Energy Market Insights

Twice Monthly Independent Market Analysis

ELECTRICITY

SUPPLY WOES LIFT FRONT ANNUAL 20%

UK power prices have reached unprecedented levels over the past two weeks as the European energy crisis intensified with Russia cutting gas exports to Germany, while high temperatures and dry conditions continued to wreak chaos for power stations on the continent as well as prop up demand for cooling applications. The latest chapter in the Russian saga has led October '22 Baseload to balloon 20% over the latter half of July to just under £406/MWh at the time of writing – having closed at another record high of £411/MWh last week – while the next two annuals have made more modest gains of 3.5% and 7.5%, respectively.

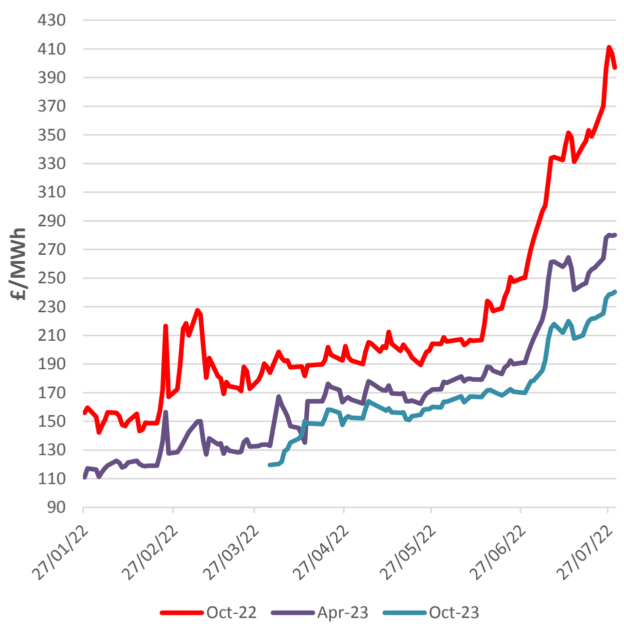
Rising power prices have been largely driven by strength in the gas market, while the EU ban on Russian coal imports that kicked in this month – as well as strong demand for the fuel in Europe due to coal-to-gas switching – has helped to push front quarter coal values up another 5%. The same UK electricity Baseload period has jumped by more than a fifth to £545/MWh. In response to the relentless gains and fears over rising consumer bills, BEIS has launched a review of the UK's electricity market design aimed at mitigating the impact of high global prices, boosting energy security and increasing renewable capacity. Changes being consulted on include introducing incentives for consumers to use power at cheaper rates when demand is low, increasing low carbon solutions – such as power storage – in the capacity market and de-coupling the cost of fossil-fuel based generation from renewables. These measures seem unlikely to be sufficient to avoid more spikes this winter and higher costs for consumers, especially if temperatures are low for a sustained period.

The share of renewables in the power mix was extremely varied with wind power making up 4% of the total at its lowest point and up to 43% at its highest – injecting volatility into the short-term market – with wind and solar generation accounting for about 18% of UK electricity supply on average overall, virtually unchanged from the prior two weeks. The Day-ahead index dropped to a low of £232/MWh prior to wind output increasing from 1 GW to more than 9 GW – spiked to a high of £344/MWh ahead of wind generation falling to 1 GW – ending July around the £300/MWh mark.

The UK continued as a net power exporter to the continent although volumes were limited by outages on the IFA2 and Eleclink interconnectors with France, meaning average outflows were just under 2 GW, compared to 2.2 GW in the preceding two weeks. Despite outrage in the UK media when extremely hot weather led to National Grid having to buy power from Belgium at almost £10,000/MWh – a new record – to avoid blackouts in London, in reality the volumes acquired at this price were small and the UK was actually a net exporter of power to Belgium overall during July.

UK carbon values continued to be disconnected from the wider energy commodity market – as economic headwinds remained the gain influence on emissions values – with UKAs falling about 6% to just under £79/TCO2e.

