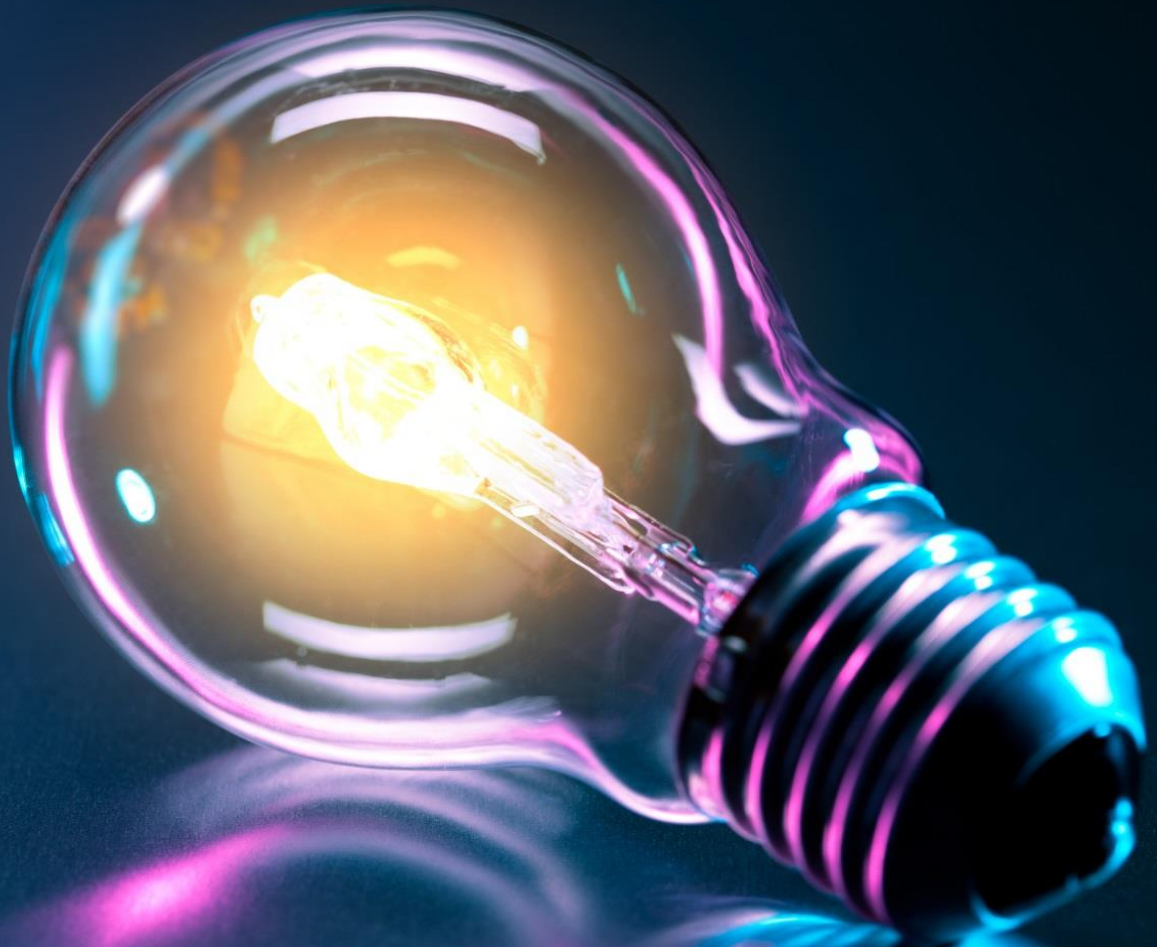


# Final Auction Results

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*TA Capacity Market Auction for 2017/18*



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### Executive Summary

National Grid in its role as EMR Delivery Body is required by the Capacity Market Rules 2014 (Rule 5.10.6) unless instructed to the contrary pursuant to the Regulations, to publish the results of the Capacity Market Auction and to make these results public. This report discharges that obligation.

