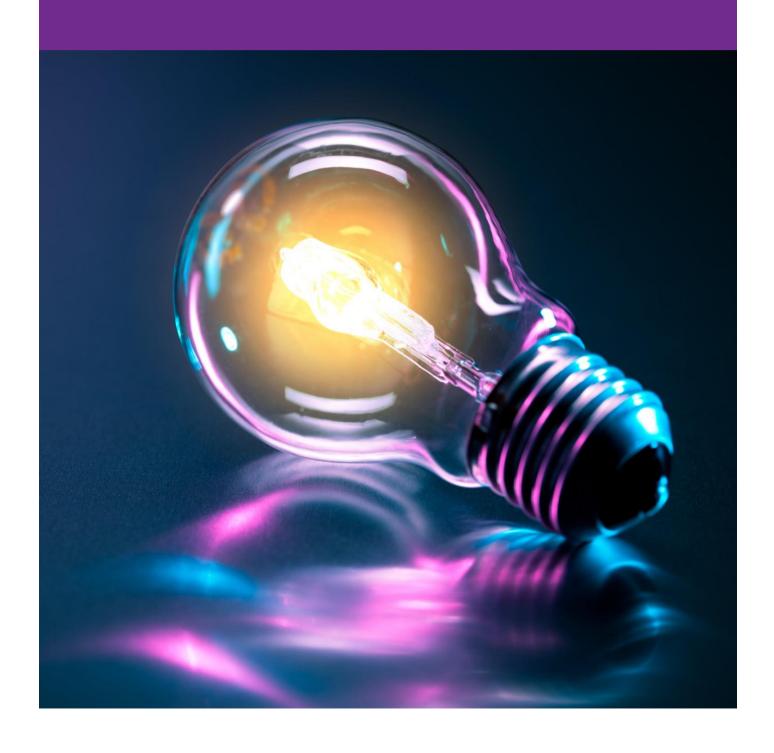
# nationalgrid

## **Provisional 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 5.10.2) to notify the Secretary of State of the Provisional Results of the Transitional Capacity Auction as soon as reasonably practicable following the conclusion of the Transitional Capacity Auction.

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 2014/2015 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 awarded Agreements is: 802.710 MW.

The CMUs to which a Capacity Agreement has been provisionally 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 (which is payable at a rate equal to 70% of the auction clearing price).

The cost of the Capacity procured in the Transitional Capacity Auction therefore cannot be calculated until the end of the Working Day following the date on which the Clearing Round occurs. **The maximum cost of the Capacity procured is £22,074,525 whilst the minimum cost is £15,452,168.** The actual cost of the Capacity procured will be confirmed in the final results report.

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 results of the auction remain provisional for the period of 8 working days after the completion of the Transitional Capacity Auction, during which time the Secretary of State may annul the auction on the grounds specified in Regulation 27 of the Electricity Capacity Regulations 2014. Final results will be published once this period has elapsed.

#### **The Auction Clearing Price**

The Clearing Price is: £27.50 kW / year

The 2015 Transitional 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.

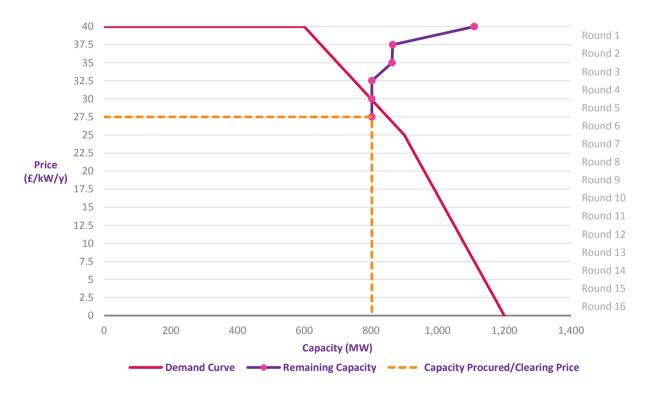


Figure 1: Demand and Possible Supply Range

#### The Aggregate Bidding Capacity of CMUs Provisionally Awarded Agreements

The Aggregate Bidding Capacity of CMUs provisionally 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.

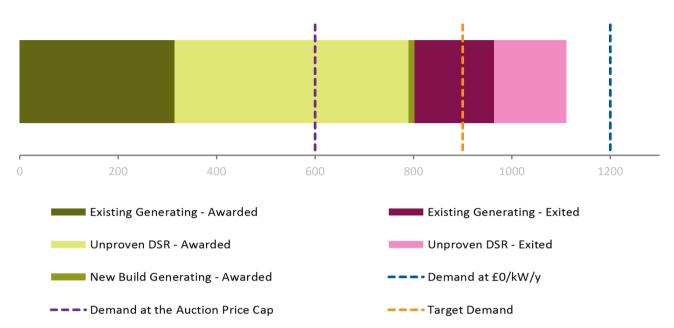


Figure 2: Breakdown of the Capacity Entering the Auction Provisionally Awarded Agreements

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.

