

# Capacity Market auction results

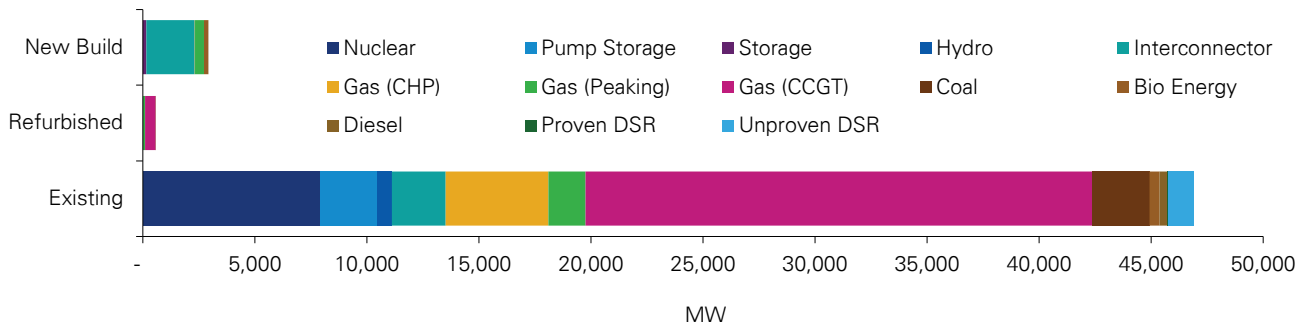


## Record low clearing price reflects limited need for new capacity

### Headline results

- The T-4 Capacity Market (CM) auction cleared at a record low price of £8.40/kW, securing 50.4GW of capacity for delivery in 2021-22. This will be at a gross cost to consumers of around £423 million<sup>(a)</sup>.
- This year's auction means a big shift away from coal, with nearly 8GW of existing coal stations missing out on agreements.
- Existing gas and nuclear, plus new interconnectors and decentralised energy are filling the gap, as we transition to a power system that is both more localised and more international, with decreasing dependence on large-scale power generation.
- Biggest challenge for security of supply in GB market is now about providing flexibility rather than the overall level of capacity.
- Low clearing price will make it harder to progress case for new large-scale gas-fired capacity until the electrification of transport increases the overall demand for electricity.
- The January 2018 T-1 auction cleared at £6/kW, securing 5.8GW of capacity, with the total cost of CM approximately £1 billion for 2018/19<sup>(b)</sup>.

### CM T-4 auction, Delivery Year 2021-22



### Detailed analysis on T-4 results

#### An oversubscribed auction...

Government has welcomed the record low clearing price, saying that: 'the Capacity Market is helping to drive competition, protect customers and ensure security of supply'<sup>(c)</sup>.

The excess supply was created by 74.6GW of prequalified capacity competing to secure CM agreements against a target demand of 49.5GW. This generated an excess supply of over 25GW, driving down the auction clearing price, which may in turn result in the closure of existing coal plants.

#### ...potentially leading to significant coal closure...

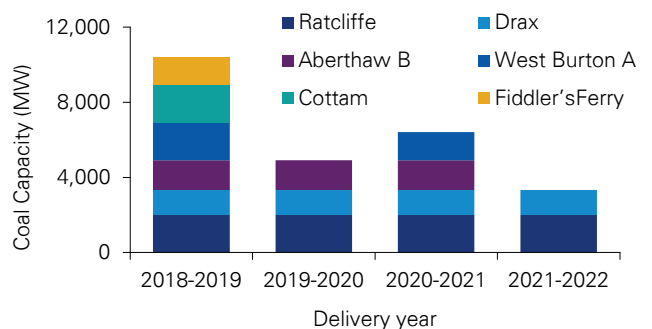
Due to European Industrial Emissions Directive (IED) and UK Government policy to end unabated coal by 2025, the majority of coal plants (approximately 8GW) took the decision to exit the CM before it cleared. Their future post 2020-21 is now uncertain:

- Only two units at Drax and three units at Ratcliffe are likely to remain operational post 2021.
- Eggborough, unsuccessful in the T-1 auction and opted-out of the T-4 auction, could close as early as the end of this year (subject to any 'Black Start' contracts they can secure).

- Cottam and Fiddler's Ferry could close as early as October 2019, while West Burton and Aberthaw have CM contracts for the 2020-21 delivery year.

