

# Capacity Market

---

Operational Coordination Event– July 2016





Matthew Magill, EMR Delivery Body, National Grid

# Housekeeping



# Welcome and Purpose of Today...

- Ensuring that everything is in place for the first delivery year
  - SO Update
  - DSR and Agreements update

- EMR process for the three 2016 Auctions
  - Background to EMR CM – Future Energy Scenarios
  - EMR CM Changes – DBEIS and Ofgem
  - EMR Delivery Body and Applicants – Registration & Prequalification
  - EMR Delivery Body Systems – National Grid IS
  - Q&A Afternoon

# Agenda

Time	Agenda	Presenter
09:30 – 09:40	Welcome, Agenda, Operational Plan, DSR update and Team changes	Matthew Magill
09:40 – 10:10	National Grid: SO Obligations within Capacity Mechanism	Dave Preston
10:10 – 10:20	ESC: Sampling and Metering Testing	Matthew Johnson
10:20 – 11:05	National Grid: Electricity Capacity Report and Future Energy Scenario update	Duncan Rimmer, Gareth Lloyd and Andy Dobbie
<b>11:05 – 11:20</b>	<b><i>Break &amp; 121's &amp; optional Q&amp;A preference</i></b>	
11:20 – 11:30	Ofgem: update	David O'Neill
11:30 – 11:45	DBEIS: policy and consultation update	Jonathan Robinson
11:45 – 12:45	Delivery Body: Registration & Prequalification (end to end process)	Matthew Magill & Eleanor Brogden
12:45 – 12:55	Delivery Body: IT update	Viv Emery & Ian Nicholas
12:55 – 13:15	Delivery Body: Auction parameters, readiness overview and end to end process	Ian Nicholas
13:15 – 13:20	Plan for the afternoon & key messages	Matthew Magill
<b>13:20 – 14:00</b>	<b><i>Lunch &amp; 121's &amp; Visit the ECR Table</i></b>	
14:00 – 15:00 <i>(optional)</i>	Q&A Group 1: DSR testing process	Tim Gregory
	Q&A Group 2: Prequalification process and rules	Tushar Singh, Eleanor Brogden and Ian Nicholas
	Q&A Group 3: DBEIS policy and consultation update	Jonathan Robinson
15:00	End	

