

Welcome to The e-POWER Bulletin!

The e-POWER Bulletin aims to provide a unique focus, giving you - the generators - just what you need to know when selling your renewable power. No more, no less. In this issue we take a look at:

- Amber Rudd's major energy policy reset speech and the impacts of the autumn statement;
- The government's response to the FiT scheme review consultation and revised proposals;
- trends in wholesale power prices;
- sharp rises for renewables as part of the UK generation mix;

- an analysis of monthly e-POWER auctions; and
- the latest e-Roc auction results.

Whether you're a prospective or existing e-POWER user, the aim of this newsletter is to meet your needs. So if it doesn't hit the spot or you've got ideas for future content, I would love to hear from you.

Thanks for reading,

Stuart Stephens

Government plans energy transition

Over the past few issues of e-POWER, we have covered the government's plans to cut costs to consumers through changes to support schemes for renewable power. In November, the government outlined its long-term vision for the energy sector, and the philosophy underpinning its green policy reforms.

On 18 November, energy and climate change secretary Amber Rudd <u>delivered</u> a major speech intended to "reset" energy policy.

Tried-and-tested

The speech confirmed the government's intention to prioritise energy security and affordability as the key planks of the energy trilemma. Climate change would, Rudd said, remain a major threat to long-term economic security, so emissions cuts would not be neglected - however, this goal would be pursued with a focus on keeping costs to consumers as low as possible.

Rudd drew praise from environmental groups for announcing that the government would aim to phase unabated coal power off the system by 2025.

This lost capacity would, she said, be succeeded by a new generation of gas plant and nuclear power projects.

Rudd said: "One of the greatest and most costeffective contributions we can make to emission reductions in electricity is by replacing coal-fired power stations with gas." The government will consult in the spring on how this transition can be delivered, with plans to place limits on unabated coal from 2023.

Rudd reaffirmed the government's intention to withdraw subsidies for more mature renewable technologies, such as onshore wind and solar photovoltaics. There is now sufficient capacity of both of these technologies in the pipeline to meet the UK's 2020 power targets, and ministers are confident that these sectors can continue to develop without the need for



further subsidies.

The government instead intends to re-focus its support for the renewable electricity sector onto offshore wind, in which the UK is already a world leader.

To this end, Rudd confirmed that the government would aim to hold, by the end of the decade, three more auction rounds for subsidies as part of the new contracts for difference (CfD) regime - with the first of these likely to be staged before the end of next year.

These auctions will, however, only be held if the industry is able to meet strict cost-reduction targets set by the government.

Rudd said: "The industry tells us they can meet that challenge, and we will hold them to it. If they don't there will be no subsidy. No more blank cheques."

The government is aspiring to deploy an extra 10GW of offshore wind capacity by 2030, in addition to the 10GW expected to be delivered before the end of this decade.

Rudd also argued that, just as fossil fuel generators pay the cost of the pollution they cause, intermittent generators should "be responsible for the pressures they add to the system when the wind does not blow or the sun does not shine."

Industry reacts

The speech was well received by business groups for sending a clear signals to investors.

Rhian Kelly, business environment director of the CBI, called it "an encouraging sign that the government is looking at ways to bolster our long-term energy future".

Kelly said that the speech has provided investors with clarity on the future of UK energy policy, as there was currently insufficient confidence to enable the construction of new gas power stations.

The Institute of Directors <u>praised</u> the government's balancing of the need for the reliable provision of electricity with environmental goals.

The replacement of coal power stations with gas generation would be a cost-effective way of cutting emissions, said the organisation's senior energy advisor Dan Lewis. It would also represent an important opportunity to support the development of the UK's shale gas industry.

Autumn Statement

Rudd's speech was followed by further details on the government's proposed cuts to the feed-in tariff and Renewables Obligation (RO) schemes, on which it consulted earlier this year.

In the Autumn Statement, delivered on 25 November, the Treasury estimated that these reforms, if implemented, would save households £6/ year and businesses £500/ year. The government is expected to confirm the outcome of the consultations imminently.

The Treasury also reaffirmed its intention to end the Climate Change Levy (CCL) exemption applied to renewable electricity. The transitional period for suppliers to apply the CCL exemption on renewables electricity generated before 1 August 2015 will end on 31 March 2018.

Chancellor George Osborne also detailed plans to provide energy-intensive industries (EIIs) with a permanent exemption from the costs of the RO and the FiT. This move will aim to improve the competitiveness of EIIs, which have in recent months warned of the damaging impacts of rising energy prices.

The government had already been planning to provide EIIs with a compensation package for the costs of the RO and the FiT. But it said that switching from cash compensation to an exemption would save £410mn/ year by 2019-20, with the costs instead picked up by small businesses and households.

