# nationalgrid

## **Capacity Market Auction Guidelines**

2018 year ahead Capacity Auction (T-1) Delivery year 2019/20

2018 four year ahead Capacity Auction (T-4) Delivery year 2022/23



19<sup>th</sup> July 2018

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.

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#### **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.

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 one year ahead Capacity Auction for 2019/20 (T-1) and Four year ahead Capacity Auction for 2022/23 (T-4).

- The provisional 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 processes 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**- these sessions will be available during Prequalification and in the weeks prior to each Auction and will cover the following subjects:

- Registration and Prequalification
- Auction

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

## 1. Auction Data

#### **1.1 Auction Timetable**

The below table provides the timetable for the one year ahead Capacity Auction for 2019/20 (T-1) and four year ahead Capacity Auction for 2022/23 (T-4).

Auction	T-1	Т-4
Prequalification Window opens	23/7/2018	23/7/2018
Prequalification Window closes	14/09/2018	14/09/2018
Prequalification Results Day (post disputes)	16/11/2018	16/11/2018
Notification of Prequalified CMUs pursuant to Rule 5.5.10(b) and associated update of affected Auction Parameters	T-3 weeks 8/1/2019	T-3 weeks 15/1/2019
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 8/1/2019	T-3 weeks 15/1/2019
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 8/1/2019 to 15/1/2019	T-15 to T-10 15/1/2019 to 22/1/2019
<b>Mock Auction</b> – users login, check CMU details, run through a scripted auction in readiness for live auction	T-7 days 18/1/2019	T-7 days 25/1/2019
Auction start (T)	29/1/2019	5/2/2019

Table 1 – Auction timetable

#### **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 below:

Auction	T-1	T-4
Target capacity	4.6 GW	46.3 GW
Demand curve coordinate -volume at price cap	3.6 GW	44.8 GW
Demand curve coordinate -volume at £0/kW	5.6 GW	47.8 GW
Price cap	£75 /kW/year	£75 /kW/year
Net CONE	£49 /kW/year	£49 /kW/year
Price Taker Threshold	£25 /kW/year	£25 /kW/year
15 Year Minimum £/kW Threshold	N/A	£270/kW (De-rated capacity)
3 Year Minimum £/kW Threshold	N/A	£135/kW (De-rated capacity)
Indexation base period	N/A	2017/18*

#### Table 2 – Auction Parameters

In accordance with Regulation 13 of the Regulations, the Secretary of State has notified the Delivery Body of adjustments to be made to the Auction Parameters as set out above. The parameters above shall hereafter form part of the Auction Guidelines for the relevant Capacity Auctions in substitution of the previously published Auction Parameters.

The Delivery Body has been instructed that it may be required to make an additional limited reduction to the T-4 Capacity Auction target contingent on the results of the Tier 2 appeals process governed by

<sup>\*</sup> Base Period for Indexation: October 2017/April 2018 inclusive

Regulation 70 and 71. Any further adjustments will form part of the final Auction Guidelines to be published not less than 3 weeks prior to the start of the T-4 auction as dictated by Regulation 21(3).

#### **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 below.

The interconnector de-rating methodology is detailed in the Secretary of State (SoS) Confirmation of Capacity Auction Parameters communicated 9<sup>th</sup> July same date as ECR /AG publish date.

Name for Technology Class	Plant Types Included			De-rating factors T-4 (%)
Oil-fired steam	Conventional steam generators using fuel oil			89.13
generators Open Cycle Gas Turbine (OCGT)	Gas turbines running in open cycle fired mode		95.14	95.14
Reciprocating engines <sup>1</sup>	Gas turbines running in open cycle fired mode Reciprocating engines not used for autogeneration	on	95.14	95.14
Nuclear	Nuclear plants generating electricity		84.20	84.20
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			90.09
· · ·		Storage Duration: 0.5h	17.50	14.91
		Storage Duration: 1h	34.21	29.40
		Storage Duration: 1.5h	50.00	43.57
		Storage Duration: 2h	62.80	56.68
	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: 2.5h	71.96	66.82
		Storage Duration: 3h	78.09	73.76
		Storage Duration: 3.5h	81.57	77.78
		Storage Duration: 4h	95.52	80.00
		Storage Duration: 4.5h	95.52	95.52
		Storage Duration: 5.0h	95.52	95.52
		Storage Duration: 5.5h	95.52	95.52
04		Storage Duration: 6.0h	95.52	95.52
Storage		Storage Duration: 6.5h	95.52	95.52
		Storage Duration: 7.0h	95.52	95.52
		Storage Duration: 7.5h	95.52	95.52
		Storage Duration: 8.0h	95.52	95.52
		Storage Duration: 8.5h	95.52	95.52
		Storage Duration: 9.0h	95.52	95.52
		Storage Duration: 9.5h	95.52	95.52
		Storage Duration: 10.0h	95.52	95.52
		Storage Duration: 10.5h	95.52	95.52
		Storage Duration: 11.0h	95.52	95.52
		Storage Duration: 11.5h	95.52	95.52
		Storage Duration: 12.0h	95.52	95.52

<sup>1</sup> 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)

