

Capacity Market Auction Guidelines

2019 three year ahead Capacity Auction (T-3)

Delivery year 2022/23

2019 one year ahead Capacity Auction (T-1)

Delivery year 2020/21

2019 four year ahead Capacity Auction (T-4)

Delivery year 2023/24

12th February 2020

Contents

| | |
|--|----------|
| Capacity Market Auction Guidelines | 2 |
| Executive summary | 3 |
| User Support Guides | 3 |
| System Specific Training | 3 |
| 1. Auction Data | 4 |
| 1.1 Auction Timetable | 4 |
| 1.2 Auction Parameters | 4 |
| 1.3 De-rating Factors | 5 |
| 2. Processes | 6 |
| 2.1 Prequalification | 6 |
| 2.1.1 Prequalification guidance | 6 |
| 2.1.2 Capacity Market Operational Plan | 7 |
| 2.2 Capacity Market Register | 7 |
| 2.3 Notifications | 7 |
| 2.3.1 Prequalification results | 7 |
| 3. Auction | 8 |
| 3.1 Bidding Company and Authorised Individual management | 9 |
| 3.2 Contingency Bidding Arrangements | 9 |
| 3.3 Auction Monitor | 9 |
| 3.4 Reporting of Results | 9 |
| 3.4.1 Intra-Round reporting | 9 |
| 3.4.2 Detail around the Auction reporting following the clearing round | 10 |
| 3.4.3 Final results | 10 |

Capacity Market Auction Guidelines

These Auction Guidelines must be used in conjunction with the Electricity Capacity Regulations 2014 (with subsequent amendments) and Capacity Market Rules 2014 (with subsequent amendments); failure to do so may result in unsuccessful Prequalification or failure to gain a capacity agreement in the Capacity Auction.

Copyright National Grid Electricity System Operator Limited 2019, all rights reserved. No part of these Auction Guidelines 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 Electricity System Operator Limited except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

Executive summary

The Electricity Capacity Regulations 2014 (“the Regulations”) and the Capacity Market Rules 2014 (“the Rules”), both as amended, oblige National Grid Electricity System Operator Limited in its role as Delivery Body to publish Auction Guidelines. This document has been prepared to discharge that obligation.

The Regulations, the Rules, and these Auction Guidelines set out the requirements for market participants wishing to enter the Capacity Market and for owners of Mandatory CMU’s not wishing to enter the Capacity Market. In addition to these obligatory Auction Guidelines, the Delivery Body is also preparing non-statutory user support guides, providing information and training which is referenced in this document.

Capitalised terms used in these Auction Guidelines shall have the meanings given in the Rules.

In accordance with the Regulations and Rules these Auction Guidelines provide the following specific information for the three year ahead Capacity Auction for 2022/23 (T-3), one year ahead Capacity Auction for 2020/21 (T-1) and four year ahead Capacity Auction for 2023/24 (T-4).

- The date on which the Capacity Auctions will start
- The timetable for submission and determination of applications
- Details of how to apply to prequalify to participate in the Capacity Auction
- Instructions on using the EMR Delivery Body Portal and the IT Auction System
- The Auction Parameters determined by the Secretary of State
- The approved De-Rating Factor for each Generating Technology Class, each DSR CMU and each Interconnector CMU
- Contingency arrangements for auction bidding, in the event of failure of a participant’s access to the system

Other supporting documentation will be provided in the form of:

User Support Guides

These will cover each key process and will:

- Set out the process steps
- Set out the provider data requirements, referencing the Capacity Market Rules or Auction Guidelines as appropriate
- Explain any actions that are to be taken by the Delivery Body

System Specific Training

Following a webinar detailing key auction information including use of the system, a session will be arranged where successful applicants will be able to use the auction system in a sandbox environment.

This system will be accessed via the EMR Delivery Body Portal www.emrdeliverybody.com

All Auction Participants please be aware:

We have been instructed by BEIS that, if the Remaining Capacity exceeds the capacity determined by the Demand Curve at the end of the Bidding Round where the Bidding Round Floor Price is £0, the auction does not clear and no agreements will be issued. We would like to remind Bidders that if an Auction Participant fails to enter a bid, this is interpreted to be a bid at £0 (zero price bid) and would therefore not lead to an agreement should the auction fail to clear.

