Energy Market Insights

Twice Monthly Independent Market Analysis

ELECTRICITY

BOOMING WIND PRESSURES SHORT-TERM



The opening two weeks of February was another volatile period for UK power as a flood of renewables and mild conditions competed with restrictions at French nuclear plants, bullish carbon and underlying strong sentiment driven by the situation on the Russia-Ukraine border – although at the time of writing signs of a limited partial withdrawal of Russian troops were pushing all periods lower.

Wind farm generation has been buoyant, with output averaging more than 11 GW – meaning wind has been the single-largest source of power in the UK over the last fortnight, at around 35% of the total. This was up from less than 8 GW during the last two weeks of January, with the surge in wind production pushing short-term UK power prices to lows not seen since the start of the year. UK Day-ahead Baseload power has averaged £167/MWh over the last two weeks – £40/MWh lower than during the preceding fortnight. A few days into February the Dayahead index moved below £156/MWh for the first time since late 2021 – before ticking up above £170/MWh as French nuclear outages kicked in or were extended, and UK exports became more frequent.

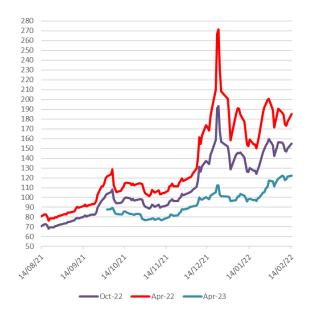
During the first half of February the UK was a net exporter of power to France – with around 250 MW delivered on average each day – compared to an average of 66 MW in the opposite direction throughout January. EdF has announced a nuclear output target this year in France of 295-315 TWh – down from the original estimate of 300-330 TWh – raising fresh concerns for longer-term power prices. April '22 power Annual started the month just over £170/MWh and swelled to £190/MWh, before rolling back and then bouncing again helped by EdF continuing to add to the maintenance schedule while hawkish rhetoric – at least from western leaders – around the Ukraine-Russia border situation added some bullish impetus.

Surging carbon also added strength to the April '22 Annual as UKAs edged up from just under $\pm 83/TCO2e$ at the start of February to more than $\pm 87/TCO2e$ for five days – before dropping to around $\pm 84/TCO2e$ in the middle

of the month. UKAs largely mirrored moves in the EUA market, with a period of very high prices driven by strong demand expectations due to coal being profitable over gas for power generation, as well as speculative buying and bullish technical signals.

Coal prices rose in tandem with carbon and touched highs not seen since energy commodities peaked in October last year. At one point year-ahead coal pushed above \$118/ tonne – almost 30% higher than at the start of the year – on solid demand in Europe and Asia. Coal prices then eased as the Chinese government indicated it would look to increase domestic supply to reduce prices, with losses on other energy commodities such as oil and carbon also factoring into the downside.

UK Annual power prices (six-month view)



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ELECTRICITY: OUTLOOK

By the end of February around 8.2 GW of French nuclear capacity will have been taken offline for work lasting at least a month – with several outages expected to last into Q3 – according to the latest schedule from power grid operator RTE. In early February EdF added new restrictions on an almost daily basis and additional works – as well as extensions to planned curtailments – are likely going forward.



VOLATILITY

Market volatility in early February, though prices remain down on festive highs



The situation in Ukraine continues to provide upward pressure on markets

A forecast from Elexon – the balancing manager for UK power – indicated wind farm generation will average just under 11 GW over the final two weeks of February – which is relatively high and should reduce the need for more expensive thermal generation – potentially pressuring short-term prices. The UK government will hold Contracts for Difference (CfD) auctions on an annual basis from March 2023 – up from every two years currently – to speed up the deployment of new renewable capacity. CfDs are used to support renewable projects by guaranteeing a price for the electricity they produce.

A proposed 2.2 GW nuclear reactor at the Bradwell B site in Essex has moved a step closer after the UK's Office for Nuclear Regulation (ONR) and Environment Agency approved the use of a reactor design from China that is planned for the site.



RENEWABLES

Renewables output is strong for this time of year, applying downward pressure

| KEY POWER INDICATORS: | | | | | | | | | | | | |
|---|-------|--------------------|-------|-----------------------|------|------------------|------|------------------------|-------|------------------|-------|--|
| Long-term UK (£/MWh) | | | | Short-term UK (£/MWh) | | | | European power (£/MWh) | | | | |
| Apr '22 Annual | chg | Oct '22 Annual | chg | Month-ahead index: | chg | Day-ahead index: | chg | Germany Cal '23 | chg | France Cal '23 | chg | |
| 185.00 | 13.75 | 155.25 | 12.97 | 179.00 | 5.40 | 173.50 | 2.50 | 147.15 | 15.60 | 166.28 | 24.78 | |
| KEY OTHER INDICATORS: | | | | | | | | | | | | |
| Coal (\$/MT) '23 | chg | Oil (Brent) \$/bbl | chg | UKA '22 (£/TCO2) | chg | EUA ′22 (€/TCO2 | chg | EUA '23 (€/TCO2) | chg | EUA '24 (€/TCO2) | chg | |
| 116.00 | 2.00 | 94.49 | 4.88 | 83.75 | 1.09 | 92.08 | 2.27 | 93.68 | 2.99 | | 3.84 | |
| All changes (chg) are compared to last report | | | | | | | | | | | | |