The Transitional Capacity Auction for delivery in 2017/18 concluded **on 22nd March 2017, 15:30 GMT**. This report is to be published 8 Working Days following the conclusion of the Capacity Market Auction, the "Auction Results Day", Monday 3rd April 2017.

The results of the auction are as follows, where any capacity figure refers to derated capacity, unless otherwise stated.

- a) The Clearing Price is: £45.00 / kW / year**
- b) The aggregate Capacity of Capacity Market Units awarded Capacity Agreements is: 312.171 MW.**
- c) The total forecast cost of Capacity Agreements awarded (being the product of the Clearing Price and the Aggregate Bidding Capacity of Capacity Agreements awarded) is: £ 14,047,695**
- d) The CMUs to which a Capacity Agreement has been awarded and the duration of those Capacity Agreements are listed in Appendix A.**

In addition to the results presented above, National Grid is required under Capacity Market Rule 5.10.3 to report any CMUs that were removed from the IT Auction System under Capacity Market Rule 5.3.3.

Two CMUs were removed from the IT Auction System due to a change in its prequalification status after the IT Auction System data had been populated.

Exit Bids were submitted by the Auctioneer for these CMUs, at the Price Cap in the first round. As these Exit Bids took effect well above the Price Cap of the Clearing Round, no other Bidding CMU was denied a Capacity Agreement by the removed unit's inclusion at the beginning of the Auction.

The remainder of this report gives further detail on the Capacity Market Auction Clearing, how the Clearing Price was reached and what makes up the capacity that has been procured.

## The Auction Clearing Price

The Clearing Price is: **£45.00 / kW / year**

The 2017 Transitional Auction Auction Cleared in Bidding Round 6 on the **22nd March 2017, 15:30 GMT**.

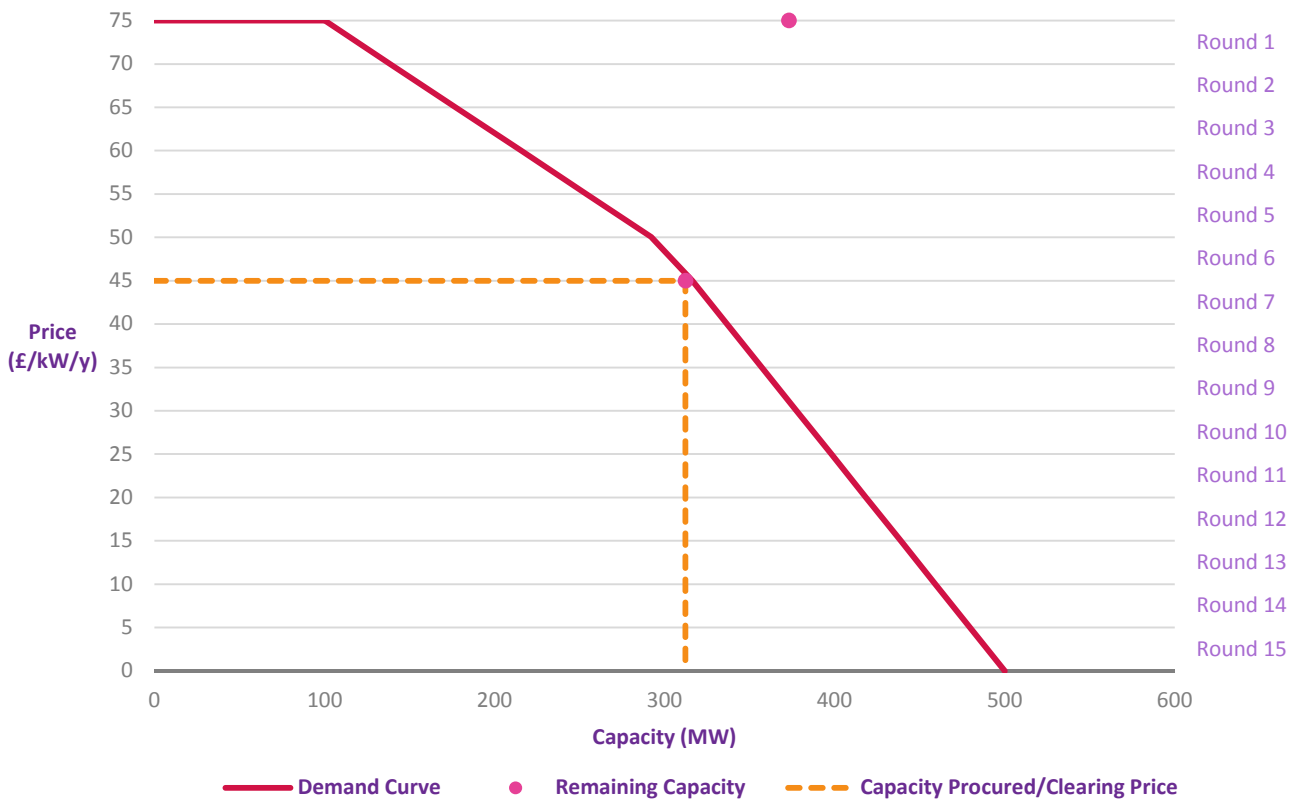
The Auction did not clear with an exact match of Offered Capacity and target capacity ("Clearing Capacity") and so the Net Welfare Algorithm was used to determine price and volume.