## **Auction Guidelines**

		1	1
Combined Cycle		89.05	90.00
Gas Turbine			
(CCGT)			
Combined Heat	Combined heat and Power plants (large and small-scale)	90.00	90.00
and Power (CHP)	Combined heat and rower plants (large and small-scale)	90.00	30.00
Coal	Conventional steam generators using coal	86.56	86.56
Biomass <sup>2</sup>	Conventional steam generators using biomass	86.56	86.56
	Generation of energy from waste, including the generation of energy from:		
<b>F</b>	(a) conventional steam generators using waste;		
Energy from	(b) anaerobic digestion;	86.56	86.56
Waste <sup>2</sup>	(c) pyrolysis; and		
	(d) gasification		
DSR	Demand Side Response	84.28	84.28
	IFA (France)	N/A	66
	IFA2 (France)	69	67
	Eleclink (France)	73	71
Interconnectors	BritNED (Netherlands)	N/A	43
merconnectors	Moyle (Northern Ireland)	26	33
	EWIC (Republic of Ireland)	43	33
	NEMO (Belgium)	68	50
	NSL (Norway)	N/A	87

Table 3 – Derating Factors

<sup>2</sup> 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)

#### 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, <u>www.emrdeliverybody.com</u>.

#### 2.1.1 **Prequalification guidance**

Further information on how to submit Prequalification information and the overall process is included in the <u>Capacity Market Prequalification guidance document</u> which also includes:

- Instructions on how to use the EMR Delivery Body Portal for Prequalification activities
- 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 <u>Capacity Market Operational Plan</u> identifies the key milestones and activities required to deliver the Capacity Market Auctions in 2018 / 2019. The timeline for operation of the 2018/19 Capacity Market is based on the Capacity Market Regulations and Rules and covers the T-1 and T-4 Auctions. As per the Regulations, there will not be another Transitional Auction (TA).

#### 2.2 Capacity Market Register

The Capacity Market Register for each individual Auction can be accessed on the <u>EMR Delivery Body</u> <u>website</u>.

#### 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, pay as clear, 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.

Both the 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.

Parameters	T-1	T-4
Non Variable or Variable Price-Duration auction	Non Variable Price Auction	Non Variable Price Auction
Bidding round price spread	£5/kW/year per round	£5/kW/year per round
Auction start time	29/1/2019 09:00	5/2/2019 09:00
First bidding round of the day (all 2 days), duration	60mins	60mins
Bidding round duration thereafter	30mins	30mins
Time between rounds (recess)	15mins	15mins
Number of auction rounds per day	Day1 10 rounds Day2- 5 rounds	Day1 10 rounds Day2- 5 rounds
Number of auction days planned	2 days	2 days

#### Table 4 - Auction Parameter

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 use of the system, including placing Exit Bids, will be available in advance of system go-live. Training will commence from November 2018 and will include a bidder manual, screen casts, user trials and a mock auction.

Below are the lists of activities that participants need to carryout during T-15 to T-10 window for the T-1 and T-4 Auctions. More details and guidance will be available near to the time.

Participant Checklist	Activity	Task	System	Dates
	Bidder setup	Bidding groups	EMR Portal	Dec to Jan 19
T-1 Auction	Bidder setup	Set up AI's for bidding in T-1	EMR Portal	Dec to Jan 19
	<b>Confirmation Activities</b>	Exist- price maker /taker	EMR Portal	Jan-19
	<b>Confirmation Activities</b>	Newbuild/refurb - confirm entry and length agreem	ie EMR Portal	Jan-19
	<b>Confirmation Activities</b>	DSR - size and confim entry	EMR Portal	Jan-19
	Mock	Login to Auction system Check CMU details	T-1 Auction System	Jan-19
	Mock	Login and Join Mock Auction	T-1 Auction System	18/01/01/2019
	Auction	Login to enter live auction	T-1 Auction System	29/01/2018

	Bidder setup	Bidding groups	EMR Portal	Dec to Jan 19
T-4 Auction	Bidder setup	Set up AI's for bidding in T-4	EMR Portal	Dec to Jan 19
	<b>Confirmation Activities</b>	Existing CMU's- price maker /taker	EMR Portal	Jan-19
	<b>Confirmation Activities</b>	Newbuild/refurb - confirm entry and length agree	eme EMR Portal	Jan-19
	<b>Confirmation Activities</b>	DSR - size and confim entry	EMR Portal	Jan-19
	Mock	Login to Auction system Check CMU details	T-4 Auction System	Jan-19
	Mock	Login and Join Mock Auction	T-4 Auction System	25/01/2018
	Auction	Login to enter live auction	T-4 Auction System	05/02/2018

#### 3.1 Bidding Company and Authorised Individual management

Bidding Companies will be automatically created in the EMR Portal for each participant who has been prequalified 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 <u>guidance document</u> 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 (Al's) by telephone. Al'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 will be made available 15 days prior to the start of the Capacity Auction.

#### 3.4 Reporting of Results

#### Intra-round reporting

As per Rule 5.5.18; prior to the start of each round the high level round results will be made publically 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-1 and T-4 auctions.

The EMR Portal is used to display these round updates.

#### Detail around the Auction reporting following the clearing round

In order 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.

## **Auction Guidelines**

On the day 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 19:30.

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.

#### 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.