# Farewell & Thank you...

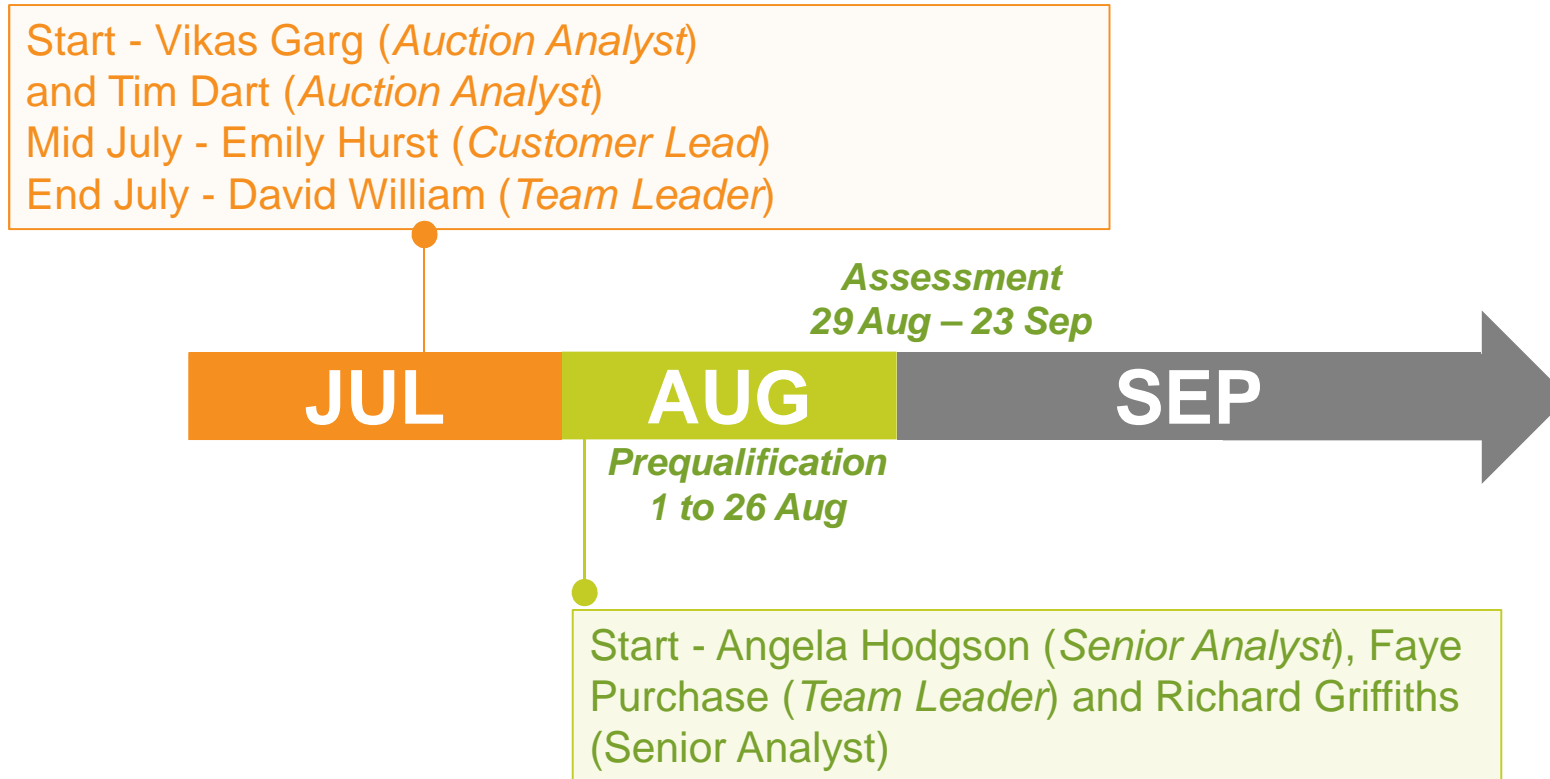


- Eleanor Brogden is leaving to a new role of Strategy Analyst.
- Eleanor will be leaving the EMR ring-fence on 27 July 2016, so will be unavailable to Applicants' EMR related queries from this date.
- Today will be Eleanor's last Operational Co-ordination Event... & the only one she was not able to negotiate out of presenting at!

***“It has been a pleasure working with you all... many were faces I had known from my previous role at National Grid, & I look forward to meeting you all again in a different guise”***

***“In particular, a thank you to the Ofgem & DECC (as was) teams – my role in this team was Rules & Reg.s focussed and I have enjoyed working with you all”***

# New Starters in the EMR Team





Operational Timetable for 2016/17



# Operational Timetable

National Grid, as the Delivery Body, have recently published the key dates for the three planned Capacity Market auctions (including prequalification and other key milestones) in the Operational Plan

## Electricity Market Reform

Electricity Market Reform aims to deliver low carbon energy supplies whilst maintaining security of supply and minimising the cost to the consumer. EMR introduces two key mechanisms to provide incentives for the investment required in our energy infrastructure.