UK Annual power prices (six-month view)



The UK does not have sufficient capacity to avoid record power prices this winter – according to pricing analysts EnAppSys – although the country should avoid blackouts. Given current winter prices net exports to France are likely to continue – with another 1 GW of interconnector capacity set to come online in December – while the UK should import from Belgium, the Netherlands and Norway. Net flows on UK interconnectors could average close to zero this winter, whereas traditionally the country has relied on imports of 2-3 GW, they said.

BEIS REVIEW

BEIS launches a review of the UK's electricity market

PRICES

Gas and power prices for winter hit record highs

UK generator Drax has hedged 11.7 TWh of 2023 renewable generation – which comes from biomass – at an average price of £87.2/MWh. Year-ahead UK Baseload prices are currently much higher at more than £300/MWh. Drax has also hedged 8.8 TWh for 2024 and 4.5 TWh the year after at average prices of £98.3/MWh and £109.5/MWh, respectively.

Offshore wind projects with a combined capacity of nearly 8 GW have been given the green light from BEIS to enter a lease agreement with the Crown Estate. Of the six plans moving to the development stage, five are planned to have a 15 GW capacity while the sixth will have a 480 MW capability.

During August around 8.2 GW of French nuclear capacity is set to be restored following maintenance – compared to 5.35 GW being taken offline for more than a month – according to the latest schedule from EdF.

KEY POWER INDICATORS:

Long-term UK (£/MWh)				Short-term UK (£/MWh)				European power (£/MWh)			
Oct'22 Annual	chg	Apr'23 Annual	chg	Month-ahead index:	chg	Day-ahead index:	chg	Germany Cal '23	chg	France Cal '23	chg
397.00	48.75	280.00	23.13	291.80	36.80	300.00	27.83	361.79	6.76	497.50	20.63

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
278.25	1.00	110.43	13.50	78.33	-3.07	78.67	-5.04	80.90	-5.58	84.45	-7.73

All changes (chg) are compared to last report

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GAS

NORD STREAM CUT DEEPENS WINTER RISK

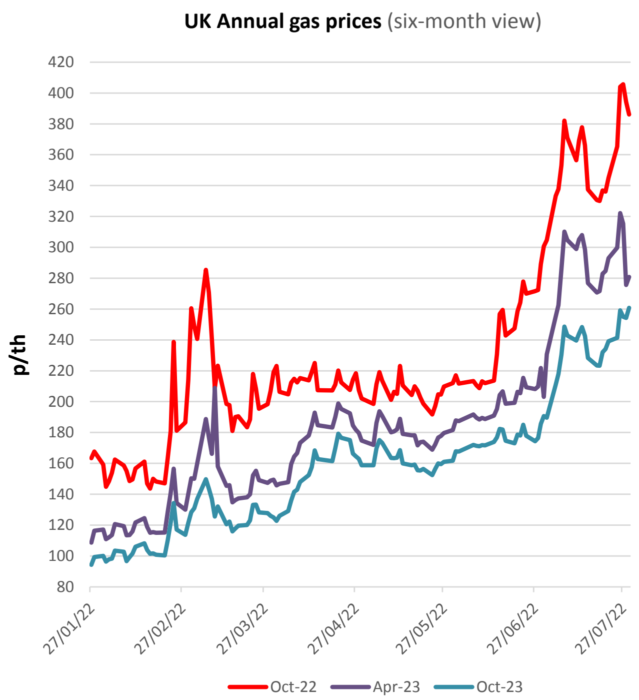
Last week Gazprom cut flows on the Nord Stream pipeline to Germany – citing issues with the infrastructure that required maintenance – sending gas markets across Europe into yet another Russia-related frenzy. Prior to this the market had breathed a sigh of relief when Nord Stream started flowing again on July 21st following ten days of maintenance, after speculation Russia would halt supply through the link following the planned outage. In the gas price boom that followed UK months from November '22 to February '23 all traded above 500 p/th as the risk on winter supply intensified, although these periods have nudged down a touch since then. At the time of writing November '22 was valued around 474 p/th – rising 21% since the start of July – while December 22 and January '23 have gained about 25%.

