national**grid**

Report to Secretary of State Adjustment to Demand Curve

2016 Early Capacity Auction



Report to Secretary of State Adjustment to Demand Curve 2016 Early Auction 2017/18 Delivery Year

Copyright

19th October 2016

Copyright National Grid 2016, all rights reserved. No part of this report may be reproduced in any material form (including photocopying and restoring in any medium or electronic means and whether or not transiently or incidentally) without the written permission of National Grid except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

Table of Contents

Executive Summary	3
Prequalification Results	3
Volume of Prequalified Capacity Market Units	3
Volume of Conditionally Prequalified Capacity Market Units	3
Volume of Capacity Market Units of which the Applications were rejected	3
CMUs which submitted Opt-Out Notifications	4
Opt Out: Non-Operational	4
Opt Out: Temporarily non-Operational	4
Opt Out: Operational	4
Update to the Demand Curve	4
Opt Out: Operational	4
Long Term STOR adjustments	4
Embedded Small Scale Capacity adjustments	5
Adjustments to autogeneration capacity assumed to be outside of the CM	5
Conclusion	5

Draft 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"), both as amended, oblige National Grid Electricity plc in its role as Delivery Body to publish Auction Guidelines. 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 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 Capacity Market Units (CMU) which have Prequalified to bid in the Capacity Auction is 53,299 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 8,515 MW.

Volume of Capacity Market Units of which the Applications were rejected

The aggregate De-rated Capacity of CMUs of which applications were rejected is 584 MW.

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 3,673 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 33 MW.

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 0 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 0 MW.

In addition, around 600 MW of existing de-rated transmission-connected capacity did not submit an opt-out notice but was assumed to be operational in 2017/18 in our modelling. We therefore recommend that the demand curve should be reduced by 600 MW to reflect that volume of capacity that has implicitly elected to Opt Out and is assumed to remaining operational for the delivery year.

Long Term STOR adjustments

Applicants in the Capacity Market (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 390 MW of Long Term STOR contracts in place. In 2015 265 MW prequalified for the CM and our recommendation was to reduce volume by 135 MW.

Following this year's prequalification process 255 MW of STOR has prequalified for the EA auction, we would therefore recommend a reduction of 135 MW rounded to 100 MW.

Embedded Small Scale Capacity adjustments

Modelling work carried out to inform the Electricity Capacity Report and updated for new information received since then assumed that there was approximately 4,300 MW of existing embedded small scale de-rated capacity capable of meeting a Capacity Obligation including Demand Side Response (DSR). This has been increased by around 350 MW to 4,650 MW to take account of autogeneration capacity assumed to be outside of the CM that has participated in prequalification (see section below). This volume has been compared to the volume of small embedded Existing Generating CMUs, small embedded Refurbishing CMUs, Proven DSR CMUs and Unproven DSR CMUs to test if any such capacity has implicitly opted-out from the Capacity Market.

The de-rated capacity of Non CMRS Existing Generating CMUs which have submitted a Prequalification Application for both the Early Auction and Transitional Auction for 2017/18 is approximately 4,700 MW.

Therefore it would appear that all existing embedded small scale generation for which National Grid has access to information has opted in to the Capacity Market and is seeking a Capacity Agreement in either the Transitional or Early Auctions. The Demand Curve does not, therefore, need to be amended to take account of embedded generation which has implicitly opted out of the mechanism.

Adjustments to autogeneration capacity assumed to be outside of the CM

Modelling work carried out to inform the Electricity Capacity Report assumed over 1,400 MW of existing de-rated autogeneration capacity was outside of the Capacity Market. New information received since the modelling has reduced this amount by around 150 MW.

Of the remaining existing autogeneration de-rated capacity assumed to be outside of the CM, approximately 350 MW of Existing Generating CMUs have submitted a Prequalification Application for the Early Auction.

As such, it is recommended that the demand curve should be amended to reflect that volume of existing autogeneration capacity assumed to be outside of the capacity market that has participated in prequalification. This would result in the target capacity being increased by 500 MW.

Conclusion

In light of the Prequalification Results and updated information, National Grid as EMR Delivery Body recommends that the Demand Curve for the Early auction is adjusted to reflect the volume of capacity which has implicitly opted out and is assumed to remain operational for the Delivery Year, the volume of autogeneration capacity assumed to be outside of the CM in the modelling that has submitted a Prequalification Application and a small adjustment for Long Term STOR participation.

On the basis of this analysis, it is recommended that the target capacity for the 2016 Early Capacity Auction should be reduced by 200 MW (500 MW - 600 MW- 100 MW = -200 MW).

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

Target capacity for 2016 Early Auction	53,600 MW	
Demand curve coordinate – target volume at price cap	52,600 MW	
Demand curve coordinate – target volume at £0/kW	54,600 MW	
Price cap	£75/kW/yr	
Price Taker Threshold	£25/kW/yr	
15 Year Minimum £/kW Threshold	£255/kW de-rated capacity	
3 Year Minimum £/kW Threshold	£130/kW de-rated capacity	
Indexation base period	Average CPI October 2015 – April 2016	