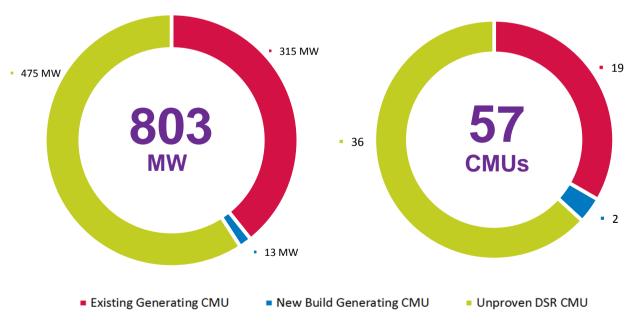


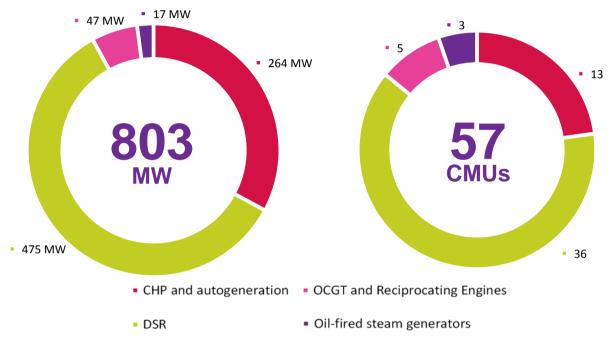
Figure 3: Breakdown of Awarded Capacity by CMU Type

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 provisionally awarded Capacity Agreements by Technology Type.

Figure 4: Capacity Awarded by Technology Type



The majority of the Capacity Agreements provisionally 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 CMUs to which Capacity Agreements have been Provisionally Awarded

A List of the CMUs and their provisional 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 provisionally 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.

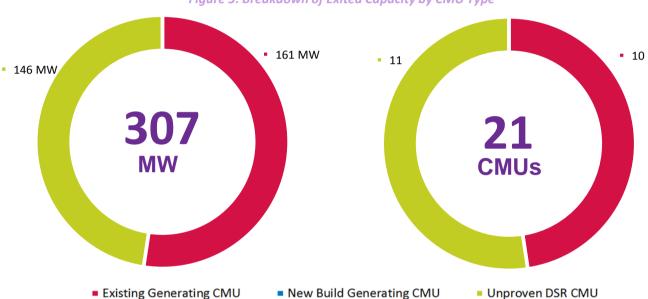


Figure 5: Breakdown of Exited Capacity by CMU Type

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.

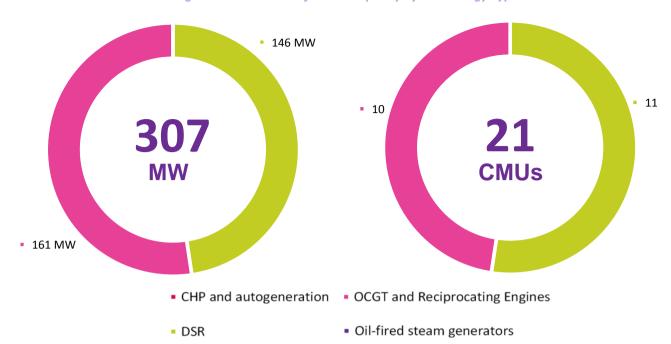


Figure 6: Breakdown of Exited Capacity by Technology Type

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 provisional agreementts.

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

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	<b>Existing Generating CMU</b>	28.37	1
Regent Park Energy Limited	ARPCM1	Yes	Existing Generating CMU	12.195	1
Alkane Energy UK Limited	AUKCM1	Yes	<b>Existing Generating CMU</b>	8.557	1
Green Frog Power Limited	BRISTO	No	Existing Generating CMU	N/A	N/A
British Sugar plc	BSWISS	Yes	<b>Existing Generating CMU</b>	41.4	1
Cargill PLC	CarGen	Yes	Existing Generating CMU	25.11	1
E.ON UK plc	CEN001	Yes	<b>Existing Generating CMU</b>	2.017	1
GB Gas Holdings Ltd	CENEST	Yes	Unproven DSR CMU	5.105	1
Cofely East London Energy Limited	CES001	Yes	<b>Existing Generating CMU</b>	2.92	1
Cofely East London Energy Limited	CES002	Yes	Existing Generating CMU	5.254	1
Cofely Industrial Energy Services Limited	CES003	Yes	<b>Existing Generating CMU</b>	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	<b>Existing Generating CMU</b>	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

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	<b>Existing Generating CMU</b>	N/A	N/A
Green Frog Power Limited	PLYSTO	Yes	Existing Generating CMU	18.908	1
E.ON UK CHP Limited	POLCHP	Yes	<b>Existing Generating CMU</b>	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	<b>Existing Generating CMU</b>	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	<b>Existing Generating CMU</b>	N/A	N/A