

Report to Secretary of State Adjustment to Demand Curve

2014 Four year ahead Capacity Market Auction



Report to Secretary of State
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Four year ahead auction
First delivery year 2018/19

Report to Secretary of State – Adjustment of Demand Curve

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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 (CMUs) which have prequalified to bid in the Capacity Auction
- The aggregate De-rated Capacity of CMUs of which applications were rejected
- 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
- 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 CMUs which has prequalified to bid in the Capacity Auction is **52,446 MW**.

Volume of Conditionally Prequalified Capacity Market Units

The aggregate De-rated Capacity of CMUs which has conditionally prequalified to bid in the Capacity Auction is **10,058 MW**.

Volume of Capacity Market Units for which the Application was rejected

The aggregate De-rated Capacity of CMUs for which applications were rejected is **4995 MW**.

Update to Demand Curve

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 **4762MW**.

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 **3843 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 3843 MW. It should be noted that this plant is not obliged to update its submission regarding availability and faces no sanction in the event the capacity is not available during the Delivery Year. Modelling to set the Demand Curve in the 2014 Electricity Capacity Report assumed that 1695MW of this volume would convert to biomass and this volume has already been taken into account 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 has not already been taken into account. This would result in the target capacity being reduced by **2100MW**. It should be noted that this de-rating factor(s) used to calculate this volume have not been amended to reflect that the availability of this capacity may be less certain than that of plant participating in the mechanism.

Embedded Generation

Modelling work carried out to inform the 2014 Electricity Capacity Report was based on the assumption that there was 2200MW 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.

Update to Demand Curve

The volume of non CMRS Existing Generating CMUs which have submitted a Prequalification Application is **2202MW**. Based on the assumptions used in the modelling, it would appear that existing embedded generation that National Grid has access to any information on has opted in to the Capacity Market and is seeking a Capacity Agreement.

The Demand Curve does not, therefore, need to be amended to take account of embedded generation which has opted out of the mechanism.

Long term STOR:

Long term STOR contract holders submit a 'withdrawal declaration' at Prequalification which is defined in the Regulations as "a declaration in writing by an applicant that, if the applicant is awarded a capacity obligation for CMU i, it will offer to the national system operator to withdraw from or terminate the relevant STOR contract with effect from a date no later than the start of the delivery period." The Demand Curve should therefore be modified in the event of any long term STOR providers electing to continue to provide long term STOR rather than enter the Capacity Market.

There is 400MW of long term STOR under contract. Applications for Prequalification have been submitted in respect of 285MW of the 0.4GW under contract.

As such, it is recommended that the Demand Curve should be amended to reflect that volume of capacity which is under contract to provide long term STOR but has chosen not to participate in the Capacity Market. This would result in the target capacity being reduced by **100MW**.

Volume held back for the T-1 Auction:

Prior to publication of the Auction Guidelines, DECC determined that 2500MW of De-rated Capacity should be reserved for auction at the year ahead auction. Amendments to this volume have not been considered as this Government decision is not impacted by the Prequalification process.

Conclusion:

In light of the Prequalification results, National Grid as EMR Delivery Body recommends that the Demand Curve is adjusted to reflect the volume of capacity which has submitted an Opt-out Notification but which will remain operational for the Delivery Year. The target capacity for the 2014 T-4 Capacity Auction should be reduced by **2200 MW**.

- Generating CMU – Opt Out Operational: 2100 MW
- Embedded generation: No change
- Long term STOR – not participating in the Capacity Market: 100 MW
- Volume reserved for the T-1 auction: No change

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

Target capacity for 2014 T-4 Capacity Auction	48,600MW (50,800MW)
Demand Curve coordinate – target volume at price cap	47,100MW (49,300MW)
Demand Curve coordinate – target volume at £0/kW	40,100MW (52,300MW)
Price cap	£75/kW/yr
Price Taker Threshold	£25/kW/yr
15 Year Minimum £/kW Threshold	£250/kW de-rated capacity
3 Year Minimum £/kW Threshold	£125/kW de-rated capacity
Indexation base period	1st October 2012 to 30th April 2013

Update to Demand Curve
