

# Report to Secretary of State Adjustment to Demand Curve

2015 Four year ahead Capacity Market Auction



Report to Secretary of State  
Adjustment to Demand Curve

2015 T-4 Auction  
2019/20 Delivery Year

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# Report to Secretary of State on Amendments to the Demand Curve

## Executive Summary

The Electricity Capacity Regulations 2014 (“the Regulations”) and the Capacity Market Rules 2014 (“the Rules”) oblige National Grid Electricity plc in its role as Delivery Body to advise the Secretary of State if any adjustment should be made to the Demand Curve in light of Prequalification Results and provide a recommendation as to any adjustment to be made, in accordance with Regulation 23 of the Regulations. This document has been prepared to discharge that obligation.

Capitalised terms used in this report shall have the meanings given in the Rules and references to a Rule are to a rule within the Rules.

In accordance with the specific requirements in the Regulations and the Rules this document sets out

- The aggregate De-rated Capacity of Capacity Market Units (CMU) which have prequalified to bid in the Capacity Auction
- The aggregate De-rated Capacity of CMUs of which applications were rejected
- The aggregate Ce-Rated capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will be closed down, decommissioned or otherwise non-operational by the commencement of the delivery year
- The aggregate De-Rated Capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will be temporarily non-operational for all the winter of the delivery year but will be operational thereafter
- The aggregate De-rated Capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will remain operational during the delivery year
- Whether an adjustment is required to the Demand Curve in light of Prequalification Results
- A recommendation as to the adjustment to the Demand Curve

## Prequalification Results

### Volume of Prequalified Capacity Market Units

The aggregate De-rated Capacity of Capacity Market Units (CMU) which have Prequalified to bid in the Capacity Auction is **43069.596 MW**

### Volume of Conditionally Prequalified Capacity Market Units

The aggregate De-rated Capacity of Capacity Market Units (CMU) which have Conditionally Prequalified to bid in the Capacity Auction is **2911.161MW**.

### Volume of Capacity Market Units of which the Application was rejected

The aggregate De-rated Capacity of CMUs of which applications were rejected is **13079.230 MW**.

## Update to Demand Curve

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### CMUs which submitted Opt-Out Notifications

#### Opt Out: Non-Operational

The aggregate De-Rated capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will be closed down, decommissioned or otherwise non-operational by the commencement of the delivery year is **8835.45 MW**.

#### Opt Out: Temporarily non-Operational

The aggregate De-Rated Capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will be temporarily non-operational for all the winter of the delivery year but will be operational thereafter is **0MW**.

#### Opt Out: Operational

The aggregate De-rated Capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will remain operational during the delivery year is **1712.969 MW**.

## Update to the Demand Curve

### Opt Out: Operational

The Demand Curve should be adjusted to reflect capacity that has elected to opt out of the capacity market to ensure that consumers are not required to pay for capacity which will remain operational without a capacity agreement.

The aggregate De-rated Capacity of Generating CMUs of which the Delivery Body received an Opt-out Notification stating that the CMU will remain operational during the delivery year is 1712.969 MW. Modelling to set the Demand Curve in the Electricity Capacity Report assumed that 1120MW of this volume would convert to biomass and have already taken account of this volume in the initial recommendation on the volume of capacity to procure.

As such, it is recommended that the demand curve should be amended to reflect that volume of capacity which has elected to Opt Out while remaining operational for the delivery year where that volume was not already taken account of. This would result in the target capacity being reduced by **600MW**.

### Long Term STOR adjustments

Applicants in the CM auction cannot hold both a long term STOR contract and a Capacity Market Agreement simultaneously. Long term STOR contract holders can prequalify for the CM but must declare that they will surrender their long term agreement.

There is currently circa 400MW of Long Term STOR contracts in place. In 2014 300MW prequalified for the CM and our recommendation was to reduce volume by 100MW.

## Update to Demand Curve

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Following this year's prequalification process 265MW of STOR has prequalified for the T-4 auction, we would therefore recommend a reduction of **135MW**.

### Embedded Generation adjustments

Modelling work carried out to inform the Electricity Capacity Report was based on the assumption that there was approximately **3600MW** of existing embedded generation, capable of meeting a Capacity Obligation. This volume has been compared to the volume of Non CMRS Existing Generating CMUs and Non CMRS Refurbishing CMUs to test if any such generation has implicitly opted-out from the Capacity Market.

The volume of Non CMRS Existing Generating CMUs which have submitted a Prequalification Application is approximately **2000MW**. This suggests that approximately 1600MW has not entered the prequalification process. This plant may remain operational but it is not clear as to what decisions individual owners will make.

Whilst the position regarding embedded plant is unclear, we have considered a number of potential scenarios which could prevail; some embedded plant may be planning to close before 2019/20 but we don't have any information that helps us identify whether or not this is likely or which plant this would include. Some embedded plant may be planning to participate in the T-1 auction in 2018, if this were the case, then it would be prudent to recommend a reduction in the capacity to procure in the T-4 auction unless it is assumed that it is already included in the 2500MW held back by DECC for the T-1 auction. In absence of any evidence that provides confidence that we can rely on this embedded generation being operational in 2019/20 we do not recommend any adjustment to the target capacity at this stage.

### Conclusion

In light of the Prequalification Results, National Grid as EMR Delivery Body recommends that the Demand Curve for the T-4 auction is adjusted to reflect the volume of capacity which has submitted an Opt-out Notification but which will remain operational for the Delivery Year and a small adjustment for Long Term STOR participation.

It should be noted that the recommended reduction has been informed by T-4 participant actions and that market conditions may change in advance of the T-1 auction for 2019/20. In the event that such market conditions prevail, it may be necessary to make further changes to the required volume for 2019/20 ahead of the T-1 auction.

On the basis of this analysis, it is recommended that the target capacity for the 2015 T-4 Capacity Auction should be reduced by **735MW**

As such the Auction Parameters would be amended as shown in the table below,

Target capacity for 2015 T-4 Capacity Auction	<b>44665MW</b>
Demand curve coordinate – target volume at price cap	<b>43165MW</b>
Demand curve coordinate – target volume at £0/kW	<b>46165MW</b>
Price cap	<b>£75/kW/yr</b>
Price Taker Threshold	<b>£25/kW/yr</b>
15 Year Minimum £/kW Threshold	<b>£255/kW de-rated capacity</b>
3 Year Minimum £/kW Threshold	<b>£130/kW de-rated capacity</b>
Indexation base period	<b>Average CPI October 2014 – April 2015</b>

# Update to Demand Curve

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