The Net Welfare Algorithm evaluates the integral specified in Rule 5.9.6 to determine whether to include the marginal unit. The algorithm subtracts the additional cost of procuring the marginal unit from the welfare gained by procuring the marginal unit. If the result is positive i.e. the welfare gained by procuring the additional unit outweighs the cost, the unit is included, and the Clearing Price is set to the Exit Bid Price of that unit.

**The result of the Net Welfare Algorithm was negative and the marginal unit was not procured.**

Figure 1 shows the Demand Curve and the supply curve. The supply curve is found by cumulatively adding the Bidding Capacities of CMUs, according to their Exit Ranking. The dotted orange line shows the price and capacity where the auction cleared.

Figure 1: Demand and Possible Supply Range



## The Aggregate Bidding Capacity of CMUs Awarded Agreements

The Aggregate Bidding Capacity of CMUs awarded Capacity Agreements is: **312.171 MW**. A total of **372.987 MW** entered the Auction, of which **83.69%** received Capacity Agreements for delivery in 2017/18.

Figure 2: Breakdown of the Capacity Entering the Auction Awarded Agreements

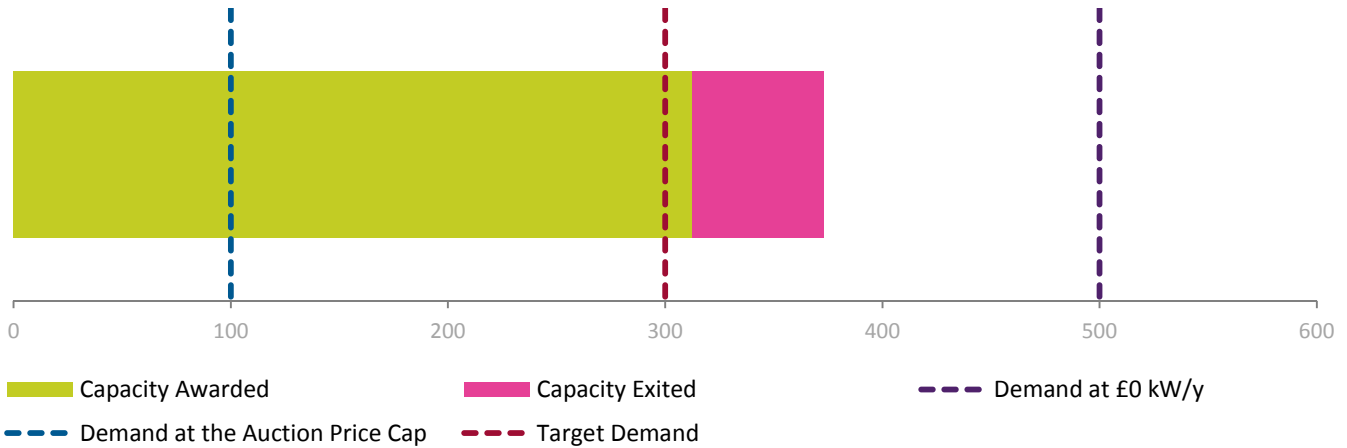


Figure 3 and Table 1 show the breakdown of the Total Awarded Capacity Agreements by CMU Type. A mixture of new and existing Capacity was procured. **275.171 MW** of the volume of Capacity Agreements awarded is for new capacity (Unproven DSR).

Figure 3: Breakdown of Awarded Capacity by CMU Type

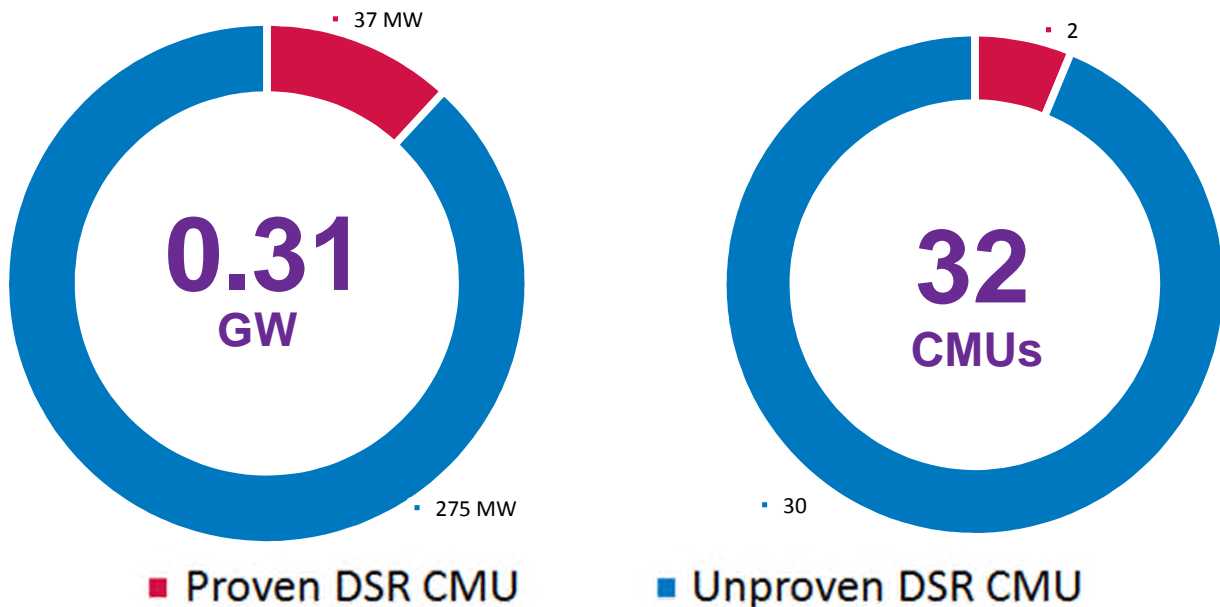


Table 1: Breakdown of Awarded Capacity by CMU Classification

CMU Type	Capacity (MW)	%	No. of CMUs	%
Proven DSR	37.000	11.85	2	6.25
Unproven DSR	275.171	88.15	30	93.75

## The CMUs to which Capacity Agreements have been Awarded

A List of the CMUs and their status has been included in Appendix A. In total there are **32 CMUs** that have been awarded Capacity Agreements, from **10 Applicant Companies**.

