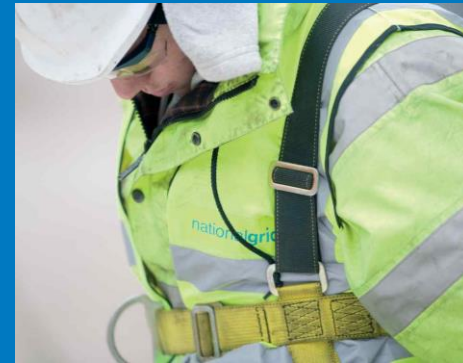


Implementation Co-ordination Workshop



20th October 2015
Capacity Market

Main Agenda

Agenda	
Time	Topic
09:00-09:30	Registration and Coffee
09:30 - 09:45	Welcome and Reflections on process to date
09:45 to 11:00	Auction System Demonstration (IN and IBM Power Auctions) <i>Including next steps for training and nominating Bidders</i>
11:00 to 11:15	Coffee
11:15 to 11:45	Submitting updates to Prequalification information: <ul style="list-style-type: none">➤ Credit Cover➤ Planning consents➤ Price Maker
11:45 to 12:00	Confirming entry to the Auction Prospective CMUs – entry and agreement length <ul style="list-style-type: none">➤ DSR Bidding Capacity
12:00 to 12:30	Q&A

Welcome and Reflections on process to date

Overview of Prequalification – T-4

68.16 ^{GW}

of prequalified
capacity
(includes conditionally PQ)

59.17 ^{GW}

of de-rated
capacity

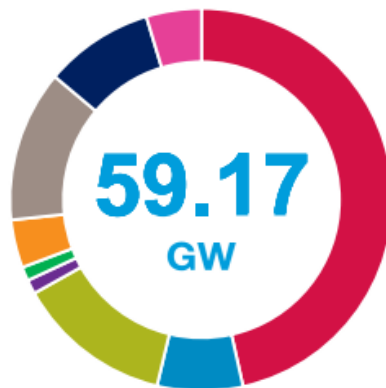
455

capacity market
units

9.87 ^{GW}

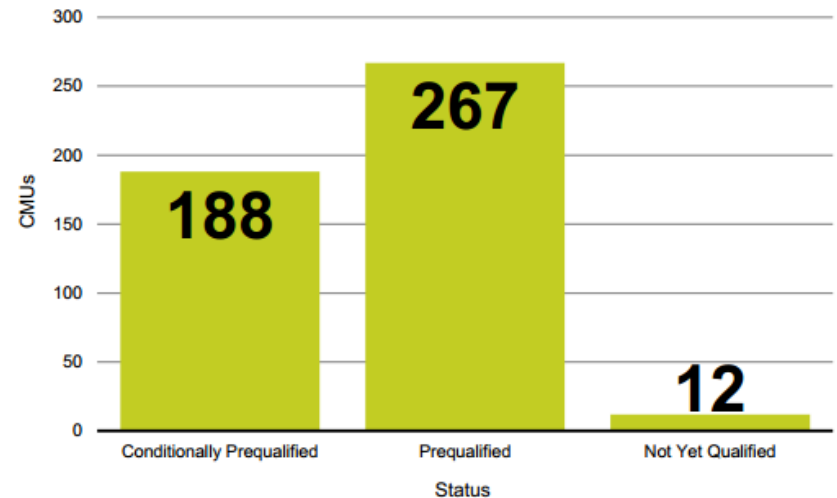
of prospective
**generation &
DSR**

CMU capacity by fuel type



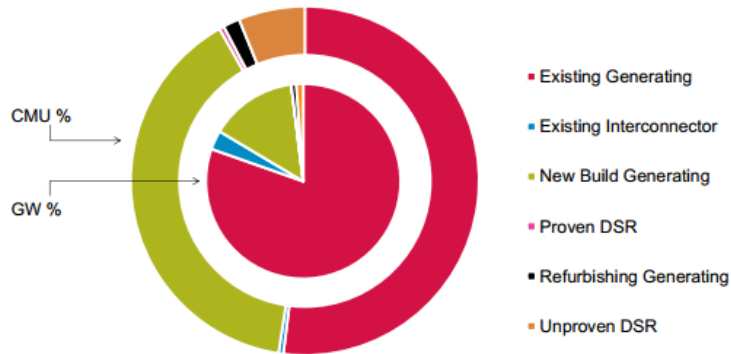
- CCGT %
- CHP and autogeneration %
- Coal/biomass %
- DSR %
- Hydro %
- Interconnector %
- Nuclear %
- OCGT and Reciprocating %
- Storage %

CMUs prequalified

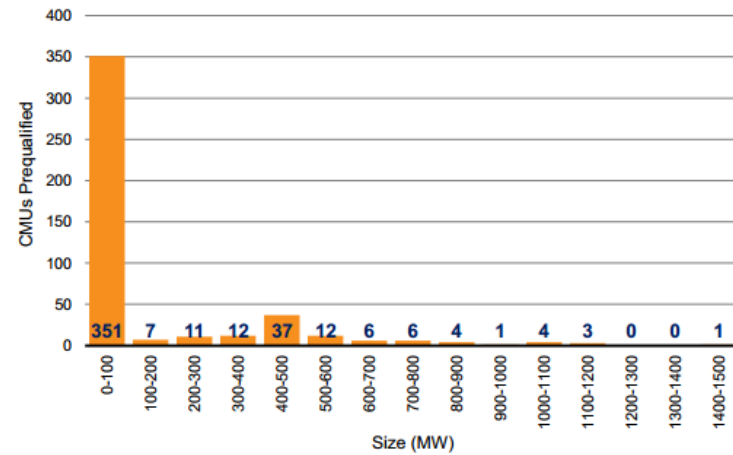


Overview of Prequalification – T-4

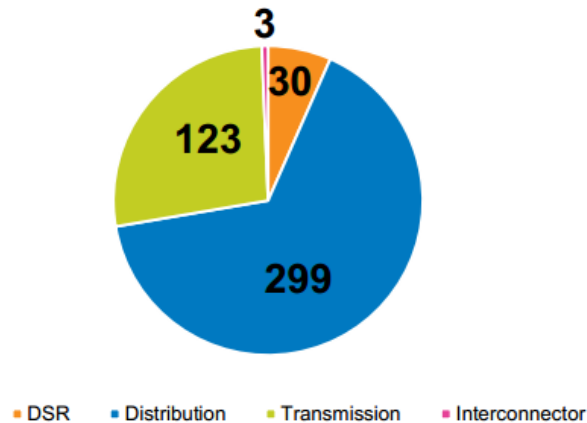
classification overview



CMU size distribution



CMU by connection type



Overview of Prequalification – TA

1.80 GW

1.60 GW

105

1.07 GW

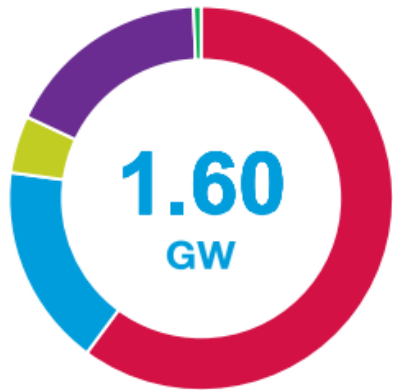
of prequalified capacity
(includes conditionally PQ)

