

The UK capacity market auction provisional results for October-2019 to September-2020 were announced today. We produce a mini-briefing here, analysing the auction results.

**** Updated 16:47 11-Dec for (1) to change the new diesel in line with DECC comments of 650MW=£176m, compared to previously 575MW/£155m. (2) Split out 1-year and 15-year contracts; before we missed that 144MW of new embedded generation only got 1-year contracts.*****

		MW derated				£m (in 2014/5 prices), based on MW derated	
		1-year contracts	15-year contracts	Not Contracted	Not Qualified	Cost of this auction (2019-2034)	Cost of CapMech for 2019 alone*
Existing	Coal	4,425	0	3,071	0	£80	£139
	Nuclear	7,575	0	0	0	£136	£136
	Interconnector	1,862	0	0	0	£34	£34
	Large Gas	24,704	0	1,633	0	£445	£445
	Embedded Diesel	220	0	180	0	£4	£4
	Other (hydro, pump, OCGT)	5,176	0	220	0	£93	£93
New	Interconnector	0	0	540	0	£0	£0
	Large Gas	810	0	4,604	0	£15	£50
	Embedded Diesel	0	650	220	736	£176	£18
	Embedded Other	144	333	361	635	£92	£14
	Demand Response	456	0	217	0	£8	£8
TOTAL Existing		43,961	0	5,104	0	£791	£851
TOTAL New		1,410	983	5,942	1,370	£291	£90
TOTAL		45,372	983	11,046	1,370	£1,082	£942

* Includes multi-year contracts in last year's auction covering 2019 (5524MW in total)

NOTE: Participants in the auction are not required disclose fuel type. However, fuel type is needed in order to have meaningful analysis, so we have done our best to split by fuel. This split is fairly robust, except for the split of embedded generation between gas and diesel, which is hard to judge, and therefore should be viewed as approximate.

Our commentary:

"The capacity mechanism is having the perverse effect of slowing the modernisation and decarbonisation the UK electricity system.

The capacity mechanism has failed to attract any new efficient gas plant or interconnectors, and it is paying coal to stay open longer than it would have otherwise, despite a government pledge to phase-out coal generation.

Also, a tax loophole –the Enterprise Investment Scheme – is funding super-profitable¹ new diesel plants to be built, which evade carbon pricing and strict emissions limits, and although are cheap to build, are expensive and polluting to run.

Amber Rudd promised that after this year's capacity auction, she will 'take stock and ensure it delivers the gas [capacity] we need'².

This review needs to be as thorough as possible, and should also include an investigation into how the capacity mechanism has become such a shambles."

– Dave Jones, Policy Analyst, Sandbag

¹ See <http://www.ippr.org/publications/mad-maths-how-new-diesel-generators-are-securing-excessive-returns-at-billpayers-expense>

² See <https://www.gov.uk/government/speeches/amber-rudds-speech-on-a-new-direction-for-uk-energy-policy>

Is the Capacity Market slowing UK decarbonisation?

Analysis:

Cost of auction: £834m is the headline DECC figure, but this is for only this auction and only for 2019.

The total cost for 2019 will be £942m, once you include the £107m of 2019 payments agreed from last year's auction. This £942m will be the cost added to consumer electricity bills in 2019.

The total cost of this auction is £834m only for the payments for 2019; once you include payments for the duration of the 15-year contracts, this rises to £1082m.

New gas: No new gas power stations have been contracted.

ESB's Carrington (910MW), which is already under construction and due for commissioning in 2016, did get awarded a one year contract.

A further 5.1GW unsuccessfully bid into the auction (4.6GW once de-rated)

- Intergen's Spalding (997MW) and Gateway Energy Centre (1261MW)
- Watt Power's Hirwuan (299MW) and Progress Power (299MW)
- Scottish Power's Damhead Creek 2 (1280MW)
- Centrica's Kings Lynn (370MW)
- Carlton Power's Thorpe Marsh (640MW)

Only one new gas power station got accepted in last year's capacity auction – Trafford Power (1656MW) – and even this has yet to secure financing to ensure it will be built.

Coal: £139m will be paid to subsidise old coal power stations in 2019, despite the government announcing a coal phase-out.

£80m will be paid to 3 coal power stations that received a one-year contract today: Drax (1280MW), EON's Ratcliffe (2060MW), and RWE's Aberthaw (1692MW).

An additional £59m will be paid in 2019 to EDF's West Burton and Cottam (3500MW), which got awarded 3 year contracts in last year's auction.

Interestingly, SSE's Fiddlers Ferry (1973MW) did not qualify for the first time. Rugeley (1026MW) and one unit of West Burton (493MW) did not qualify for the second year in a row. The capacity mechanism, by design, assumes there will be sufficient capacity available if these coal power stations were to close... is that really the case?

Diesel: Bids were successful for 650MW of new diesel, according to DECC, which equates to payments over 15 years of £176m.

420MW of the 650MW was contracted by just three companies – Peak Gen Power, Prime Energy Development, and UK Strategic Reserve Limited – with each winning 140MW of contracts.

There is a further 333MW of embedded generation, run mostly on gas, which will be paid a further £92m for over the next 15 years.

Interestingly, another 220MW of what we think is diesel has successfully bid for 1-year contracts – we suspect much of this diesel was already built over the last few years, funded by STOR and triad avoidance payments.

All these units are small enough to evade carbon pricing and strict emissions limits that large power stations need to abide by.

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Demand response: Only 1% of the capacity contracted was demand response, and only a very small amount of this is considered “proven” (8MW out of 456MW).

Interconnectors: The auction did not attract any successful bids for new interconnectors.

Only one applied – a 1GW interconnector from England to Belgium – and that was unsuccessful.

About this briefing

Sandbag is a UK-based not-for-profit think tank conducting research and campaigning for environmentally effective climate policies. Our research focus includes the phase-out of old coal in Europe; deep decarbonisation of industry through technologies including Carbon Capture Utilisation & Storage; reform of the EU Emissions Trading Scheme; and increasing ambition in the EU 2020 and 2030 climate & energy packages.

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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The logo for Sandbag, featuring the word "sandbag" in a bold, blue, lowercase sans-serif font.