Nord Stream flows have averaged 31 mcm per day – 19% of the link's 161 mcm capacity – since the turndown, compared to 64 mcm over the first ten days of July (before the summer maintenance started) and 99 mcm on average in June. Gazprom has not said how long it expects the reduction in capacity to continue, while most of Europe sees this as a strictly political manoeuvre given there are other export options available through which the gas could be re-routed. Italian energy major Eni has also reported that Gazprom continues to underdeliver on offtake nominations from its contract with the Russian producer. UK October '22 Annual gas has roared up in response with the period just under 396 p/th at the time of writing – after closing at yet another record high of 405 p/th last week – a 17% increase across the fortnight.

On a more positive note, EU storage injections have not slowed despite the reduction in Russian flows with 365 mcm added to sites on average each day last month – little changed from the volume in June and 13% higher the 2017-21 average. Storage across the bloc is currently just under 70% full – in line with the five-year average – but with Norwegian maintenance due to ramp up this month the injection pace is likely to take a hit. Supply side concern continues to drive risk into the front winter, which closed at a high of 491 p/th last week and is currently around 462 p/th, gaining 15% since mid-July.

EU member states agreed on a voluntary 15% reduction in gas demand between August and the end of March next year, although exemptions are in place for countries particularly reliant on Russian volumes and no mandatory action is in place yet. Spain and Italy have said they plan a 7% cut, although both countries have lower exposure to Russian supply shocks due to pipeline links to North Africa (and Azerbaijan in Italy's case) and sizeable LNG import capacity.

UK LNG imports have tailed off in recent months amid rising prices in Asia as well as competition for spot cargoes elsewhere in Europe. Supply into the grid averaged around 22 mcm per day, about 31% lower than over the opening two weeks in July and 48% down compared to June. This came against a backdrop of stubbornly high demand – about 30% above the seasonal average across July – as power plants and exports continued to suck up volumes.



GAS: OUTLOOK

Japan is looking to increase US LNG imports as the country struggles with its worst power crisis since the Fukushima disaster. Citizens have been asked to reduce energy use or face mandatory blackouts. In the longer-term Japan, the world's second-largest LNG importer, plans to increase renewable capacity from 25% of the total currently to 38% by 2030, which should alleviate some gas demand.

Norwegian summer maintenance restrictions are set to rise from the middle of August when the next round of planned work kicks in – further straining European gas supply – with just under 30 mcm set to be unavailable between the 14th and 30th. Curtailments will be even greater during September with 40-140 mcm/day offline during the month.

GAS CUTS

Prices continue to rise following Russia gas cuts

EU REDUCTION

EU states agree a voluntary 15% reduction in gas demand over winter

LNG

Strong international LNG demand boosts prices

EU coal demand is expected to rise by 7% this year – according to the International Energy Agency – after increasing 14% in 2021, with gas to coal switching for power production the main factor lifting coal use. Despite the rise Europe only accounts for around 5% of global coal demand.

Global LNG export capacity is set to exceed 800 million tonnes per annum (MPTA) by 2027 – more than 75% higher than the current capability – according to the latest report from the International Gas Union (IGU). In the first four months of this year 12.5 MPTA was brought online, after 6.9 MPTA was commissioned last year. More than 1,000 MPTA of projects are currently awaiting financial investment decisions (FID) – according to the report – with more than 60% of these based in North America.

STORAGE

EU continues to boost gas storage for the winter

KEY GAS INDICATORS:

Long-term UK (p/th):				Short-term UK (p/th):				European gas (€/MWh):		Crude Oil:	
Oct '22 Annual	chg	Apr '23 Annual	chg	Month-ahead index:	chg	Day-ahead index:	chg	TTF 2023:	chg	Oil (Brent) $/bbl:	chg
386.09	20.00	280.83	-17.79	319.06	82.24	278.82	55.21	149.50	8.30	110.43	13.50

All changes (chg) are compared to last report

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