of de-rated capacity

capacity market units

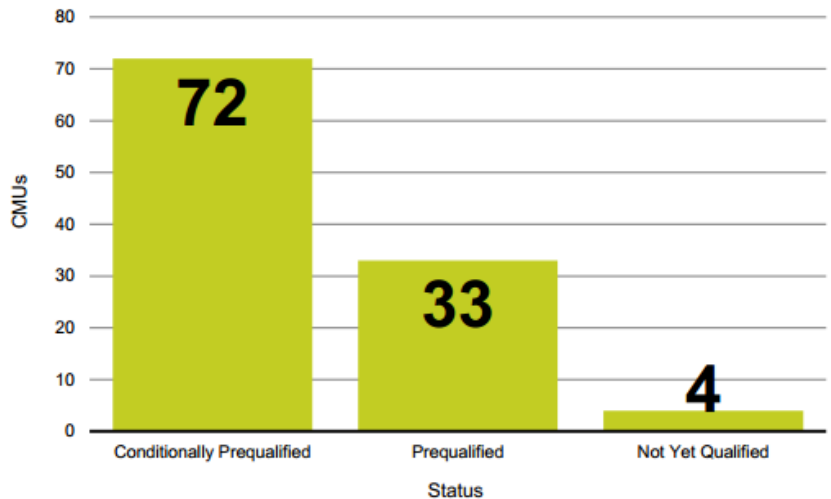
of prospective generation & DSR

CMU capacity by fuel type



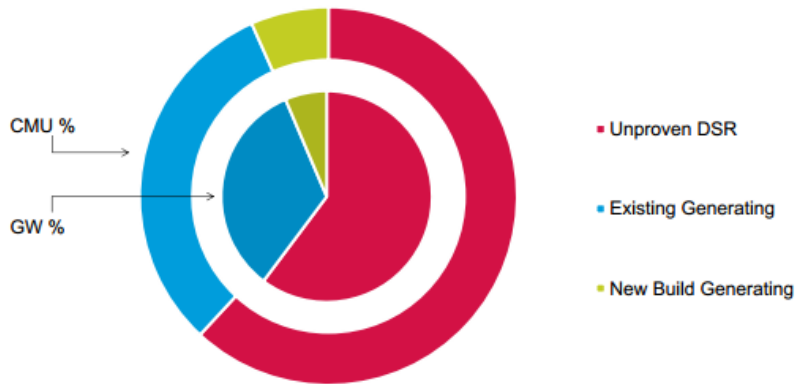
- DSR %
- CHP and autogeneration %
- Coal/biomass %
- OCGT and Reciprocating %
- Oil-fired steam generators %

CMUs prequalified

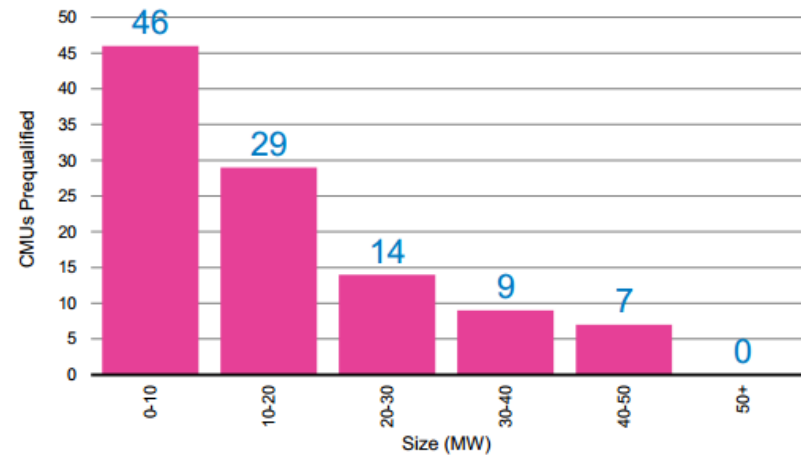


Overview of Prequalification – TA

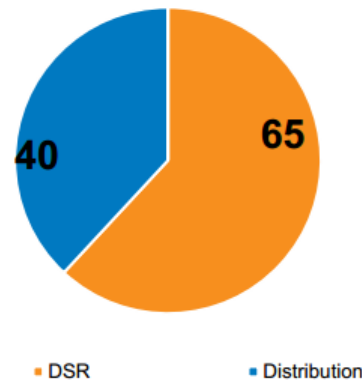
classification overview



CMU size distribution



CMU by connection type



Auction – timetable, parameters

Timetable

	T-4	TA
Prequalification Window opens	27 th July	27 th July
Prequalification Window closes	28 th August	28 th August
Prequalification Results Day	25 th September	25 th September
Notification of updated Auction Parameters and confirmation of the conditional Prequalified Applicants which have fully Prequalified pursuant to Rule 4.6.3	19 th October	19 th October
Notification of Prequalified CMUs pursuant to Rule 5.5.10(b) and associated update of affected Auction Parameters	17 th November	5 th January 2016
Confirmation of Entry and decisions under Rules 5.5.11, 5.5.13 and 5.5.14 notified to DB	24 th November (T-10)	12 th January
Auction start	December 8th 2015	January 26th

Overview of 2015 Capacity Market process

nationalgrid

2015

Auction parameters - target volume, Price cap (26th June)

