

Final Auction Results

Transitional Capacity Market Auction for 2016/17



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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 the Electricity Capacity Regulations 2014, 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 2016/17 concluded on 27th January 2016, 10:30 GMT. The results of the auction are as follows, where all prices are 2014/15 prices and any capacity figure refers to de-rated capacity, unless otherwise stated.

The Clearing Price is: **£27.50 kW / year**

The Aggregate Capacity of Capacity Market Units (CMUs) awarded Agreements is: **802.710 MW**.

The CMUs to which a Capacity Agreement have 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. **The Auction concluded without any CMUs being removed from the system by National Grid.**

Under Capacity Market Rule 11.3.3(c) any Bidder that is provisionally notified that it has been awarded a Capacity Agreement in the Transitional Capacity Auction pursuant to Rule 5.10.1 may choose to amend their product choice before the end of the Working Day following the date on which the Clearing Round occurs. Such a Bidder may choose between the full capacity product or a time banded product, where the latter is payable at a rate equal to 70% of the auction clearing price.

The total forecast cost of Capacity Agreements Awarded is **£22,026,939**. This represents the product of the Bidding Capacity of each CMU awarded a Capacity Agreement and the Capacity Cleared Price for that CMU.

The results of the Capacity Auction have been added to the Capacity Market Register, available at www.emrdeliverybody.com

The remainder of this report gives further detail on the Transitional Capacity 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: **£27.50 kW / year**

The Transitional Capacity Auction cleared in Bidding Round 5 on the **27th January 2016, 10:30 GMT**.

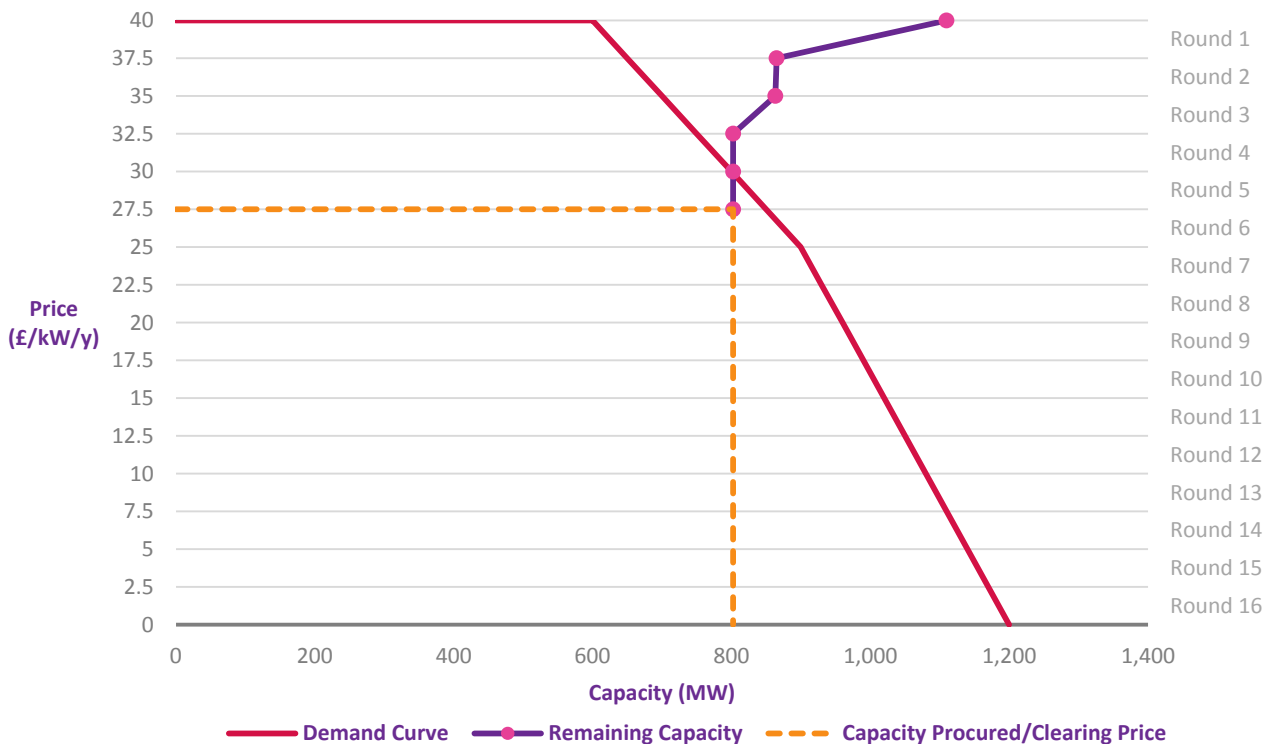
The Auction did not clear with an exact match of Offered Capacity and target capacity ("Clearing Capacity") and so the Net Welfare Algorithm was used to determine clearing.