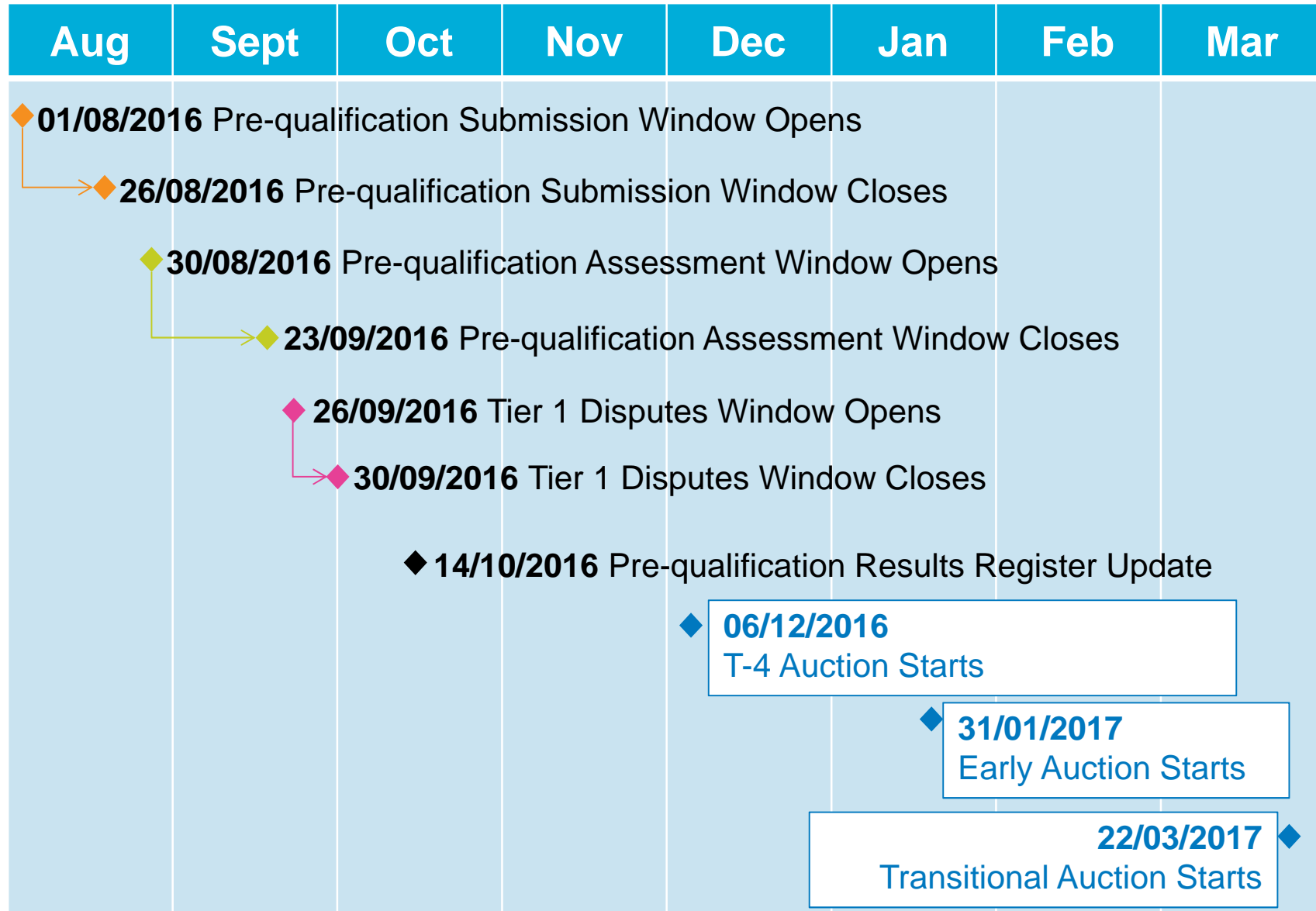
# Capacity Market Auction Guidelines

## July 2016



- The Capacity Market Auction Guidelines outline the process for participant to prequalify and enter the three Capacity Auctions along with content around the target volumes to procure, de-rating factors and the key dates and milestones.
- The Regulations, the Rules, and these Auction Guidelines form the legal requirements for market participants wishing to enter the Capacity Market and for owners of Mandatory CMU's not wishing to enter the Capacity Market.

# Key Dates





DSR and FCM update

# Financial Commitment Milestone

## – Rule 6.6

Auction Year	CMU Type	When (18 months after the Auction Results Day)	What you need to provide
2014 T-4	New Build & Refurbishing	02/07/2016	<p>Assessment by Independent Technical Expert as per the Required Technical Standard stating –</p> <ul style="list-style-type: none"> <li>■ 10% Capital Expenditure of the Total Project Spend has been met</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>■ Sufficient financial resources to meet Total Project Spend</li> <li>■ Capacity Provider has entered into a major contract</li> </ul> <p>Along with -</p> <ul style="list-style-type: none"> <li>■ Directors resolution to complete project on or before start of Delivery Year</li> <li>■ Directors Certificate confirming sufficient financial resources and validity of the contract entered into</li> </ul>
2015 T-4	New Build & Refurbishing	22/06/2017	<p>Assessment by Independent Technical Expert as per the Required Technical Standard stating –</p> <ul style="list-style-type: none"> <li>■ 10% Capital Expenditure of the Total Project Spend has been met</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>■ Sufficient financial resources to meet Total Project Spend</li> <li>■ Capacity Provider has entered into a major contract</li> </ul> <p>Along with -</p> <ul style="list-style-type: none"> <li>■ Directors resolution to complete project on or before start of Delivery Year</li> <li>■ Directors Certificate confirming sufficient financial resources and validity of the contract entered into</li> </ul>