Auction Guidelines

Prequalification results

2016

Jan Mar May June July Sept Nov Dec Jan

DECC/Industry Review Process

Revised Rules

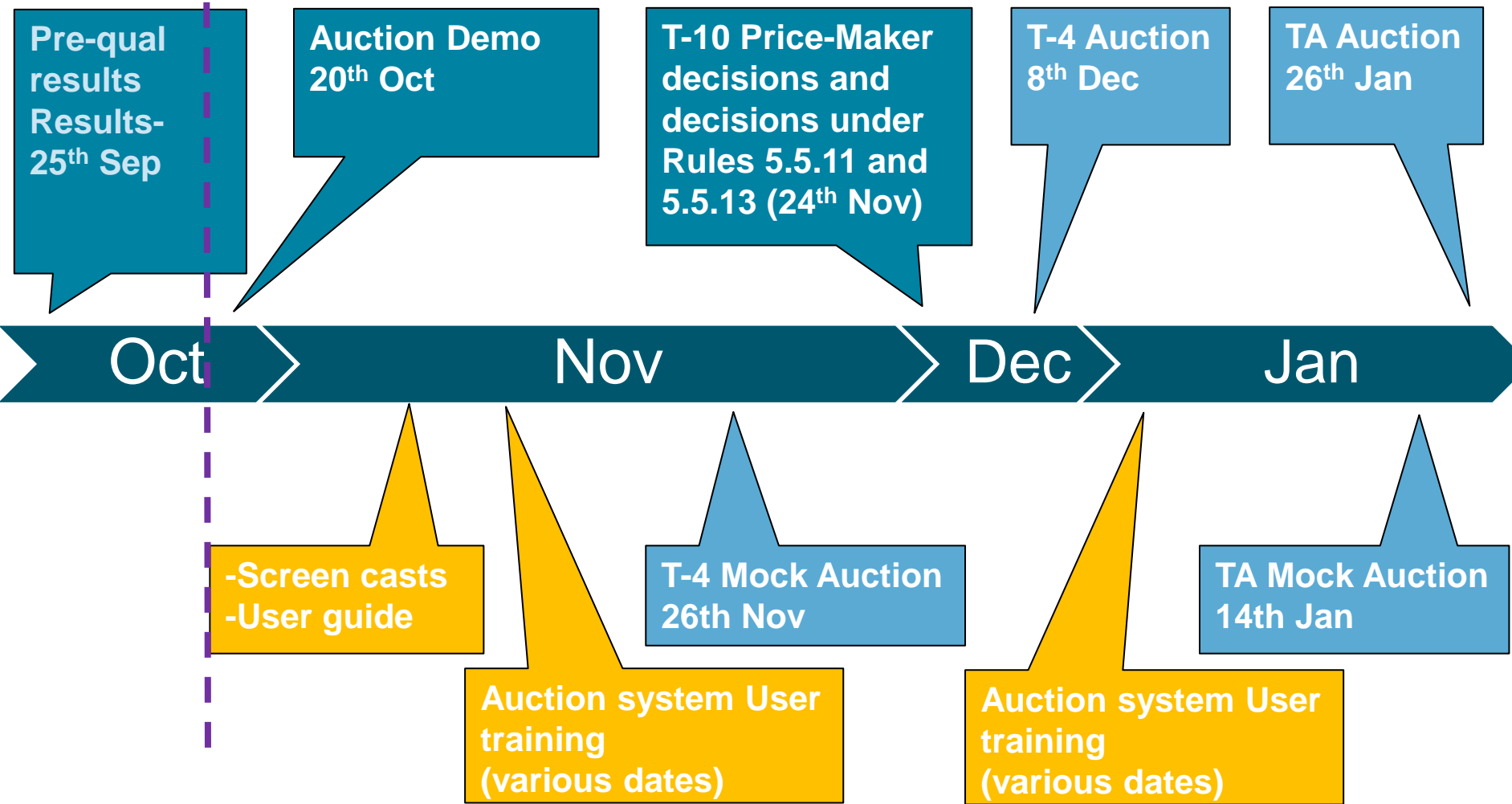
Prequalification open for CM (T-4 & TA)

8th Dec NG runs T-4 CM auction

NG runs Transitional CM auction

Timeline 2015

2016



Parameters T-4

Target capacity for 2015 T-4 Capacity Auction	44,665 MW
Demand curve coordinate – target volume at price cap	43,165 MW
Demand curve coordinate – target volume at £0/kW	46,165 MW
Price cap	£75/kW/year
Net Cone	£49/kW/year
Price Taker Threshold	£25/kW/year
15 Year Minimum £/kW Threshold	£255/kW De-rated capacity
3 Year Minimum £/kW Threshold	£130/kW De-rated capacity
Indexation base period	2014/15

Parameters TA

Target capacity for 2016 Transitional Auction	900 MW
Demand curve coordinate – target volume at price cap	600 MW
Demand curve coordinate – target volume at £0/kW	1200 MW
Price cap	£40/kW/year
Net Cone Proxy	£25/kW
Price Taker Threshold	£15/kW/year
Time banded discount to the clearing price	70%
Indexation base period	2014/15

Auction Timetable T-4 December 2015

Round	Price range (£/kW/year)	Round Start	Round End	Recess
Day 1 (8th Dec)				
R1	75-70	09:00	10:30	30mins
R2	70-65	11:00	12:30	30mins
R3	65-60	13:00	14:30	30mins
R4	60-55	15:00	16:30	30mins
Day 2 (9th Dec)				
R5	55-50	09:00	10:30	30mins
R6	50-45	11:00	12:30	30mins
R7	45-40	13:00	14:30	30mins
R8	40-35	15:00	16:30	30mins
Day 3 (10th Dec)				
R9	35-30	09:00	10:30	30mins
R10	30-25	11:00	12:30	30mins
R11	25-20	13:00	14:30	30mins
R12	20-15	15:00	16:30	30mins
Day 4 (11th Dec)				
R13	15-10	09:00	10:30	30mins
R14	10- 5	11:00	12:30	30mins
R15	5-0	13:00	14:30	30mins 14

Auction Timetable 2016 TA

Round	Price range (£/kW/year)	Round Start	Round End	Recess
Day 1 (26th January)				
R1	40.00-37.50	09:00	10:30	30mins
R2	37.50-35.00	11:00	12:30	30mins
R3	35.00-32.50	13:00	14:30	30mins
R4	32.50-30.00	15:00	16:30	30mins
Day 2 (27th January)				
R5	30.00-27.50	09:00	10:30	30mins
R6	27.50-25.00	11:00	12:30	30mins
R7	25.00-22.50	13:00	14:30	30mins
R8	22.50-20.00	15:00	16:30	30mins
Day 3 (28th January)				
R9	20.00-17.50	09:00	10:30	30mins
R10	17.50-15.00	11:00	12:30	30mins
R11	15.00 -12.50	13:00	14:30	30mins
R12	12.50-10.00	15:00	16:30	30mins
Day 4 (29th January)				
R13	10.00-7.50	09:00	10:30	30mins
R14	7.50-5.00	11:00	12:30	30mins
R15	5.00-2.50	13:00	14:30	30mins 15
R16	2.50-0.00	15:00	16:30	30mins

User Training Nov T-4/ January TA

- Web based
- What will be covered?
Full range of bidder actions as well as backup procedures.
Bidder freedom (with a range of CMU's. The Auctioneer has control over the clearing.
- Who gets the training?
All participants that can enter the auction (Prequalified, conditionally Prequalified or still in Disputes).

User Training Nov and January

■ When is the training?

There are various training dates available and sessions will run from 09:30-14:00, we will send login details WC 2nd,9th November and WC 4th Jan.

We will allocate the dates - please let us know if the date you receive is not suitable.

■ How many users can be trained?

4 user logins will be sent to the main admin for each registered company.

Auction System Testing

- The auction specifications were derived from the Electricity Regulations and the Capacity Market Rules.
- IBM and National Grid created models based on Chapter 5 independently to ensure the system design was consistent with the auction rules.
- Auction Monitor has built a shadow model to test above
- This included testing the system against an extensive list of clearing scenarios and functional tests
- In total the system was tested against 25 clearing scenarios and circa 300 functional tests as well as substantial penetration, performance and volume testing.