## The Duration of Agreements Awarded

The maximum duration for Capacity Agreement received in the Transitional Capacity Auction is one Year. The capacity procured for the period 2017 - 2034 is shown in Figure 4 and Table 2.

Figure 4: Volume of Capacity Procured by Delivery Year

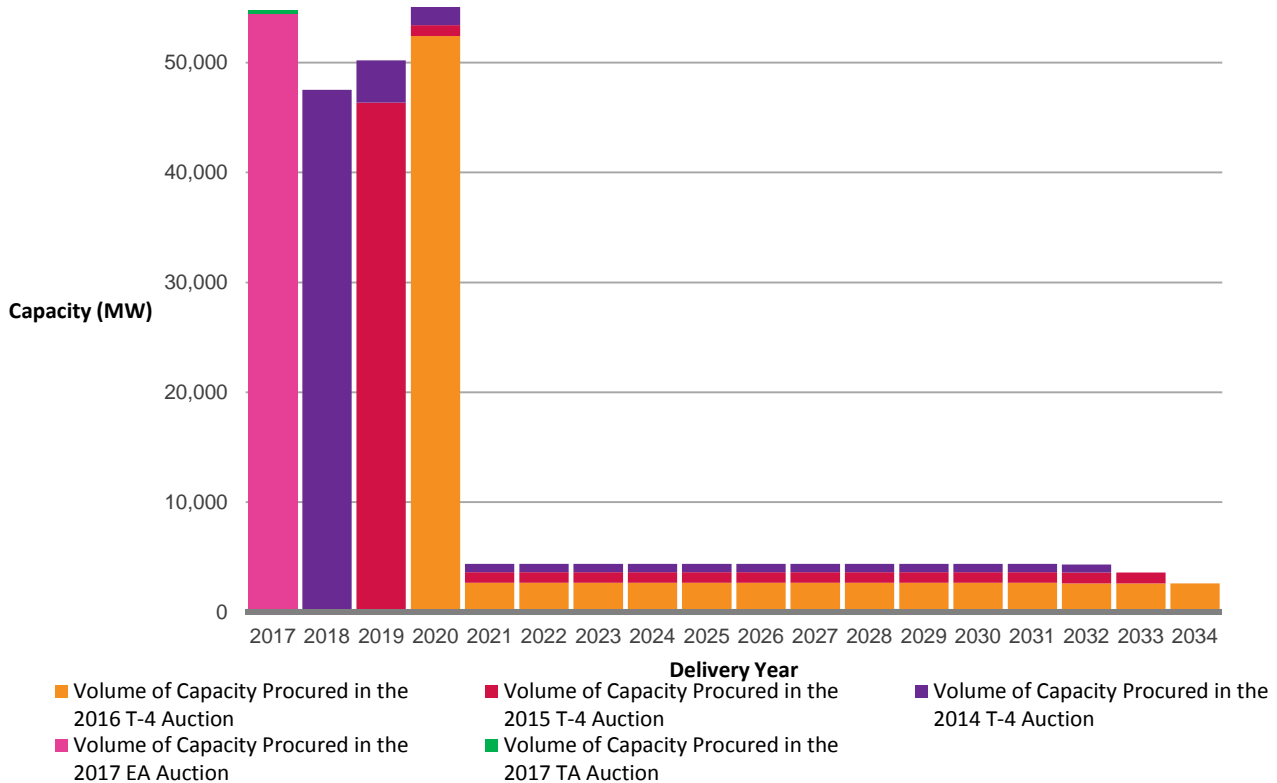


Table 2: Capacity Procured by Delivery Year

Delivery Year	2014 T-4	2015 T-4	2016 T-4	2017 EA	2017 TA	Total
2017	-	-	-	54,433.634	312.171	54,745.805
2018	47,530.843	-	-	-	-	47,530.843
2019	3,848.509	46,353.569	-	-	-	50,202.078
2020	3,848.509	982.520	52,425.302	-	-	57,256.331
2021	747.488	982.520	2,648.756	-	-	4,378.764
2022	747.488	982.520	2,648.756	-	-	4,378.764
2023	747.488	982.520	2,648.756	-	-	4,378.764
2024	747.488	982.520	2,648.756	-	-	4,378.764
2025	747.488	982.520	2,648.756	-	-	4,378.764
2026	747.488	982.520	2,648.756	-	-	4,378.764
2027	747.488	982.520	2,648.756	-	-	4,378.764