The Renewable Heat Incentive (RHI) scheme is set to continue for the next five years, with government announcing that the programme's funding would increase to £1.15bn by 2020-21 - an increase of over 250% from the present level. But cost-control reforms to the scheme are expected to deliver savings in excess of £690mn/ year by 2021.

Annual RHI budgets to 2020-21 have yet to be determined; however it has been confirmed that a cap will be used to provide a backstop on expenditure.

The government also confirmed that a consultation on the RHI would take place in the new year, with "bold reforms" planned for implementation in 2017.

Government responds to FiT review consultations

On 17 December government released <u>consultation responses for the FiT review</u>, deciding to go ahead with most of the proposals laid out in <u>its original consultation</u>. One key difference was a less drastic reduction in generation tariffs and a tariff now being offered for >1,500kW onshore wind. Tariffs have fallen on average by 41% compared to current levels, compared to 52% in the original consultation.

However, whilst the magnitude of the reductions in tariffs are less drastic than the original consultation proposed, the general story is one of significant cuts to current support levels. Additionally, the right to receive a generation tariff for extensions will be removed for all installations which commission on or after 15 January 2016.

The more material constraint on deployment will be the cost control measures. Quarterly MW deployment caps will implemented to set an absolute limit on the amount of capacity accredited each quarter under each tariff rate. The first cap period will run from 8 February (the date of legislative implementation) to 31 March 2016. For digression, default pre-set degressions will be applied to generation tariffs on a quarterly basis and a contingent degression rate of 10% will be applied if a quarterly capacity cap is hit. Capacity caps are likely to create a significant slowdown in deployment rates from historic levels. For example standalone solar and >1500kw onshore wind will be subject to a 5MW quarterly capacity cap.

A pause will occur in the scheme from 15 January 2016 until new tariffs and caps are implemented on 8 February 2016. During this period, applications can still be submitted, but Ofgem will not accredit any new installations. Those that apply during this timeframe will be subject to new arrangements from 8 February. Helpfully, pre accreditation will be reintroduced from February 8 once legislative changes to FIT and licence modifications have taken effect.

Government has decided not to implement a decision on the long-term future of the FiT scheme. Its view is that keeping generation tariffs available provides a route to becoming less reliant on subsidy. However, government will still consider the future of the long-term export tariff in due course.

Wholesale prices

Seasonal power prices have fallen 8.4% on average since the November 2015 e-POWER bulletin and have continued to hit new lows. Continued weak commodity prices, with oil prices hitting 11-year lows of \$32.9/bl and coal prices dropping to 10-year lows of \$43.3/t, have fed directly into the UK power and gas markets to suppress prices further.

Brent crude oil prices declined 32% over November and December, reaching an 11-year low of \$32.9/bl on 11 January. Prices continued to slide as forecasts of further supplies coming online in 2016 combined with fears over slower demand growth from China. This increased expectations of a prolonged period of global oversupply.

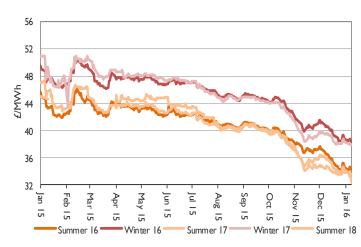
Declining oil prices fed directly into the UK gas market, which was also influenced by a stable European gas supply outlook. Seasonal contracts fell 9.5% on average.

With declining oil, gas and coal prices over November, December and in to January, power prices subsequently followed lower.

Summer 16 power dropped 9.7% to £34.4/MWh, a record low. The contract is now the lowest price seasonal since 2010. Winter 16 power decreased by 7.4% to £38.4/MWh.

A key point to note is the backwardation exhibited in the power market, with power prices in 2017 and 2018 now lower than those in 2016.

Seasonal price trends



Generation mix increasingly low-carbon

New figures published by DECC have revealed that low-carbon sources comprised 42.2% of the generation mix between July-September 2015—up 7.1 percentage points year-on-year.

The department's monthly figures, published on 26 November, said that the increase was driven mainly by a rise in renewables generation. Gas provided 37.9% of the electricity mix, with nuclear power at 24.5% and coal at 19.9%. Wind generation from major power producers increased by 40% and overall renewables generation increased by 37%, with further growth in biomass and hydro.

So far in the financial year from April to September, generation from renewables sources (Hydro, wind, bioenergy and solar) is up 48% on the same period of 2014 at 23.2TWh. 1.1TWH of this rise is attributable to solar data now recorded in the statistics, but the remaining increases have been caused by hydro (7%), wind (58%) and bioenergy (21%). These rises are significant compared to long-term averages, with bioenergy consistently at record highs over 2015.

Hydro generation, with little rise seen in capacity, is up 36% to 1.8TWh on the back of a 19% increase average precipitation levels for April to September 2015 on the same period in 2014. Wind generation has risen by 4.3TWh (58%). Rises have been supported by a 5% increase in average wind speeds compared with the same period of 2014 as well rises in capacity. Under the Renewables Obligation (RO) scheme, onshore wind capacity has risen 350MW with a number of new sites now fully operational.