Auction Definitions

- **Bidder** - is the CMU applicant Company
- **Authorised Individual** - person nominated to place bids on behalf of a Bidder
- **Auctioneer** - National Grid acting with the support of its consultants, IBM and Power Auctions

- **Bidder Support team** - National Grid bidder support, able to act as backup for failure of the electronic system
- **Auction Monitor** - Body appointed to monitor the conduct of the auction

Auction System Demonstration

IBM/Power Auction

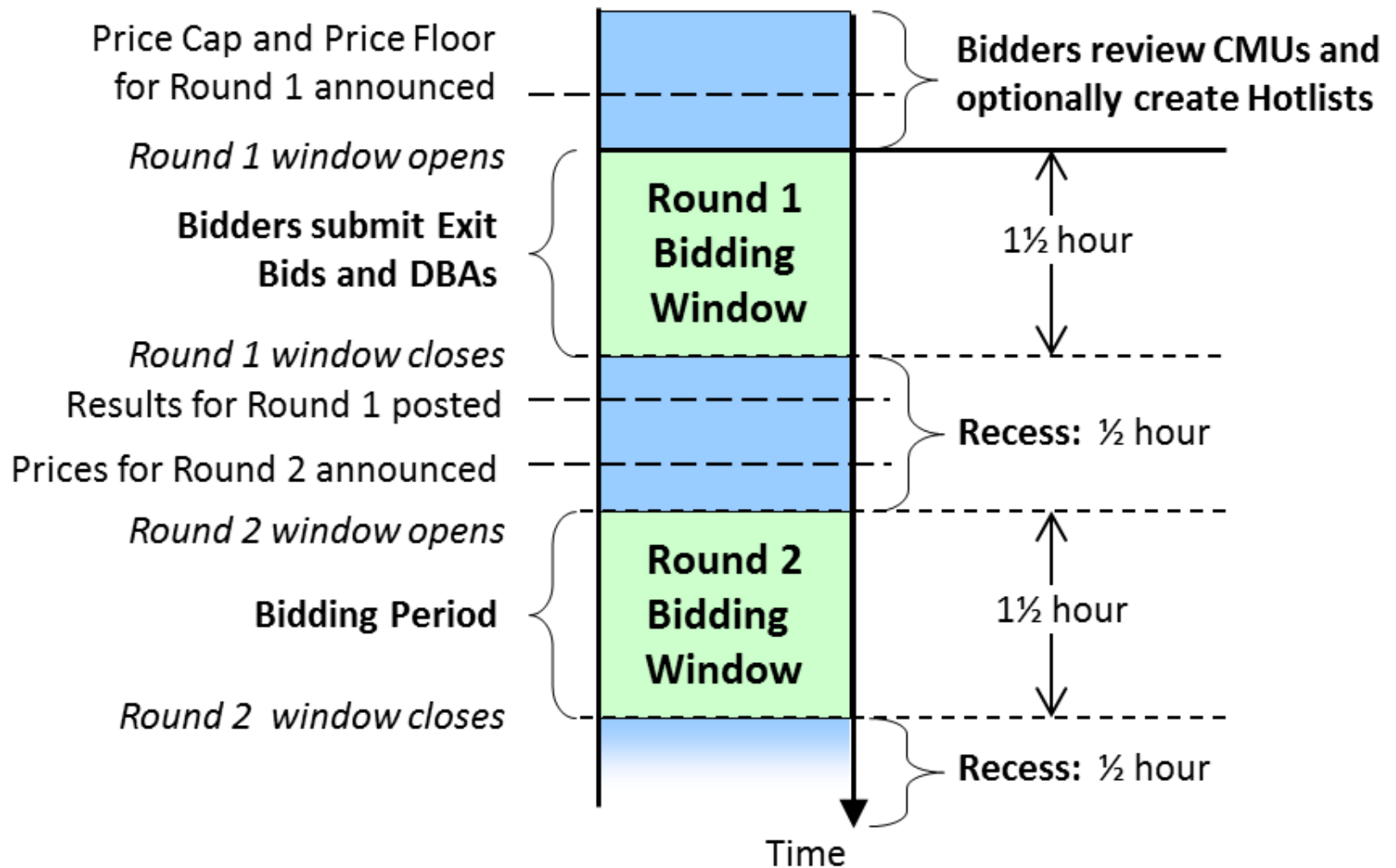
Introductions

Nick Aked/ Alex Grisman



About the auction system

- No software to download
- Uses an ordinary browser.. with the right settings
- Reliable internet access required
- Auction system runs on a secure site hosted in the UK
- Authorised Individuals invited to obtain a password and PIN
- Simple intuitive interface
- Accessible from T-9 to check your CMUs

The Auction Process



Main Interface

		Authorised Individual Austin Abshire, of Example Co is logged in.		Lock Screen	Log out		
	Electricity Market Reform DELIVERY BODY	Capacity Auction for delivery year 2019/2020		1 December 2015, 16:14:45 GMT The auction will start 8 December 2015 at 9:00:00 GMT			
My CMUs	Current Bids	Bid Confirmation	Round Results	Auction Schedule	Messages	Downloads	Settings
							You have 1 new message

Auction Schedule

Power Auctions

Authorised Individual Austin Abshire of Example Co. is logged in.

Lock Screen

Logout

nationalgrid

Electricity Market Reform Capacity Auction

DELIVERY BODY

for delivery year 2019/2020

Time left to bid

0:02

19 October 2015, 12:29:58 BST

Round 2 started at 11:00:00 and will end at 12:30:00 BST.

My CMUs

Current Bids

Bid Confirmation

Round Results

Auction Schedule

Messages

Downloads

Settings

Auction Schedule

Initial Aggregate Supply: 59,170.000 MW

Round	Duration	Start	End	Price Range	Clearing Capacity at Cap	Clearing Capacity at Floor	Recess
Round 1	1 hour 30 min	09:00 BST	10:30 BST	£75.00 - £70.00	49,300.000 MW	49,588.462 MW	30 min
Round 2	1 hour 30 min	11:00 BST	12:30 BST	£70.00 - £65.00	49,588.462 MW	49,876.462 MW	30 min
Round 3	1 hour 30 min	13:00 BST	14:30 BST		N/A		30 min
Round 4	1 hour 30 min	15:00 BST	16:30 BST		N/A		16 hours 30 min
Round 5	1 hour 30 min	20 Oct, 09:00 BST	20 Oct, 10:30 BST		N/A		30 min
Round 6	1 hour 30 min	20 Oct, 11:00 BST	20 Oct, 12:30 BST		N/A		30 min
Round 7	1 hour 30 min	20 Oct, 13:00 BST	20 Oct, 14:30 BST		N/A		30 min
Round 8	1 hour 30 min	20 Oct, 15:00 BST	20 Oct, 16:30 BST		N/A		16 hours 30 min
Round 9	1 hour 30 min	21 Oct, 09:00 BST	21 Oct, 10:30 BST		N/A		30 min
Round 10	1 hour 30 min	21 Oct, 11:00 BST	21 Oct, 12:30 BST		N/A		30 min
Round 11	1 hour 30 min	21 Oct, 13:00 BST	21 Oct, 14:30 BST		N/A		30 min
Round 12	1 hour 30 min	21 Oct, 15:00 BST	21 Oct, 16:30 BST		N/A		16 hours 30 min
Round 13	1 hour 30 min	22 Oct, 09:00 BST	22 Oct, 10:30 BST		N/A		30 min
Round 14	1 hour 30 min	22 Oct, 11:00 BST	22 Oct, 12:30 BST		N/A		30 min
Round 15	1 hour 30 min	22 Oct, 13:00 BST	22 Oct, 14:30 BST		N/A		