1. Auction Data

1.1 Auction Timetable

Table 1 provides the timetable for the three year ahead Capacity Auction for 2022/23 (T-3), one year ahead Capacity Auction for 2020/21 (T-1) and four year ahead Capacity Auction for 2023/24 (T-4).

Table 1. Auction timetable

| Auction | T-3 | T-1 | T-4 |
|---|--|---|---|
| Prequalification Window opens | 22/7/2019 | 22/7/2019 | 22/7/2019 |
| Prequalification Window closes | 13/9/2019 | 13/9/2019 | 13/9/2019 |
| Prequalification Results Day (post disputes) | 22/11/2019 | 22/11/2019 | 22/11/2019 |
| Notification of Prequalified CMUs pursuant to Rule 5.5.10(b) and associated update of affected Auction Parameters | T-3 weeks 9/1/2020 | T-3 weeks 16/1/2020 | T-3 weeks 13/2/2020 |
| Notification of updated Auction Parameters and confirmation of the conditional Prequalified Applicants which have fully Prequalified pursuant to Rule 4.6.3 | T-3 weeks 9/1/2020 | T-3 weeks 16/1/2020 | T-3 weeks 13/2/2020 |
| Confirmation of Entry and decisions under Rules 5.5.11, 5.5.13 and 5.5.14 notified to DB | T-15 to T-10 9/1/2020 to 16/1/2020 | T-15 to T-10 16/1/2020 to 23/1/2020 | T-15 to T-10 13/2/2020 to 20/2/2020 |
| Mock Auction – users’ login, check CMU details, run through a scripted auction in readiness for live auction | T-7 days 27/1/2020 | T-7 days 28/1/2020 | T-7 days 25/2/2020 |
| Auction start (T) | 30/1/2020 | 6/2/2020 | 5/3/2020 |

1.2 Auction Parameters

The Auction Parameters for each Capacity Market Auction are determined by the Secretary of State. These parameters are given in table 2.

Table 2. Auctions Parameters

| Auction | T-3 | T-1 | T-4 |
|---|-----------------------------|--------------|-----------------------------|
| Target capacity | 44 GW | 0.3 GW | 43.1 GW |
| Demand curve coordinate – volume at price cap | 43 GW | 0 GW | 42.1 GW |
| Demand curve coordinate – volume at £0/kW | 45 GW | 0.3 GW | 44.1 GW |
| Reliability Standard | 3 hours LOLE | 3 hours LOLE | 3 hours LOLE |
| Price cap | £75 /kW/year | £75 /kW/year | £75 /kW/year |
| Net CONE | £49 /kW/year | £49 /kW/year | £49 /kW/year |
| Price Taker Threshold | £25 /kW/year | £25 /kW/year | £25 /kW/year |
| 15 Year Minimum £/kW Threshold | £270/kW (De-rated capacity) | N/A | £275/kW (De-rated capacity) |
| 3 Year Minimum £/kW Threshold | £135/kW (De-rated capacity) | N/A | £135/kW (De-rated capacity) |

| | | | |
|------------------------|----------|-----|-----------|
| Indexation base period | 2017/18* | N/A | 2018/19** |
| Round price decrement | £5 | £5 | £5 |

1.3 De-rating Factors

The De-Rating Factor for each Generating Technology Class and DSR have been calculated in accordance with the methodology in Rule 2.3.5. and are explained in more detail within the Electricity Capacity Report (ECR). These factors are set out in table 3.

The interconnector de-rating methodology is detailed in the Secretary of State (SoS) Confirmation of Capacity Auction Parameters communicated 11th July, the same date as ECR/AG is published. Please note that the De-Rating Factors for Secondary Trading Entrants applying for the Delivery Year 2020/21 will be the T-1 2020/21 Auction De-Rating Factors.