The Net Welfare Algorithm specified in Rule 5.9.6 was used to determine at what point the Auction should clear. The algorithm evaluates if the welfare gained by over procuring (at a higher cost) outweighs the additional cost incurred (in comparison to under procuring at a lower cost). If the result is positive (i.e. if the welfare gained by over procuring outweighs the cost), then capacity will be over procured at the higher cost, otherwise if the result is negative then capacity will be under procured at the lower cost.

The result of the Net Welfare Algorithm was negative.

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 quantity 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: **802.710 MW**.

A total of **1,110.028 MW** entered the Auction, of which **72.31%** received Capacity Agreements for delivery in 2016/17.

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

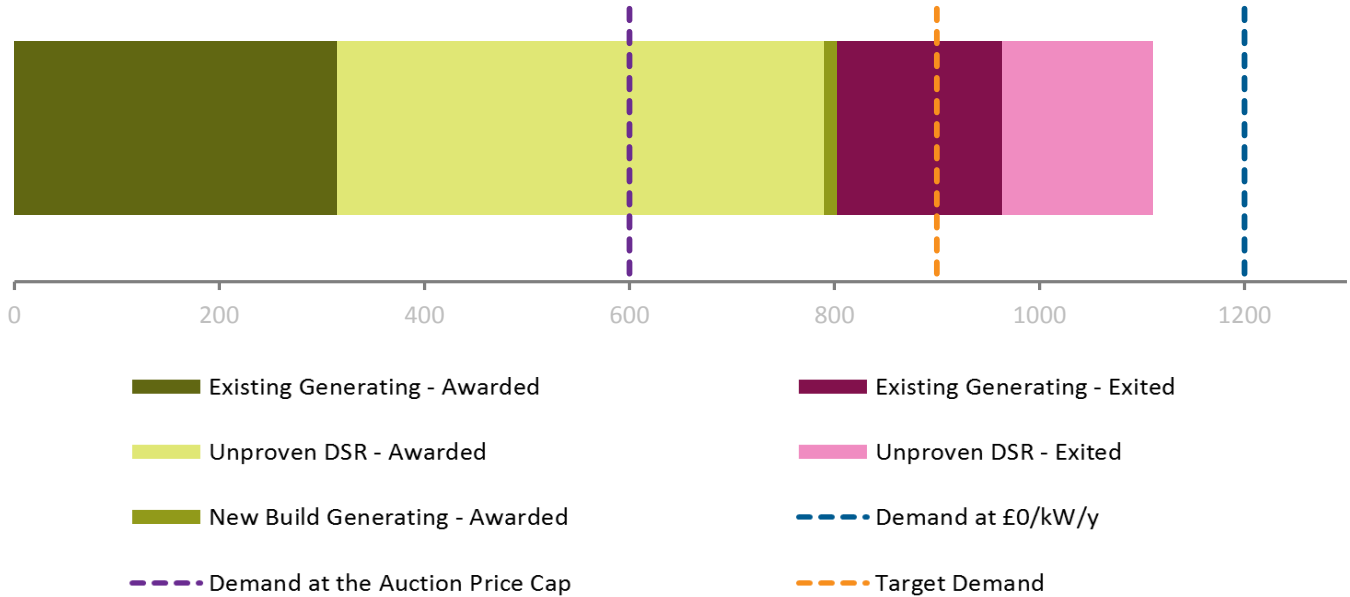


Figure 3 and Table 1 show the breakdown of the Total Awarded Capacity Agreements by CMU Type. A mixture of new and existing Capacity was procured. 487.531 MW of the volume of Capacity Agreements awarded is for new or unproven capacity. This is the sum of the capacity of CMUs that have been awarded agreements that are Unproven DSR or New Build CMUs.