Note:

- All start and end times are in local UK time.
- The number of rounds will be dependent on bidding in the auction, and thus this screen does not reflect the expected number of rounds. The timescales of future rounds are subject to change, but bidders will be notified of any changes by an announcement on the auction system.
- Indicates the Round or Recess is Active.
- Indicates a past round.

Content of the Demo

- Total Capacity = 59.17 GW
- Target Demand = 44.67 GW (at CONE)
- What we will cover
 - Introduction to user interface and start of auction
 - Show how DBAs and Exit Bids are placed and checked
 - Show Round Results.
 - Then to fast forward to R12 (£20-15) to show impact of proxy bids and clearing

All values are illustrative and for demonstration purposes

Demo

The User Interface

Demo

Bidding - Exit Bids and DBAs

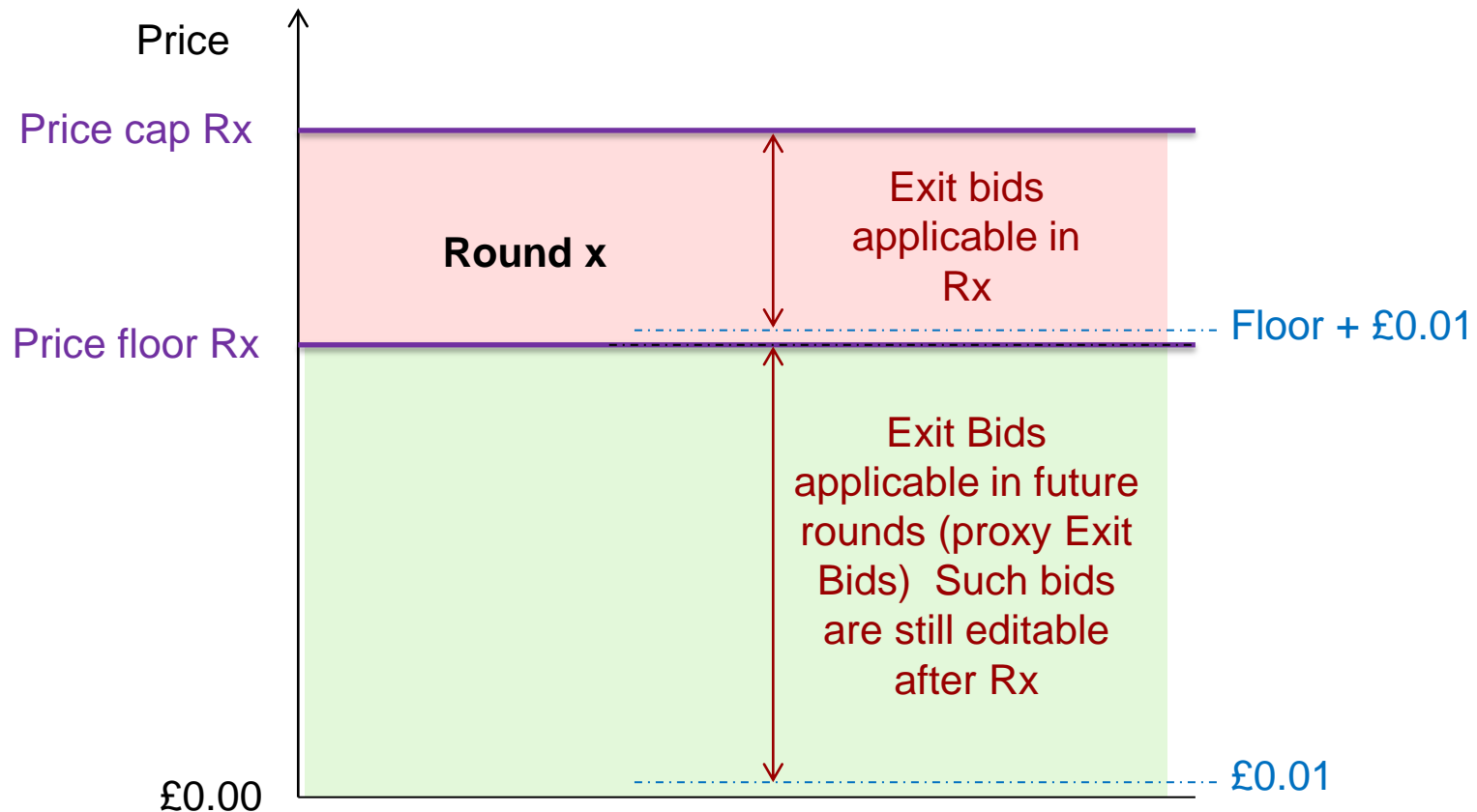
Demo

Reviewing bids

Demo

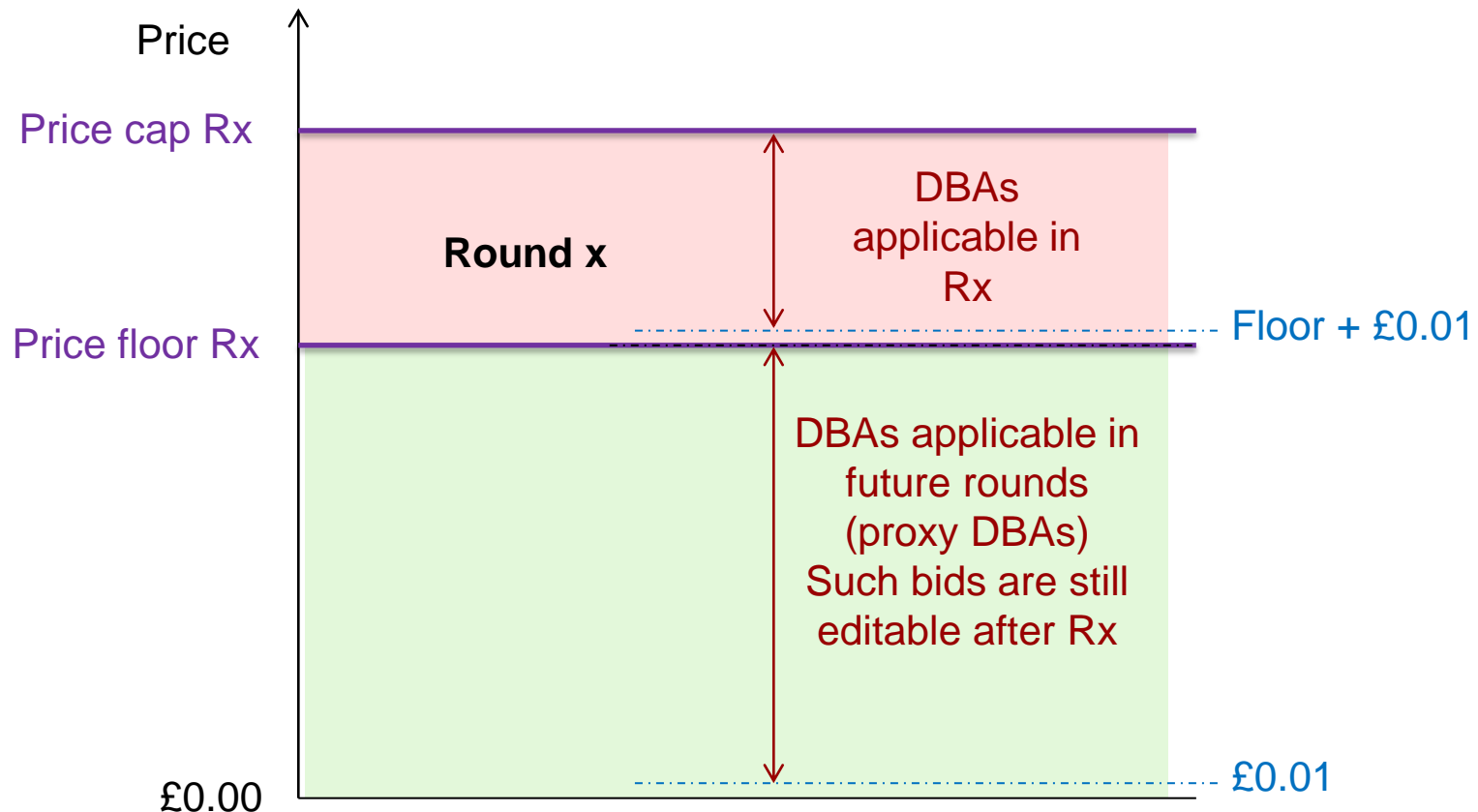
Round results and conclusion of an auction

Price ranges for Exit Bids



Exit Bids reduce CMU capacity to zero at £0.01 below the price of the Exit Bid (5.8)

Price ranges for Duration Bid Amendments



DBAs change the duration at £0.01 below the price of the DBA (5.6.5)

Access - Supported configurations

- Intel Pentium or equivalent with 1.2 Ghz processor
- Screen resolution 1366 x 768 or higher
- Windows 7 or 8.1
- IE 9 -11 or recent versions of Chrome & Firefox
- TLS 1.1 or higher must be enabled
- Cookies enabled
- Javascript enabled

Submitting Updates to Prequalification Information

Prequal Window

Prequal Decision

SoS could change Auction Parameters - Opt-out enabled for existing generating CMUS