Table 3. De-Rating Factors by Generating Technology Class

| Name for Technology Class | Plant Types Included | De-rating factors T-3 (%) | De-rating factors T-1 & ST (%) | De-rating factors T-4 (%) | |
|--|---|---------------------------|--------------------------------|---------------------------|-------|
| Oil-fired steam generators | Conventional steam generators using fuel oil | 91.26 | 91.26 | 91.26 | |
| Open Cycle Gas Turbine (OCGT) | Gas turbines running in open cycle fired mode | 94.98 | 94.98 | 94.98 | |
| Reciprocating engines ¹ | Gas turbines running in open cycle fired mode Reciprocating engines not used for auto generation | 94.98 | 94.98 | 94.98 | |
| Nuclear | Nuclear plants generating electricity | 81.22 | 81.22 | 81.22 | |
| Hydro (excluding tidal / waves / ocean currents/ geothermal / storage) | Generating Units driven by water, other than such units: (a) driven by tidal flows, waves, ocean currents or geothermal sources; or (b) which form part of a Storage Facility | 89.65 | 89.65 | 89.65 | |
| Storage | Conversion of imported electricity into a form of energy which can be stored, the storing of the energy which has been so converted and the re-conversion of the stored energy into electrical energy Includes hydro Generating Units which form part of a Storage Facility (pumped storage hydro stations). | Storage Duration: 0.5h | 10.59 | 12.26 | 10.21 |
| | | Storage Duration: 1h | 21.36 | 24.70 | 20.43 |
| | | Storage Duration: 1.5h | 31.94 | 36.96 | 30.83 |
| | | Storage Duration: 2h | 42.53 | 48.66 | 41.04 |
| | | Storage Duration: 2.5h | 52.18 | 58.68 | 50.51 |
| | | Storage Duration: 3h | 59.43 | 65.93 | 57.94 |
| | | Storage Duration: 3.5h | 64.07 | 70.38 | 62.77 |
| | | Storage Duration: 4h | 67.04 | 72.98 | 65.93 |
| | | Storage Duration: 4.5h | 69.27 | 75.03 | 68.16 |
| | | Storage Duration: 5.0h | 71.13 | 95.08 | 70.20 |
| | Storage Duration: 5.5h+ | 95.08 | 95.08 | 95.08 | |

* Base Period for Indexation: October 2017/April 2018 inclusive

** Base Period for Indexation: October 2018/April 2019 inclusive

¹ There is no Transmission connected data for these technologies (as per 2.3 of Capacity market rules) the de-rating is based on the closest transmission technology. (Biomass and EFW comes from coal, Reciprocating comes from OCGT)

| | | | | |
|-------------------------------------|---|-------|-------|-------|
| Combined Cycle Gas Turbine (CCGT) | Combined Cycle Gas Turbine plants | 90.00 | 90.00 | 90.00 |
| Combined Heat and Power (CHP) | Combined heat and Power plants (large and small-scale) | 90.00 | 90.00 | 90.00 |
| Coal | Conventional steam generators using coal | 85.81 | 85.81 | 85.81 |
| Biomass ² | Conventional steam generators using biomass | 85.81 | 85.81 | 85.81 |
| Energy from Waste ² | Generation of energy from waste, including the generation of energy from: (a) conventional steam generators using waste; (b) anaerobic digestion; (c) pyrolysis; and (d) gasification | 85.81 | 85.81 | 85.81 |
| DSR | Demand Side Response | 86.14 | 86.14 | 86.14 |
| Intermittent Renewable Technologies | Onshore Wind | 8.20 | 8.98 | 7.42 |
| | Offshore Wind | 12.30 | 14.45 | 10.55 |
| | Solar PV | 3.13 | 2.34 | 3.22 |
| Interconnectors | IFA (France) | 69 | - | 63 |
| | IFA2 (France) | 71 | 87 | 65 |
| | Eleclink (France) | 75 | 92 | 69 |
| | BritNED (Netherlands) | 50 | - | 36 |
| | Greenlink (Republic of Ireland) | - | - | 42 |
| | Moyle (Northern Ireland) | 56 | - | 44 |
| | EWIC (Republic of Ireland) | 56 | - | 44 |
| | NemoLink (Belgium) | 58 | 82 | 46 |
| | NSL (Norway) | 88 | - | 88 |
| | VikingLink (Denmark) | - | - | 32 |

2. Processes

2.1 Prequalification

The Delivery Body has developed an online system for Applicants to submit Applications and supporting information for Prequalification. This system can be accessed via the EMR Delivery Body Portal, www.emrdeliverybody.com.