Figure 3: Breakdown of Awarded Capacity by CMU Type

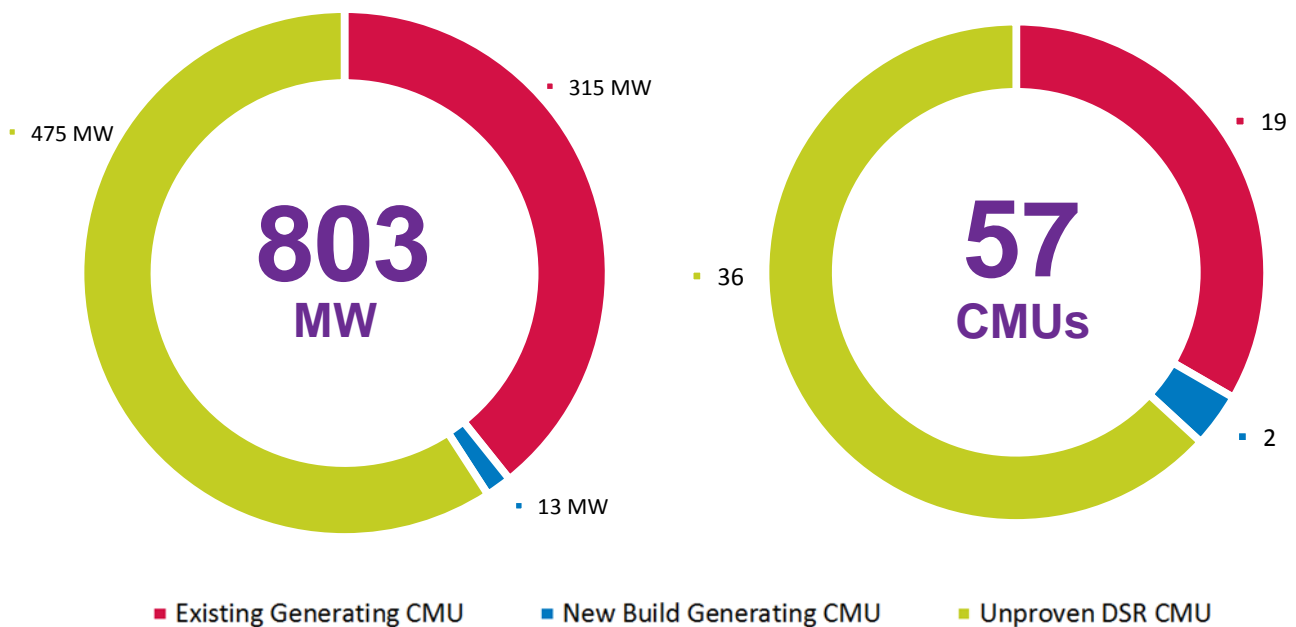
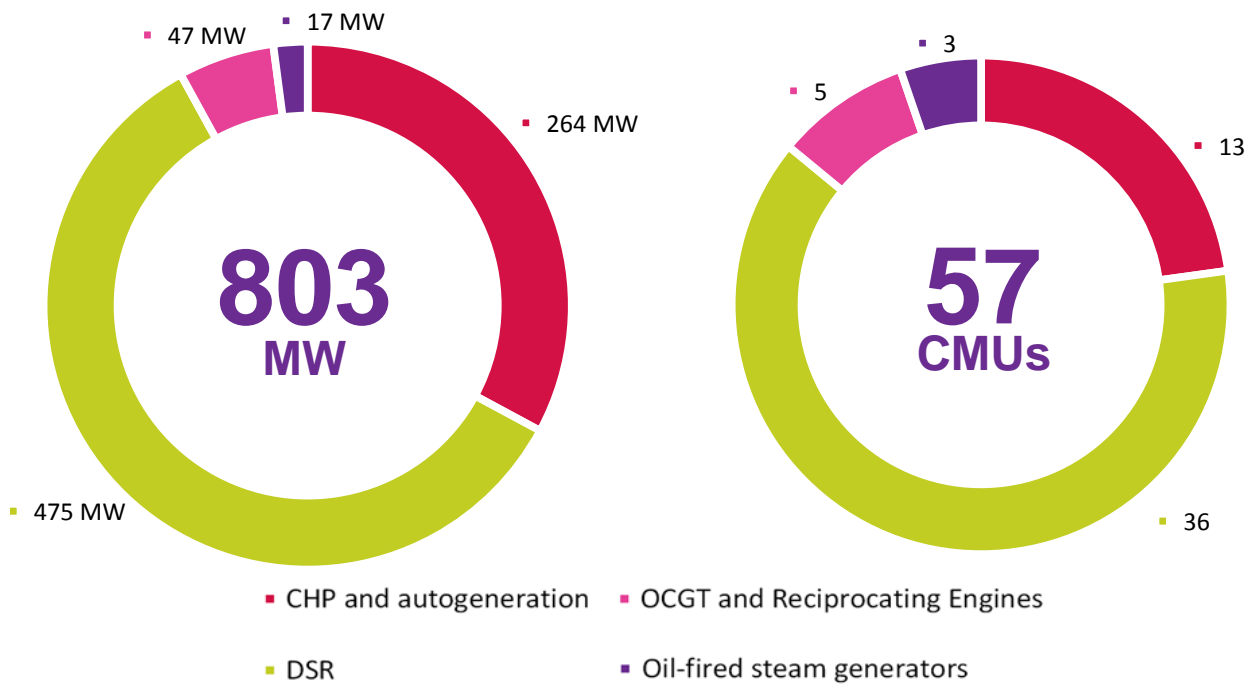


