UK Capacity Market

Is the Capacity Market slowing UK power decarbonisation?

[DECC's Capacity Market](#) will add £11 to the average consumer bill, according to DECC, of which only £0.53 is funding new infrastructure, and £7.56 will go to the Big-6 for their existing power stations. Old coal plants are being given £293m which is encouraging them to remain open – despite no risk that their closure would impact security of supply.

The UK capacity market auction provisional results for 2018/9 were announced today, and prices were less than most expected, at £19.4/KW.

The low price meant only one new CCGT qualified. Is the capacity mechanism trying to solve a non-problem?

Still, this has created a bill for electricity customers of £956m for 2018 alone – see chart for breakdown – although through its 3-year and 15-year contracts, the total payments will be for £1.7bn.

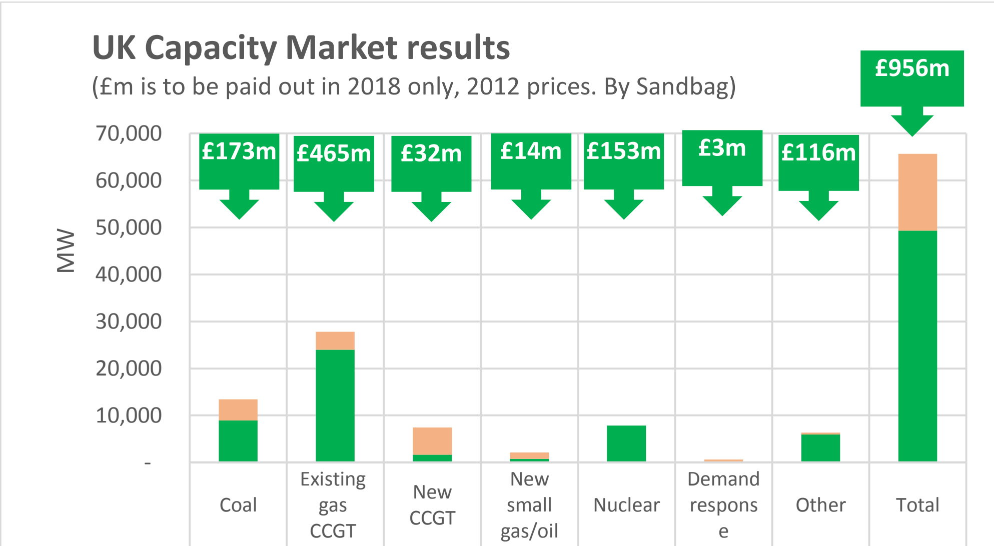
About Sandbag

Sandbag is a UK based not-for-profit organisation campaigning for environmentally effective carbon markets and focusing on the EU Emissions Trading System (ETS).

Our campaigns are supported by in-house research that monitors the environmental robustness of the caps, the distribution of allowances, and how key sectors, installations and companies in the scheme are affected.

The International Centre for Climate Governance ranks Sandbag in the top 20 climate think tanks in the world.

For more information visit our website at www.sandbag.org.uk



	Coal	Existing gas CCGT	New CCGT	New small gas/oil	Nuclear	Demand respons e	Other	Total
Unsuccessful	4,499	3,845	5,813	1361	-	453	415	16,386
Successful	8,920	23,977	1,656	740	7,876	172	5,959	49,300

"With £293m being paid to old coal, the capacity market looks more like a subsidy scheme to keep heavy polluters online, rather than a mechanism to encourage new investment - only 5% of auction revenues will go to new investment. It seems the capacity mechanism is actually slowing decarbonisation of the UK power sector." – Dave Jones, Policy Analyst, Sandbag

£293m will being paid to subsidise old coal power stations. £173m will be paid out in 2018, and EDF have got 3-year contracts, giving them an extra £120m in 2019 and 2020. This is encouraging old coal power stations to stay open longer than they would otherwise have done, and crowding out new investment into lower carbon power technologies.

However, 34% of UK coal plant failed in their bid, which may be a sign a coal closures to come. This amounts to 4.5GW of de-rated coal, which is: Eggborough (1840MW), Rugeley (902MW), Ferrybridge (891MW), and one unit at each of Fiddlers Ferry and West Burton (866MW). Also Longannet (2200MW) did not participate in the auction, fuelling speculation about closing, although Scottish Power says it plans to be open in 2018. It is not possible to say at this time what this means for future plans for these power stations, but it may be some will give clarification over the coming days.