**The combination of the low CM clearing price, the IED requirements and the expected level of the Carbon Price Support will make it difficult for any coal plants other than Drax and Ratcliffe to stay online beyond 2021.**

#### CM Agreement secured by Coal plants



Note: (a) 2016-17 real prices  
 (b) This includes the cost of T-4 auction for delivery in 2018-19.  
 (c) <https://twitter.com/beisgovuk/status/961922172569706496>

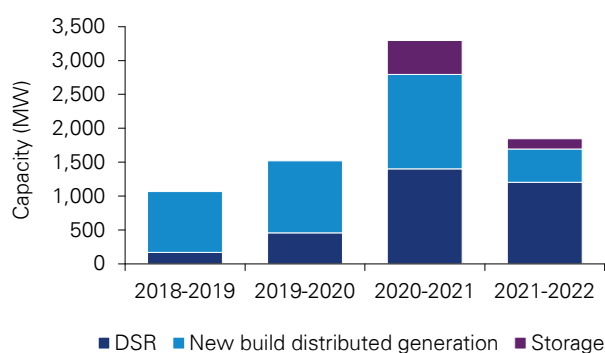
Source: KPMG Analysis: CM Registers

## ...creating room for 4GW of decentralised energy and new Interconnectors...

Almost half of this 4GW requirement (2.1GW) was fulfilled by three new interconnectors – NEMO, ElecLink and IFA2. ElecLink and IFA2 (operational by 2019 and 2020 respectively) secured approval from the French Regulator (CRE) in February 2017<sup>(d)</sup>. NEMO, interconnector to Belgium, is expected to be operational in 2019.

The remainder of the gap was plugged by decentralised capacity, although this was lower than in the previous auction due to recent policy changes.

### Decentralised capacity successful in CM auctions



Source: KPMG Analysis: CM Registers

At the end of 2017, the Government introduced lower de-rating factors for storage, linking them to duration of discharge. This reduced the overall participation of battery storage in the auction, which runs somewhat counter to the Government's vision of using storage to create 'the most efficient, most productive electricity system in the world.'<sup>(e)</sup> As a result only 150MW of de-rated capacity was successful in the auction, much lower than the previous year where approximately 500MW of battery storage secured agreements.

About 400MW of new build small-scale gas generation did secure agreements. With Ofgem reducing Triad payments for embedded generators, we have noted many flexible generation players are now increasingly reliant on wholesale market revenues. However, even with sophisticated trading capabilities it may not be possible to have a sustainable viable commercial business case at such low CM clearing prices.

The T-4 auction has brought forward 1.2GW of Demand Side Response. However, more than 1.1GW of this capacity is 'unproven' and much like battery storage the technology may not lend itself to sustained periods of demand reduction.

Note: (d) <http://www.cre.fr/en/documents/deliberations/decision/interconnector-ifa2-project>

(e) <https://www.gov.uk/government/speeches/greg-clark-speech-at-energy-uk>

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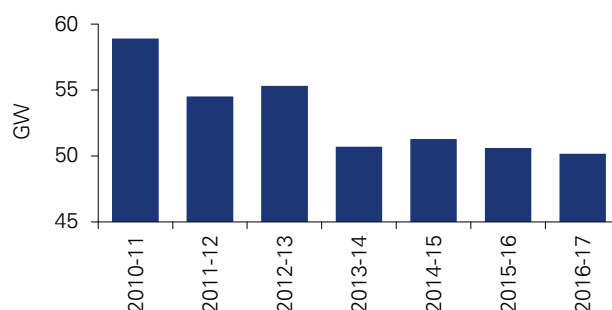
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**Interconnectors and decentralised energy are filling the gap left behind by closure of existing plants, continuing the bi-polarisation of the GB power market as it becomes both more localised and dependent on European power.**

### ... leaving circa. 12GW large-scale gas disappointed

Over the course of the past few years, the Government has introduced several measures to incentivise new build large-scale gas through the CM, including the Review of Embedded Benefits, de-rating factors for battery storage and Defra's air quality measures. However, the CM results suggest that there still isn't a requirement for new large-scale transmission connected gas generation. This reflects the fact that demand on the transmission system has fallen by almost 10GW since 2010 driven primarily by de-industrialisation, greater energy efficiency and an increase in distributed generation.

### Peak Demand (Winter)



Source: KPMG Analysis: NG Triad data

**The case for large-scale gas will be difficult until electrification of transport increases the demand for power.**

### Conclusion and next steps...

This T-4 auction has illustrated an over-capacity on the GB system in the short-term along with a changing nature of the GB power market. In the future, we can expect the power market to continue to bi-polarise as the participation of interconnectors and decentralised energy increases. **The challenge for policy makers is to consider if procuring flexibility (interconnectors and DSR) can offer the same levels of security of supply as procuring large-scale generation capacity.**

The Auction Monitor Report should be available for the Secretary of State to review by 12 February. Subject to his approval, we expect the CM agreements to be issued by 20 March.

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