Table 1: Breakdown of Awarded Capacity by CMU Classification

CMU Type	Capacity (MW)	%	No. of CMUs	%
Existing Generating	315.179	39.26	19	33.33
New Build Generating	12.788	1.59	2	3.51
Unproven DSR	474.743	59.14	36	63.16

Figure 4 shows the breakdown of CMUs awarded Capacity Agreements by Technology Type.

Figure 4: Capacity Awarded by Technology Type



The majority of the Capacity Agreements awarded, by capacity, are to DSR components.

Table 2: Breakdown of Awarded Capacity by CMU Type

CMU Type	Capacity (MW)	%	No. of CMUs	%
CHP and autogeneration	263.832	32.87	13	22.81
DSR	474.743	59.14	36	63.16
OCGT and Recip. Engines	47.357	5.90	5	8.77
Oil-fired steam generators	16.778	2.09	3	5.26

The Total Forecast Cost of Capacity Agreements Awarded

The total forecast cost of Capacity Agreements awarded is: **£ 22,026,939**

The cost is found by multiplying the Bidding Capacity of each successful CMU by the Capacity Cleared Price. For participants that selected the time banded product, the Capacity Cleared Price is equal to 70% of the auction clearing price. Whilst for participants that selected the full product, the Capacity Cleared Price is equal to the auction clearing price. The cost is in 2014/15 prices and applies to the Delivery Year 2016/17.

Payments made to Capacity Providers will be indexed according to the methodology stated in the Electricity Capacity Regulations Schedule 1(3).

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 57 CMUs that have been awarded Capacity Agreements, from 28 Applicant Companies.

The Duration of Agreements Awarded

All Capacity Agreements awarded in the Transitional Capacity Auction are for a duration of one year.