2028	747.488	982.520	2,648.756	-	-	4,378.764
2029	747.488	982.520	2,648.756	-	-	4,378.764
2030	747.488	982.520	2,648.756	-	-	4,378.764
2031	747.488	982.520	2,648.756	-	-	4,378.764
2032	715.196	982.520	2,615.359	-	-	4,313.075
2033	-	969.600	2,615.359	-	-	3,584.959
2034	-	-	2,615.359	-	-	2,615.359

## Capacity that Exited the Auction above the Clearing Price

A total of **60.816 MW** exited the auction above the clearing price. This Capacity is broken down by CMU Classification and Technology Type below.

Figure 5: Breakdown of Exited Capacity by CMU Type

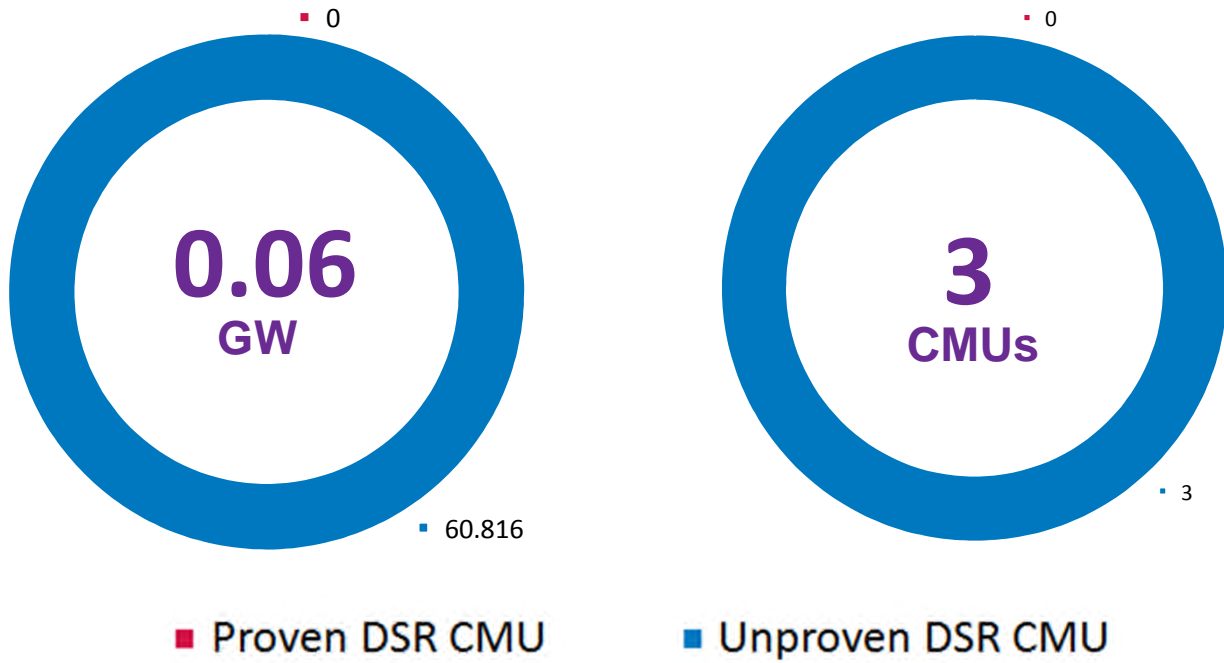


Table 3: Capacity Exited by CMU Classification

CMU TYPE	Capacity (MW)	%	No. of CMUs	%
Proven DSR	0.000	0.00	0	0.00
Unproven DSR	60.816	100.00	3	100.00

## Appendix A – Complete List of CMUs and their Status.

Note: Where a Capacity Agreement (AG) has been awarded the Capacity and Duration are the Capacity and Duration awarded.