2.1.1 Prequalification guidance

Further information on how to submit Prequalification information and the overall process is included in the [Capacity Market Prequalification guidance document](#) which also includes:

- Instructions on how to use the EMR Delivery Body Portal for Prequalification activities

² There is no Transmission connected data for these technologies (as per 2.3 of Capacity market rules) the de-rating is based on the closest transmission technology. (Biomass and EFW comes from coal, Reciprocating comes from OCGT)

- How to Register, including how to complete security and identity checks for all individuals that require access to the EMR Delivery Body Portal System
- Where to access the relevant forms to be completed by Applicants as part of the Prequalification process
- Required file formats for the uploading of any supporting documentation

2.1.2 Capacity Market Operational Plan

The [Capacity Market Operational Plan](#) identifies the key milestones and activities required to deliver the Capacity Market Auctions in 2020. The timeline for operation of the 2019/20 Capacity Market is based on the Capacity Market Regulations and Rules and covers the T-3, T-1 and T-4 Auctions.

2.2 Capacity Market Register

The Capacity Market Register for each individual Auction can be accessed on the [EMR Delivery Body website](#).

2.3 Notifications

All notifications from Applicants should be submitted to the Delivery Body through the EMR Delivery Body Portal. Applicants are required to first Register to use the EMR Delivery Body Portal before notifications can be issued and received.

2.3.1 Prequalification results

The Delivery Body shall provide notification to each Applicant that submitted an Application informing them if they were successful or otherwise by 5pm on Prequalification Results Day.

3. Auction

The Capacity Auction is a descending clock auction (also known as “pay as clear” or “Dutch auction”), where Bidders withdraw capacity as the price drops subject to the conditions set out in Chapter 5 of the Rules. Provisional Capacity Auction results are notified to Bidders within 24 hours of the Capacity Auction clearing. Results are published, and the Capacity Market Register updated, within 8 working days, subject to Rule 5.10.6.

We have been instructed by BEIS that, if the Remaining Capacity exceeds the capacity determined by the Demand Curve at the end of the Bidding Round where the Bidding Round Floor Price is £0, the auction does not clear and no agreements will be issued. We would like to remind Bidders that if an Auction Participant fails to enter a bid, this is interpreted to be a bid at £0 (zero price bid) and would therefore not lead to an agreement should the auction fail to clear.

The T-3, T-1 and T-4 auctions will be a Non-Variable Price Duration Auction. All successful Bidders receive the Clearing Price. The table below sets out further information pertaining to each Auction.

Table 4. Auction specific summary information

| Parameters | T-3 | T-1 | T-4 |
|---|-------------------------------------|-----------------|----------------|
| Non-Variable or Variable Price-Duration auction | Non-Variable Price Duration auction | | |
| Bidding round price spread | £5/kW/year per round | | |
| Auction start time | 30/1/2020 09:00 | 06/2/2020 09:00 | 5/3/2020 09:00 |
| First bidding round (of both days) duration | 60mins | | |
| Bidding round duration thereafter | 30mins | | |
| Time between rounds (recess) | 15mins | | |
| Number of auction rounds per day | Day1 10 rounds Day2- 5 rounds | | |
| Number of auction days planned | 2 days | | |

The IT Auction System is an online system, accessed by standard web browsers. Prequalified Applicants will be provided with access details to allow them to enter via the EMR Delivery Body Portal. Within the IT Auction System, bidders will be able to enter and modify their exit bids and eligible bidders will be able to change their agreement length by entering data directly on the online system.

Training on the use of the system, including placing Exit Bids, will be available in advance of system go-live. Training will commence from November 2019 and will include a bidder manual, screen casts, user trials and a mock auction.

Table 5 summarises the activities that participants must carry out during T-15 to T-10 window for the T-3, T-1 and T-4 Auctions. More details and guidance will be available near to the time.

Table 5. Summary of activities for participants to carry out prior to Auction

| Activity | Task | System to use |
|-----------------------|---|--|
| Bidder setup | Amend bidding groups | |
| | Setup Authorised Individuals for bidding | |
| Confirmation of Entry | Existing CMUs: check Price Maker/Taker status | EMR Delivery Body Portal |
| | New Build/Refurbishing CMUs: to check length of agreement and Confirm Entry | |
| | DSR CMUs: check capacity and Confirm Entry | |
| Mock Auction | Login to Auction System and check CMU details | The Auction System |
| | Participate in Mock Auction | |

3.1 Bidding Company and Authorised Individual management

Bidding Companies will be automatically created in the EMR Portal for each participant who has been pre-qualified or conditionally pre-qualified for the relevant auctions. These will be created at sub company level. If the participant only has one company, the Bidding Company will be at the main company level.