Capacity that Exited the Auction above the Clearing Price

A total of 307.318 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

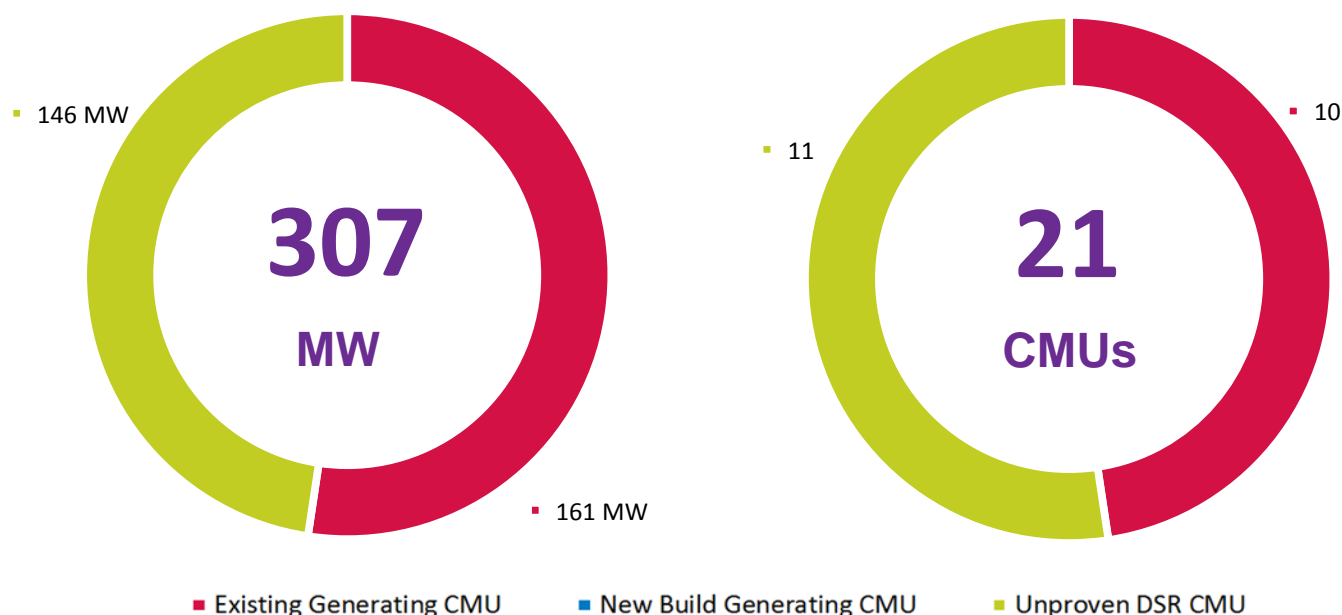


Table 3: Capacity Exited by CMU Classification

CMU TYPE	Capacity (MW)	%	No. of CMUs	%
Existing Generating	160.982	52.38	10	47.62
New Build Generating	0	0.00	0	0.00
Unproven DSR	146.336	47.62	11	52.38

Existing Generating CMUs make up the largest group of Capacity that Exited the Auction by Classification.