Applicant Company	CMU ID	Capacity AG	CMU Classification	Capacity (MW)	Duration (Years)
UK Power Reserve Limited	AGPR01	Yes	Unproven DSR CMU	10	1
Limejump Ltd.	DSR_04	Yes	Unproven DSR CMU	0.5	1
Limejump Ltd.	DSR_05	Yes	Unproven DSR CMU	0.5	1
Limejump Ltd.	DSR_06	Yes	Unproven DSR CMU	0.869	1
Limejump Ltd.	DSR_07	Yes	Unproven DSR CMU	1.738	1
Limejump Ltd.	DSR_08	Yes	Unproven DSR CMU	4.344	1
Limejump Ltd.	DSR_09	Yes	Unproven DSR CMU	4.344	1
Limejump Ltd.	DSR_10	Yes	Unproven DSR CMU	3.475	1
Limejump Ltd.	DSR_11	Yes	Unproven DSR CMU	1.738	1
E.ON UK Plc	DSR026	Yes	Unproven DSR CMU	20	1
E.ON UK Plc	DSR027	Yes	Unproven DSR CMU	6	1
E.ON UK Plc	DSR028	Yes	Unproven DSR CMU	6	1
E.ON UK Plc	DSR029	Yes	Unproven DSR CMU	3.5	1
E.ON UK Plc	DSR030	Yes	Unproven DSR CMU	0.5	1
EnerNOC UK Limited	ECMU57	Yes	Unproven DSR CMU	21.72	1
EnerNOC UK Limited	ECMU58	Yes	Unproven DSR CMU	21.72	1
EnerNOC UK Limited	ECMU59	Yes	Unproven DSR CMU	21.72	1
EnerNOC UK Limited	ECMU60	Yes	Unproven DSR CMU	21.72	1
EDF Energy Customers plc	EDFSR5	Yes	Unproven DSR CMU	2.606	1
EDF Energy Customers plc	EDFSR6	Yes	Unproven DSR CMU	3.475	1
EDF Energy Customers plc	EDFSR7	Yes	Unproven DSR CMU	1.303	1
EDF Energy Customers plc	EDFSR8	Yes	Unproven DSR CMU	1.303	1
Energy Pool UK limited	EPO008	No	Unproven DSR CMU	N/A	N/A
Energy Pool UK limited	EPO009	Yes	Unproven DSR CMU	4.344	1
KiWi Power Ltd	KIWI90	Yes	Unproven DSR CMU	20	1
KiWi Power Ltd	KIWI91	Yes	Unproven DSR CMU	20	1
KiWi Power Ltd	KIWI93	Yes	Unproven DSR CMU	20	1
SmartestEnergy Limited	SEL-1c	No	Unproven DSR CMU	N/A	N/A
SmartestEnergy Limited	SEL-2c	No	Unproven DSR CMU	N/A	N/A
SmartestEnergy Limited	SEL-3c	Yes	Unproven DSR CMU	17.376	1
SmartestEnergy Limited	SEL-4c	Yes	Unproven DSR CMU	17.376	1
BOC Ltd	TLGUK2	Yes	Proven DSR CMU	19	1
Tata Steel UK Limited	TS16_1	Yes	Unproven DSR CMU	10	1
Tata Steel UK Limited	TS16_2	Yes	Proven DSR CMU	18	1
Tata Steel UK Limited	TS16_3	Yes	Unproven DSR CMU	7	1