Higher generation has had an impact on elements of the renewables market, with higher hydro, wind and bioenergy generation adding over 7mn Rocs to the Roc market for CP14 compared with CP13. The rises are a key reason for predictions of an oversupplied Roc market for the compliance period.

98% value retention at monthly e-POWER auctions

<u>Independent analysis</u> by <u>Cornwall Energy</u> has shown that the monthly e-POWER auctions, an additional auction service to the two seasonal auctions run by e-POWER, have shown average value retention of over 98% in the past 15 months.

Since e-POWER has been conducting monthly auctions, 37 sites have been traded across eight auctions. including RO, FiT and unsupported projects for AD, hydro, landfill gas, municipal waste, solar PV and onshore wind technologies. Overall, 214MW of capacity has been auctioned.

Sites in the auctions were referenced against a maximum market benchmark value at the time of the auction on a £/MWh basis. Overall value was made up of wholesale power, Rocs (if eligible), GDUoS benefit, BSUoS benefit and until recently Lec value. Value retention as a percentage was then referenced against this maximum value. Retention ranged from 86.5% to 109.1% and average value retention was 98.9%, higher than averages seen in previous bi-annual e-POWER auctions (98.3% in the summer 15 auction and 97.9% in the winter 14 auction).

Baseload technologies showed the highest value retention, with municipal waste sites at 99.8% and AD sites at 101.8%. The trend indicates the continued appetite and willingness of some suppliers to pay above market prices to secure predictable baseload output. Data also showed that despite the removal of Lecs from 1 August 2015, value retention for baseload technologies remained above 98%, and solar PV (FiT) sites auctioned after the Lec removal achieved value retention of above 100%.

For generators, absolute comparisons with alternative routes to market are complex given the spread of offers across different PPA providers for different technologies. However, performance of sites in the monthly auctions showed value shares retained by generators are towards the upper end of the market when compared with those being achieved in other routes to market.

The next e-POWER auction will open on 26 January 2016. Over 80 generating sites are planning to take part in the January e-POWER auction representing close to 500MW.

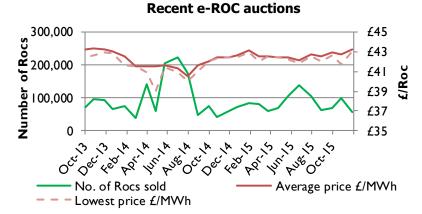
The REA are hosting a webinar at 2pm on 26th January to run through the e-POWER auction process, prices previously achieved and the live auction actually taking place that day. <u>Click here</u> to register for this free webinar.



Latest e-ROC auction results

The latest e-ROC auction took place on Thursday 22 December, with average prices falling £0.39/Roc to £42.86/Roc. Over 600 bids were received in the auction, up from the 500 bids in the October and November auctions. 114,675 Rocs were sold, the highest total since June 2015 and over 30,000 higher than the December 2014 auction.

The next e-ROC will take place on Thursday 28 January, with the e-POWER auction on 26 January.



Other industry news in brief

CCC makes recommendations for Fifth Carbon Budget

The Committee on Climate Change (CCC) <u>published its advice</u> to the government on the Fifth Carbon Budget on 26 November. For the period 2028-32, it said the UK should limit emissions to 1765MtCO₂e, equating to a 57% decrease in emissions compared to 1990 levels.

The CCC is required to advise the government on the setting of each carbon budget to ensure the UK follows a cost-effective path towards its emissions goals.

The watchdog said that the government should use policy to guide the electricity sector to reduce its carbon intensity to 100gCO2/kWh or under by 2030. It ought to meet the budget without having to purchase carbon credits outside the EU Emissions Trading Scheme (EUETS), the report said.

Wind industry expects significant construction activity this year

Trade association RenewableUK has said it is expecting a "busy year" of construction activity in the onshore and offshore wind sectors in 2016. In a statement on 23 December, the group said onshore wind developers were set to install at least 1.2GW of new capacity this year, with more than 50 projects becoming fully operational. This would be more than three times the capacity installed in 2015, when just over 400MW came online.

Fit installations rise 7.8% this quarter

Quarterly Feed-in Tariff (FiT) data <u>published by Ofgem</u> on Wednesday 25 November showed that the number of FiT installations from July to September were 7.8% higher than Q1 of FY15. 34,826 installations were

registered in Q2, 99% of which were solar PV. This is 5.2% of the total measures since the scheme's start in April 2010. 234MW of total installed capacity was accredited this quarter, and over £350mn of FiT payments were made to generators.



For further details on our auctions or more information about us, visit our website, send us an email, or give us a call.

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