Figure 6: Breakdown of Exited Capacity by Technology Type

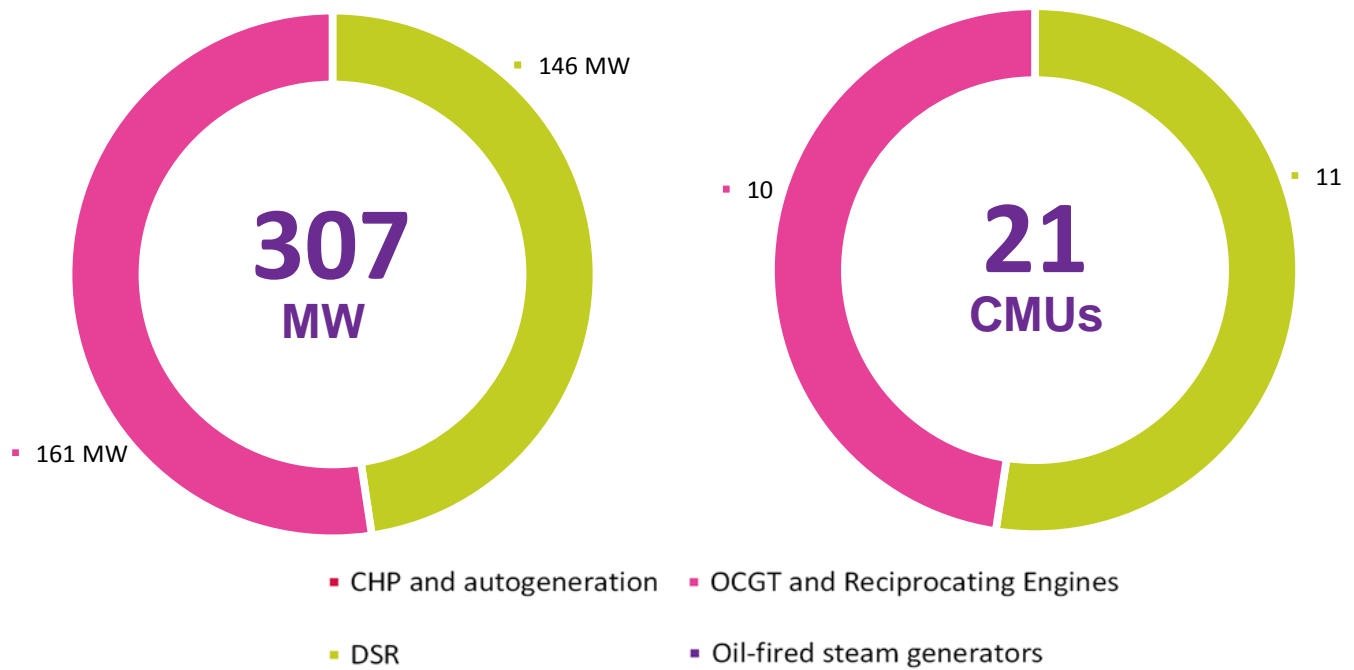


Table 4: Capacity Exited by Technology Type

CMU TYPE	Capacity (MW)	%	No. of CMUs	%
CHP and autogeneration	0	0.00	0	0.00
DSR	146.336	47.62	11	52.38
OCGT and Recip. Engines	160.982	52.38	10	47.62
Oil-fired steam generators	0	0.00	0	0.00

DSR and OCGT units exited between 17-21% of their capacity. All CHP and Oil-fired units that entered received agreements.

Appendix A – Results by CMU.

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

Applicant Company	CMU ID	Capacity AG	CMU Classification	Capacity (MW)	Duration (Years)
Tata Steel UK Limited	2015_2	Yes	Unproven DSR CMU	15	1
Aggreko UK Limited	Aggr15	Yes	New Build Generating CMU	5.768	1
Ameresco Limited	AMER01	Yes	Unproven DSR CMU	3.45	1
Ameresco Limited	AMER02	Yes	Unproven DSR CMU	3.45	1
Ameresco Limited	AMER03	Yes	Unproven DSR CMU	2.6	1
Ameresco Limited	AMER04	Yes	Unproven DSR CMU	2.6	1
Ameresco Limited	AMER05	Yes	Unproven DSR CMU	2.6	1
Ameresco Limited	AMER06	Yes	Unproven DSR CMU	2.6	1
Anglian Water Services Ltd	ANGLCM	Yes	Existing Generating CMU	28.37	1
Regent Park Energy Limited	ARPCM1	Yes	Existing Generating CMU	12.195	1
Alkane Energy UK Limited	AUKCM1	Yes	Existing Generating CMU	8.557	1
Green Frog Power Limited	BRISTO	No	Existing Generating CMU	N/A	N/A
British Sugar plc	BSWISS	Yes	Existing Generating CMU	41.4	1
Cargill PLC	CarGen	Yes	Existing Generating CMU	25.11	1
E.ON UK plc	CEN001	Yes	Existing Generating CMU	2.017	1
GB Gas Holdings Ltd	CENEST	Yes	Unproven DSR CMU	5.105	1
Cofely East London Energy Limited	CES001	Yes	Existing Generating CMU	2.92	1
Cofely East London Energy Limited	CES002	Yes	Existing Generating CMU	5.254	1
Cofely Industrial Energy Services Limited	CES003	Yes	Existing Generating CMU	5.382	1
Citigen (London) Limited	CITIGN	Yes	New Build Generating CMU	7.02	1
Limejump Ltd.	CM_LJ7	Yes	Unproven DSR CMU	6.77	1
Green Frog Power Limited	DOWSTO	No	Existing Generating CMU	N/A	N/A
REstore Flexpond UK Limited	DSBABT	Yes	Existing Generating CMU	47.349	1
E.ON UK plc	DSR001	Yes	Unproven DSR CMU	2.6	1
E.ON UK plc	DSR002	Yes	Unproven DSR CMU	2.6	1
E.ON UK plc	DSR003	Yes	Unproven DSR CMU	2.6	1
E.ON UK plc	DSR004	Yes	Unproven DSR CMU	2.6	1
EnerNOC UK Limited	ECMU01	No	Unproven DSR CMU	N/A	N/A
EnerNOC UK Limited	ECMU02	No	Unproven DSR CMU	N/A	N/A
EnerNOC UK Limited	ECMU03	No	Unproven DSR CMU	N/A	N/A
EnerNOC UK Limited	ECMU04	Yes	Unproven DSR CMU	21.7	1
EnerNOC UK Limited	ECMU05	Yes	Unproven DSR CMU	21.7	1
EnerNOC UK Limited	ECMU06	Yes	Unproven DSR CMU	21.7	1
Energy Pool UK limited	EPO001	Yes	Unproven DSR CMU	43.34	1
Energy Pool UK limited	EPO002	Yes	Unproven DSR CMU	16.492	1
EDF Energy Customers plc	ESR16B	Yes	Unproven DSR CMU	23.87	1
EDF Energy Customers plc	ESR16C	Yes	Unproven DSR CMU	23.87	1
Flexitricity Limited	FLEX60	No	Unproven DSR CMU	N/A	N/A
Flexitricity Limited	FLEX61	Yes	Unproven DSR CMU	2.604	1
Flexitricity Limited	FLEX62	Yes	Unproven DSR CMU	3.222	1
Flexitricity Limited	FLEX63	Yes	Unproven DSR CMU	2.778	1