D-17

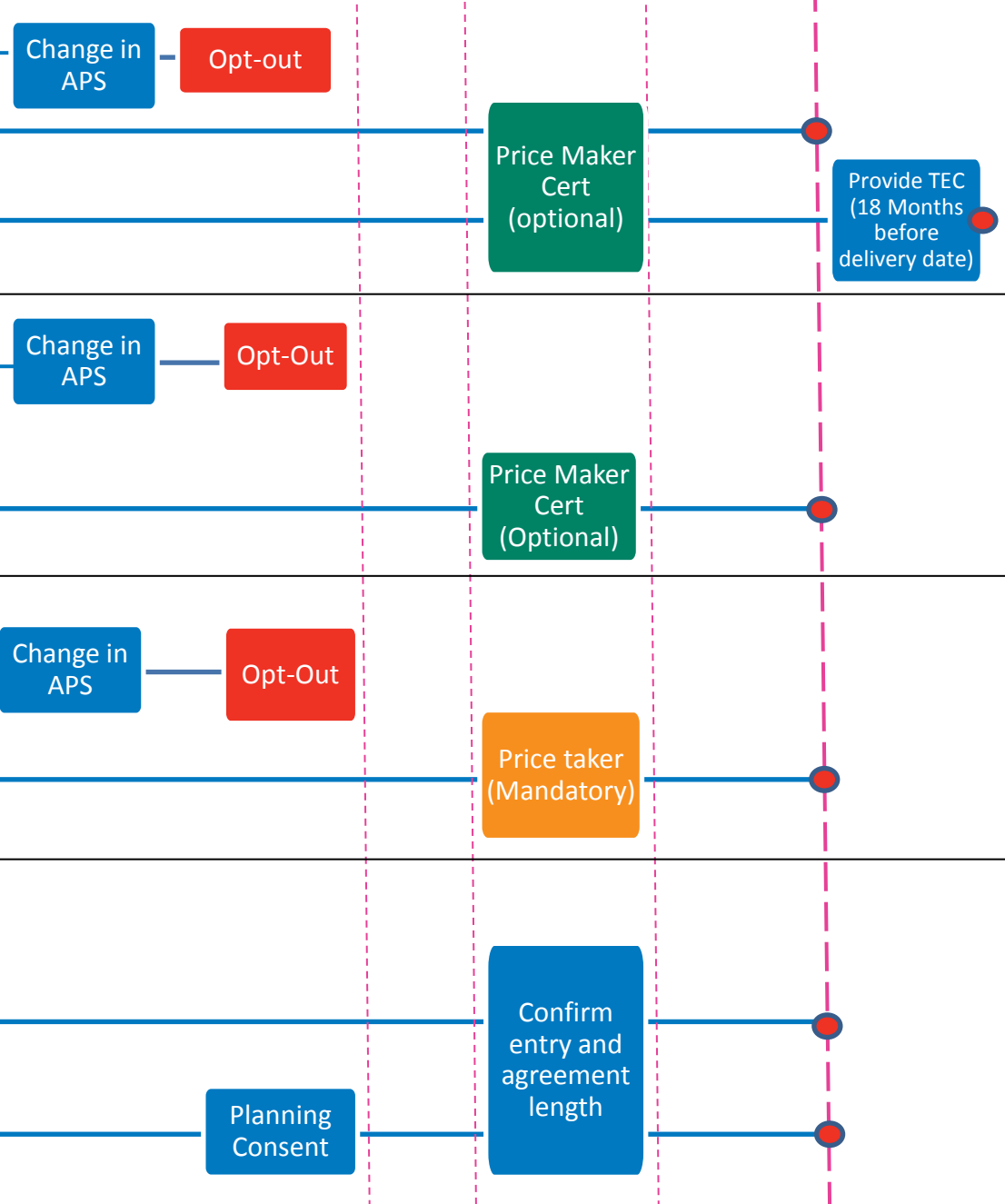
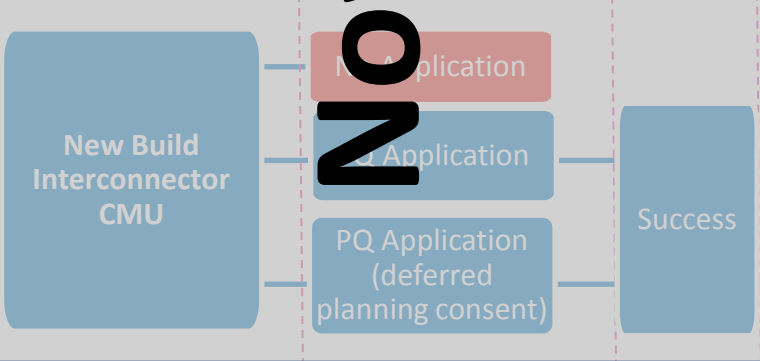
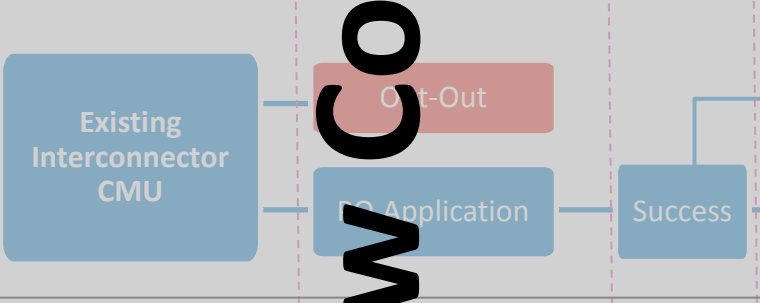
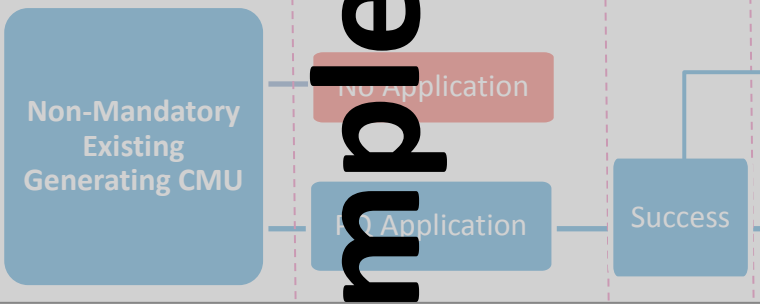