The capacity market was very oversupplied. In total, there were over 16GW more bids than were needed. This leaves 4.5GW of coal, 3.9GW of existing gas, 5.8GW of new-build gas, and 2.1GW of other units unable to secure bids. The gas plants that did not get contracts are SSE's Peterhead (1040MW), EON's Killingholme (801MW), Centrica's KPS (598MW), Corby (358MW), Deeside (465MW), and Centrica's Barry, Brigg and Peterborough (582MW). It is also not clear on the future of these power stations, although they may still be contracted in the year-ahead auction, or within-year in alternative capacity contracts.

The billion-pound give-away: The auction signalled capacity contracts of £1.7bn, of which £0.96bn is for 2018 itself. Of the £0.96bn, the big-6 get 69% of this, all of which is for existing plant – no new investments at all. This is split as follows:

	2018 only (£m, 2012 prices)	**Total 2018-2033** (£m, 2012 prices)	**£ on 2018 elec bill**
EDF	236	356	£2.71
Centrica	40	40	£0.46
EON	102	102	£1.17
SSE	85	85	£0.97
Scottish Power	44	44	£0.50
RWE	153	153	£1.75
Big 6 total	**660**	**780**	**£7.56**
Other existing plant	253	253	£2.90
New capacity	46	697	£0.53
TOTAL	**960**	**1730**	**£11.00**

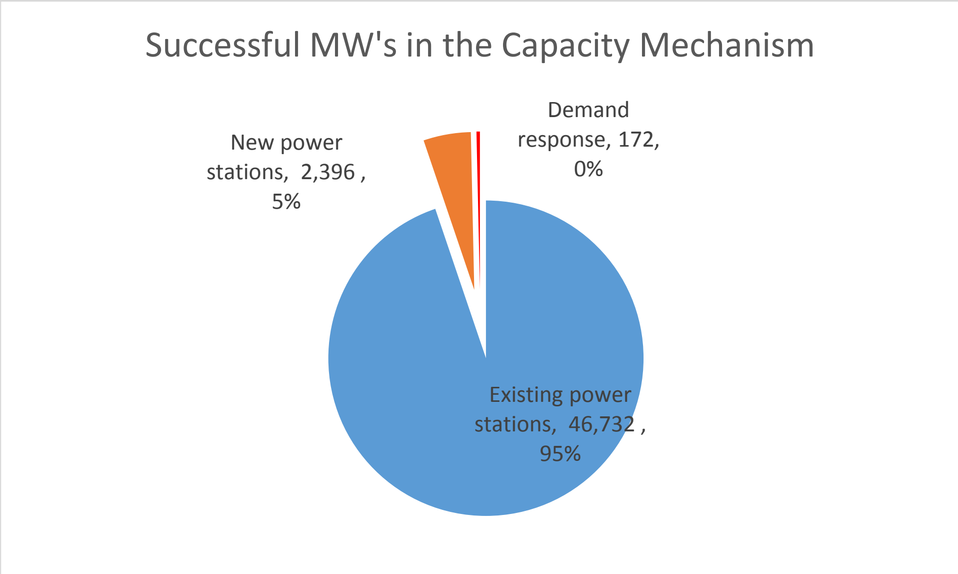
So what does this mean for electricity bills? DECC estimates £11 will be added to your electricity bill, which means you will pay £7.56 to the Big 6, and only £0.53 to new capacity.

Does a relatively low price mean the utilities are behaving? It seems that EDF decided not to kill the golden goose, and only apply for 1-year contracts on all their nuclear even though they were all available for 3-year contracts, and also not to use their market power to set price. Likewise RWE and Intergen may have had opportunity to forego revenues to keep price up, which they did not do. EON had previously decided not to enter Ratcliffe in as 15-year, to which it was bizarrely entitled, and ended up accepting only a 1-year contract.

What is getting built? The low price meant only one new CCGT qualified – Trafford Power (1656MW). Even the CCGT being built by Carrington (800MW) didn't get accepted.

In addition, 740MW of small generation (<23MW) was also successful in 15-year contracts; about 40MW is diesel, and about 700MW seems that it will be powered by natural gas. However, all of this capacity is small enough to be exempt from pollution controls – both for CO2 (they do not need meet the minimum size for the EU Emissions Trading Scheme), and non-CO2 pollutants.

172MW of demand-side response accepted. This was all from Flexitricity and Aylesford Newsprint. 435MW from Kiwi Power Limited and EnerNOC UK Limited was unsuccessful. In total, this was about 0.35% of the total successful volume:



About this briefing

We are grateful to the **European Climate Foundation** for helping to fund this work. Full information on Sandbag and our funding is available on our website (www.sandbag.org.uk).

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