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Applicant Company	CMU ID	Capacity AG	CMU Classification	Capacity (MW)	Duration (Years)
Flexitricity Limited	FLEX64	Yes	Unproven DSR CMU	5.208	1
Flexitricity Limited	FLEX65	No	Unproven DSR CMU	N/A	N/A
Flexitricity Limited	FLEX66	Yes	Unproven DSR CMU	12.586	1
Flexitricity Limited	FLEX67	Yes	Unproven DSR CMU	11.544	1
Flexitricity Limited	FLEX68	No	Unproven DSR CMU	N/A	N/A
Green Frog Power Limited	GIRSTO	No	Existing Generating CMU	N/A	N/A
Harworth Power Generation Limited	Harwo1	Yes	Existing Generating CMU	2.922	1
Green Frog Power Limited	HIRSTO	No	Existing Generating CMU	N/A	N/A
Green Frog Power Limited	HULSTO	No	Existing Generating CMU	N/A	N/A
Imerys Minerals	IMERS1	Yes	Existing Generating CMU	4.394	1
Imerys Minerals	IMERS2	Yes	Existing Generating CMU	5.658	1
Imerys Minerals	IMERS3	Yes	Existing Generating CMU	6.726	1
KiWi Power Limited	KIWI63	Yes	Unproven DSR CMU	34.72	1
KiWi Power Limited	KIWI64	Yes	Unproven DSR CMU	34.72	1
KiWi Power Limited	KIWI65	Yes	Unproven DSR CMU	34.72	1
KiWi Power Limited	KIWI66	Yes	Unproven DSR CMU	34.72	1
KiWi Power Limited	KIWI67	Yes	Unproven DSR CMU	17.36	1
KiWi Power Limited	KIWI68	Yes	Unproven DSR CMU	17.36	1
Tempus Energy Supply Ltd.	METCHP	No	Unproven DSR CMU	N/A	N/A
REstore Flexpond UK Limited	MIXUNP	Yes	Unproven DSR CMU	1.99	1
Green Frog Power Limited	NORSTO	No	Existing Generating CMU	N/A	N/A
Green Frog Power Limited	PLYSTO	Yes	Existing Generating CMU	18.908	1
E.ON UK CHP Limited	POLCHP	Yes	Existing Generating CMU	30.87	1
SmartestEnergy Limited	SMART1	No	Unproven DSR CMU	N/A	N/A
SmartestEnergy Limited	SMART2	No	Unproven DSR CMU	N/A	N/A
SmartestEnergy Limited	SMART3	Yes	Unproven DSR CMU	15.624	1
SmartestEnergy Limited	SMART4	Yes	Unproven DSR CMU	4.34	1
SmartestEnergy Limited	SMART5	No	Unproven DSR CMU	N/A	N/A
SmartestEnergy Limited	SMART6	No	Unproven DSR CMU	N/A	N/A
Southern Water	SOUWAT	Yes	Existing Generating CMU	15.523	1
Green Frog Power Limited	SWASTO	No	Existing Generating CMU	N/A	N/A
Green Frog Power Limited	TIRSTO	No	Existing Generating CMU	N/A	N/A
BOC Ltd	TLGUK1	Yes	Unproven DSR CMU	14	1
REstore Flexpond UK Limited	TLO1-2	Yes	Existing Generating CMU	46.849	1
Green Frog Power Limited	TRESTO	No	Existing Generating CMU	N/A	N/A
UK Power Reserve Limited	UKPR13	Yes	Existing Generating CMU	4.775	1
Green Frog Power Limited	WILSTO	No	Existing Generating CMU	N/A	N/A