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GAS

GEOPOLITICS TRUMP WEAK DEMAND



UK gas prices started to ease in early February as LNG supply remained robust and demand crumbled due to mild and windy conditions – although the situation in Ukraine, volatility in Russian pipeline supply and relatively empty storage led to a resurgence towards the middle of the month. The UK gas April '22 Annual kicked off February at 178.74 p/th – thundered up to a high of 203.383 p/th prior to tracking down to the low 180s – before another push brought the price back towards the 200 p/th mark.

Gas demand during the fortnight averaged 285mcm/day – about 20mcm/day lower than the seasonal average as mild temperatures led to thermostats being turned down across the country. Windy conditions meant gas plants only accounted for around 26% of UK power supply in the first two weeks of February – down from close to 40% on average during January.

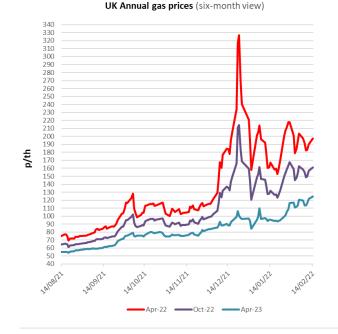
LNG continued to provide around 30% of UK gas supply and imports from Norway ticked up compared to January as fewer unplanned outages affected capacity. The UK gas Day-ahead closed at an average price of 180 p/th during the opening couple of weeks this month, which was more than 20 p/th lower than during January, although the short-term market remained volatile. The Day-ahead spiked from 174 p/th to 192 p/th in early February – then eased down as weak fundamentals softened the market – before surging and slumping again.

Russia's Gazprom has still not delivered any volumes into Germany through the Yamal pipeline this year – while transit flows via Ukraine and into Slovakia started to wane from the 10th of February. Although the UK has limited exposure to the Russian supply situation the market is closely connected to mainland Europe and the tight picture there has fed gas strength on this side of the Channel.

Elsewhere the front couple of seasons were held up by relatively empty storage, with European site fullness falling under 34% by mid-February – compared to around 45% on average at this time of year between 2017-21. The UK gas Summer '22 shot up by almost 11 p/th over the opening fortnight this month while Winter '22 rose by more than

12p/th – to 185.71 p/th and 194.98 p/th respectively – with oil, carbon and coal strength filtering into long-term prices.

This month North Sea oil moved above \$94/bbl for the first time since 2014 – driven up in part by a prediction from the International Energy Agency that demand could exceed prepandemic levels this year with the impact of the Omicron variant on the global economy now less of a concern. Questions over the ability of OPEC+ members to raise supply after the cartel fell short of targets late last year added to the bullish crude sentiment.





GAS: OUTLOOK

Norwegian summer maintenance will be relatively heavy in Q2 this year with capacity restrictions set to kick in from the 20th of April. Between 56-65mcm/ day will be taken offline from late April and through the opening week of May, which is likely to cut supply into the UK. Norwegian flows to the UK tend to be more affected by maintenance restrictions than other markets in Europe as far less UK gas is guaranteed through long-term supply contracts.

NUCLEAR

Nuclear output from France this year is expected to be down on

original estimates

Mild weather remains forecast until at least the end

of February – providing some assurance that a late

winter demand spike is now unlikely and that European storage sites may not be completely drained by the end of

Q1.



LNG

Strong LNG supply to the UK has softened pricing, providing 30% of supply

Cuadrilla has been ordered to plug and abandon its two horizontal shale wells at a Lancashire exploration site by the UK Oil & Gas Authority (OGA).

From April the Ofgem price cap for dual-fuel gas and power customers in the UK is set to rise by more than 50%.



GAS SUPPLY

Gas supplies to Europe from Russia remain low compared to previous years

| KEY GAS INDICATORS: | | | | | | | | | | | |
|---|-------|----------------|-------|-----------------------|-------|---------------------|-------|--------------------------|------|------------------------|------|
| Long-term UK (p/th): | | | | Short-term UK (p/th): | | | | European gas (€/MWh): | | Crude Oil: | |
| Apr '22 Annual | chg | Oct '22 Annual | chg | Month-ahead index: | chg | Day-ahead index: | chg | TTF 2023: | | Oil (Brent) \$/bbl: | chg |
| 197.12 | 18.38 | 161.16 | 16.27 | 191.06 | 11.59 | 188.84 | 13.20 | 55.80 | 5.58 | 94.49 | 4.88 |
| All changes (chg) are compared to last report | | | | | | | | | | | |

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