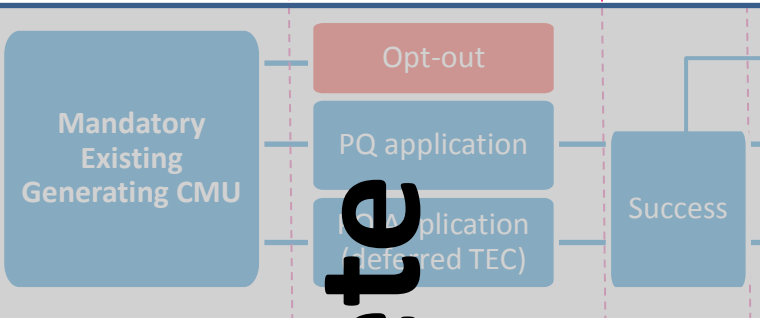
D-15

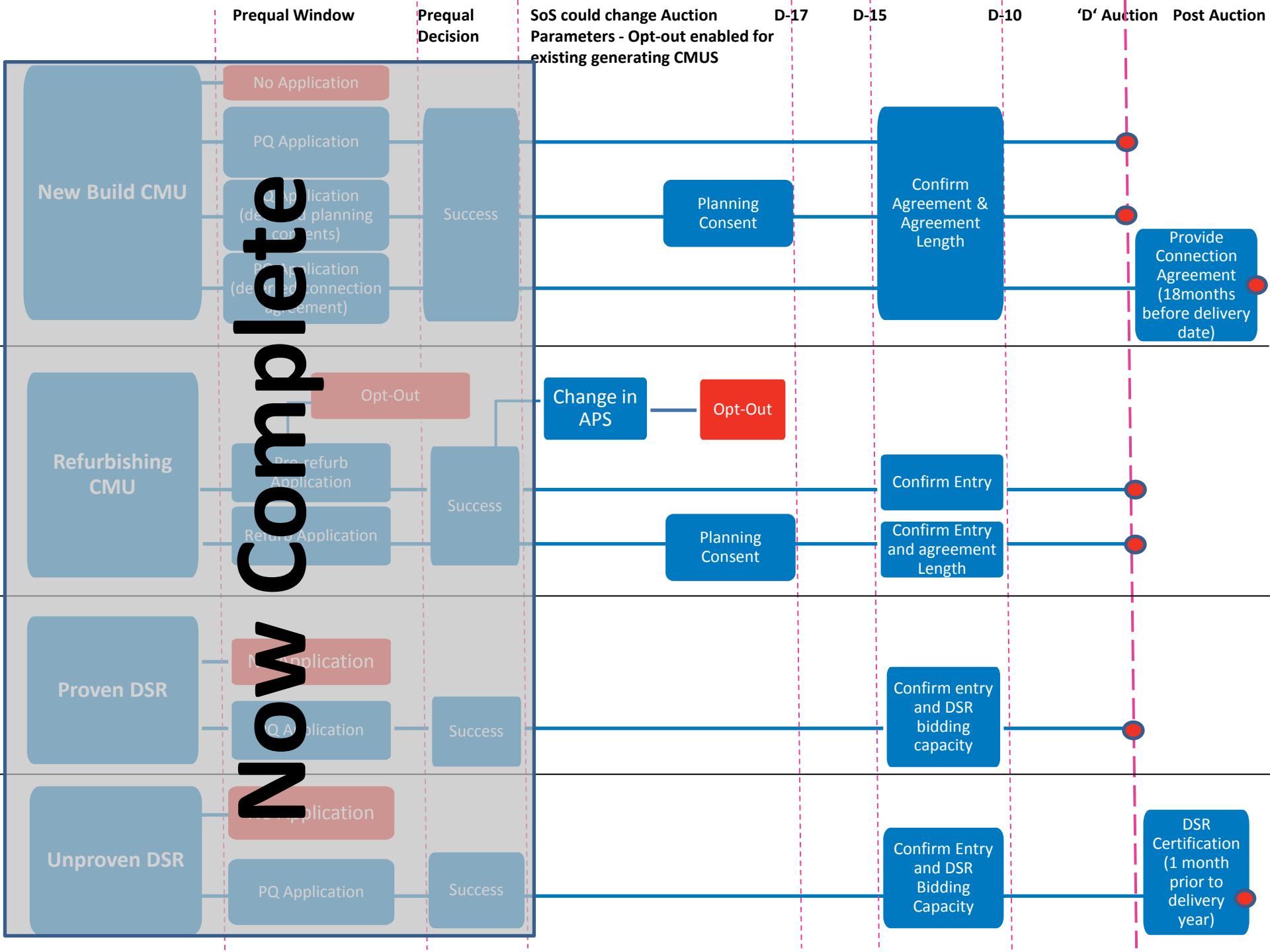
D-10

'D' Auction

Post Auction

Now Complete





Credit Cover – when placed...