Main Admin users of the main/sub company will be the default Authorised Individuals (AI's) for access to the Auction System. Please refer to [guidance document](#) for managing Bidding Company and Authorised Individuals.

3.2 Contingency Bidding Arrangements

This section describes the backup systems referred to in Rule 5.5.21 and which are to be utilised in the circumstances where a Bidder is unable to submit a Duration Bid Amendment or Exit Bid through the IT Auction System due to a technical fault in their connection to the system. In such circumstances the Auctioneer can place bids on behalf of Authorised Individuals (AI's) by telephone. AI's are the named users registered to bid Prequalified CMUs. This is only available as a contingency arrangement for loss of systems.

The procedure for placing bids by phone will be as follows:

- The AI is unable to place bids on IT Auction System
- The AI contacts Auction Manager by telephone
- Using a pre-defined unique code, the identity of the bidder is confirmed by the Auction Manager
- The AI requests the Auction Manager to place a bid in that round
- The Auction Manager enters the bid in the auction system on behalf of the bidding company and confirms, in the call the value entered
- All telephone calls will be recorded and a confirmation fax can be requested
- The placing of the bid on the auction system on behalf of the bidding company will be shown in the audit log

Note: It is recommended that the identity verification codes (instructions in the user guide for the auction system) are printed off and retained by participants before the auction starts as they would be needed for the auctioneer to authenticate the caller in the event of IT failure or disaster recovery. Telephone instructions cannot be actioned unless the caller can provide the relevant unique identification code.

3.3 Auction Monitor

As per Rule 5.14 the Delivery Body must appoint a third party to monitor the conduct of each Capacity Auction (an "Auction Monitor"). The Auction Monitor must carry out the role as described in the Rules.

The Auction Monitor must report to the Secretary of State, with a copy to the Authority, within 2 Working Days of the conclusion of the Capacity Auction on whether the procedures in the Rules and Auction Guidelines have been properly followed in the conduct of the Capacity Auction. The identity of the Monitor is made available 15 days prior to the start of the Capacity Auction (9th January 2020) and will be Deloitte LLP.

3.4 Reporting of Results

3.4.1 Intra-Round reporting

As per Rule 5.5.18; prior to the start of each round the high-level round results will be made publicly available. This will include the Bidding Round Price Spread, Potential Clearing Capacity at the price floor for that round, Excess Capacity rounded to 1GW for T-3 and T-4 auctions. **The Excess Capacity will be rounded to 100MW for the T-1 auction due to the lower demand.**

The EMR Portal is used to display these round updates.

3.4.2 Detail around the Auction reporting following the clearing round

To allow participants, the opportunity to prepare for the release of results the below describes the timeline and process which differs depending on the round that clears.

On the day that the auction clears, the provisional results will be published after markets have closed:

- DB publishes on website the Clearing Round price range within the cleared round recess.
- DB sends the individual Provisional Results to bidders via the auction system at 19:30 and also publishes the Clearing Price on the EMR Portal.
- DB will upload the full provisional report to DB website at 19:00.

The Delivery Body must within 24 hours of the Capacity Auction clearing notify Bidders whether, based on the Provisional Results, they have been provisionally awarded a Capacity Agreement with respect to a Bidding CMU. Such notification is provisional only and does not constitute notification of a Capacity Agreement.

3.4.3 Final results

The Auction Monitor will send a report to BEIS (and copy to Ofgem) with their findings within 2 working days following the Auction and unless instructed otherwise at 8 working days after the auction the DB publishes the final results to Bidders (this becomes the 'Auction Results Day'). The result is final when it is entered into the Capacity Market Register. Within 8 working days of the Auction Results Day the DB notifies each bidding CMU whether or not they have been awarded a capacity agreement.

Faraday House, Warwick Technology Park,
Gallows Hill, Warwick, CV346DA

nationalgrideso.com

nationalgrid**ESO**