When an Applicant is notified by the EMR Settlement Body that the Applicant's Credit Cover has been approved, Rule 4.6.2 of The Capacity Market Rules requires the Applicant to provide the Delivery Body with a copy of such notice **within 5 working days**.

The Delivery Body will accept the applicant forwarding a Notification pursuant to Rule 4.6.2 by email to emr@nationalgrid.com. On receipt, in accordance with Rule 4.6.3, the Delivery Body will **within five working days** notify the Applicant that it is fully prequalified, except where Rule 4.7 applies (Planning Consents).

The Applicant's CMU will also be amended to Prequalified on the CM Register.

Applicant Credit Cover Returned

In accordance with Regulations 58 to 60, the following situations will result in the release of credit cover where applicable:

Type of CMU	Circumstance
New Build (Transmission and Distribution)	Satisfying the Financial Commitment Milestone
Unproven DSR	Completing a DSR Test
New Build (Distribution only)	Provision of an acceptable connection agreement or offer.
Existing Generating (Transmission only)	Provision of a Transmission Connection agreement verifying sufficient TEC.

Applicant Credit Cover Returned

In addition there are a number of situations which will trigger the release of credit cover these are

- If you have also deferred the planning consent declaration and do not make the necessary declaration by the deadline.
- If you are unproven DSR that nominates a bidding capacity less than the prequalification capacity, or does not prove their capacity is greater than 90% of the unproven capacity, then the excess credit cover can be released.
- A CMU (other than an existing generating CMU) does not inform the Delivery Body of their intention to bid in the auction.
- A CMU is unsuccessful in the auction
- If the auction is cancelled
- If you transfer your capacity obligation to another capacity provider

Applicant Credit Cover Returned

Step A

Applicant writes to the Settlement Body to request credit cover is returned

Step B

NG Notifies credit cover can be returned

Once both Step A and Step B are complete the Settlement Body will return the credit cover as soon as reasonably practical

For more information see EMRS Working Practice 35

<https://emrsettlement.co.uk/>

Planning Consent

Applicants that declared during Prequalification, in accordance with Rule 3.7.1(a) that Relevant Planning consents will be obtained by no later than 17 Working Days prior to the first Bidding Window of the Auction, will need to submit to the Delivery Body;

- a declaration that it has obtained all Relevant Planning Consents for the CMU;
- a director's certificate confirming that the Applicant can correctly make such declaration; and
- A full electronic copy of the Relevant Planning Consents.

By

- **5pm Friday 13 November 2015 for the T-4 Auction;** or
- **5pm Friday 31 December 2015 for the TA Auction.**

The Delivery Body will accept the planning consents through the EMR Delivery Body portal. Within **5 working days**, the Applicant's CMU Condition under Rule 4.7.1 will be removed from the CM Register.

Applicant Price Maker Status

Applicants for an Existing Generating CMU that wish to be a Price Maker must lodge a Price-Maker Memorandum with Ofgem in accordance with any published guidance and submit to the Delivery Body:

- the Price Memorandum receipt (from Ofgem)
- a Price-Maker Certificate (Exhibit B)

By

- **5pm Tuesday 24 November 2015 for the T-4 Auction**; or
- **5pm Tuesday 12 January 2016 for the TA Auction**.

The Delivery Body will accept the Applicant's certificate through the EMR Delivery Body portal. In accordance with Rule 4.8.1, within **two working days** the Delivery Body will notify the Applicant that it is a Price Maker.

Confirming entry to the Auction

DSR Bidding Capacity

5.5.11 By no later than the date falling 10 Working Days prior to the commencement of the first Bidding Window, an Applicant for a Prequalified DSR CMU may issue a notification to the Delivery Body nominating the capacity (in MW) that it wishes to bid into the Capacity Auction with respect to that DSR CMU provided that such capacity is no greater than the Derated Capacity of such DSR CMU.

5.5.13 Where an Applicant for an Unproven DSR CMU nominates a DSR Bidding Capacity which is lower than the De-rated Capacity of that Unproven DSR CMU, that Applicant may submit a request to the CM Settlement Body for a portion of its Applicant Credit Cover to be released in accordance with the Regulations.

Tuesday 17 November and Tuesday 24 November for the T-4 Auction
Tuesday 5 January and Tuesday 12 January for the TA Auction

Confirmation of Entry

Refurbishing CMUs, New Build CMUs and DSR CMUs, under Rule 5.5.14 of The Capacity Market Rules, are required between 15 and 10 Working days, to confirm that they wish to participate in a Capacity Auction, and must submit a notice to the Delivery Body that:

- *(a) confirms that it will participate as a Bidder with respect to that CMU in the Capacity Auction; and*
- *(b) in the case of a Prospective Generating CMU or a Refurbishing CMU, specifies the duration of Capacity Agreement in whole Delivery Years (not being greater than the Maximum Obligation Period for that CMU) that it requires at the Price Cap.*
- *5.5.15 An Applicant for a Refurbishing CMU must specify in any confirmation pursuant to Rule 5.5.14 whether or not it also wishes to participate in the Capacity Auction with respect to the associated Pre-Refurbishment CMU.*

Tuesday 17 November and Tuesday 24 November for the T-4 Auction
Tuesday 5 January and Tuesday 12 January for the TA Auction

Summary of key dates ahead of the auction

T-4 Date	TA date	What's required
Friday 13 November 2015	Friday 31 December 2015	Planning consents – for those who deferred this in their prequalification application.
Tuesday 24 November 2015	Tuesday 12 January 2016	Applicant Price Maker Status
Between Tuesday 17 November and Tuesday 24 November 2015	Between Tuesday 5 January and Tuesday 12 January 2016.	Confirmation of Entry, Agreement Duration and DSR Bidding Capacity - Refurbishing CMUs, New Build CMUs and DSR CMUs

Information

- DECC Stakeholder Bulletins

- Contact Corinne Jenkinson [Corinne.Jenkinson @decc.gsi.gov.uk](mailto:Corinne.Jenkinson@decc.gsi.gov.uk)

- National Grid

- Portal <https://www.emrdeliverybody.com>
- Mail list emr@nationalgrid.com
- Helpline 01926 655300

Finish