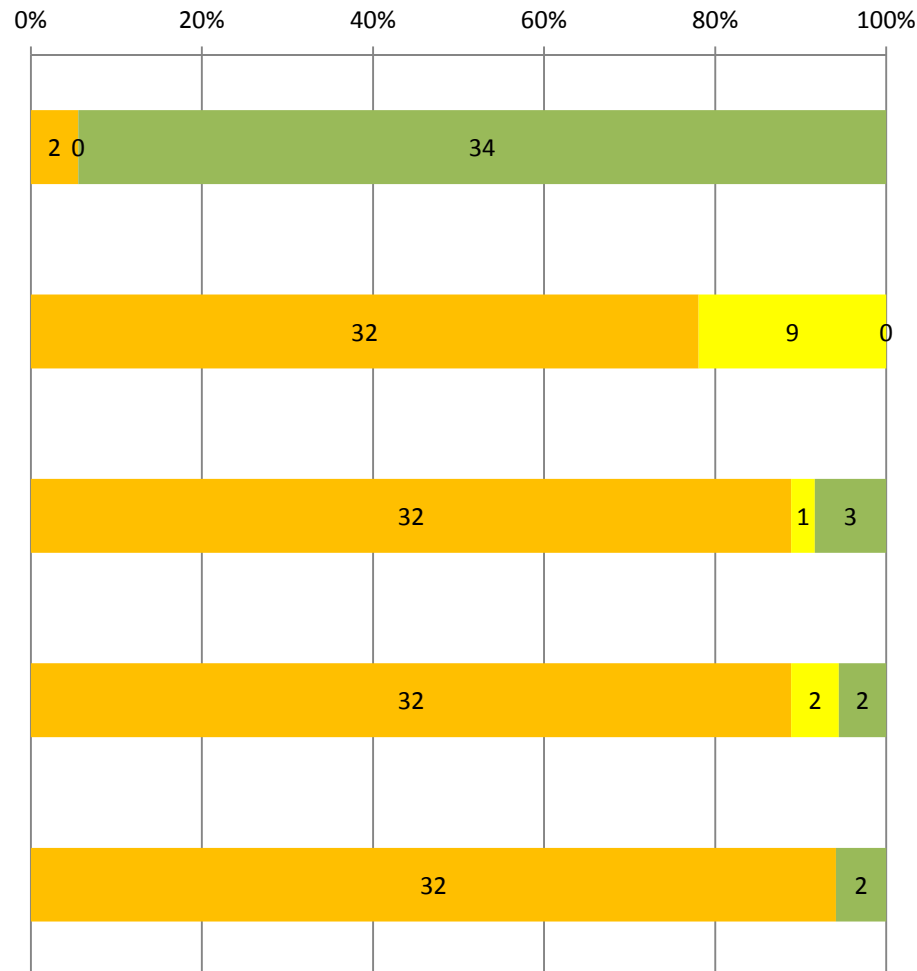
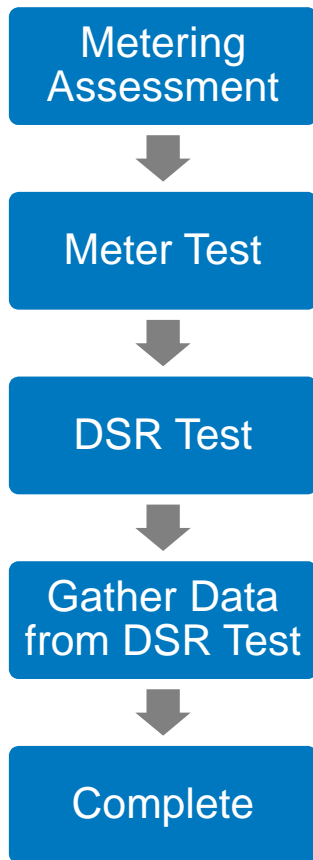
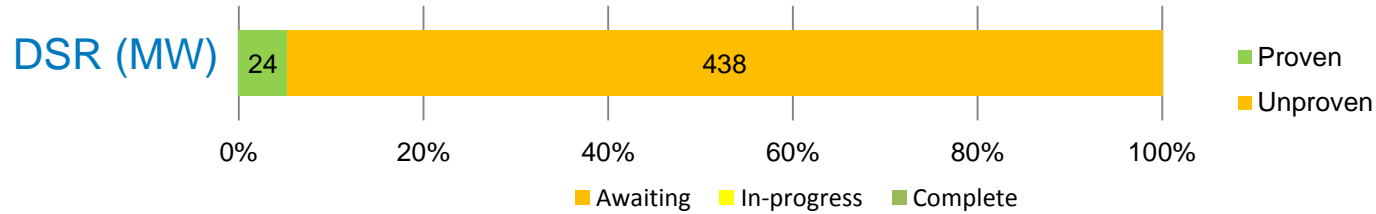
# 6 Monthly Progress Update Reports

## – Rule 12.2

Auction Year	CMU Type	When (every 6 months from Auction date till Substantial Completion Milestone is achieved)	What you need to provide
2014 T-4	New Build & Refurbishing  3 <sup>rd</sup> report	18/06/2016	<ul style="list-style-type: none"> <li>■ Progress Report               <ul style="list-style-type: none"> <li>■ Schedule of Construction Milestone dates and material changes</li> <li>■ Material changes to works described in the Construction Plan</li> </ul> </li> <li>■ Assessment from ITE</li> <li>■ Directors Certificate</li> </ul>
2015 T-4	New Build & Refurbishing  1 <sup>st</sup> report	10/06/2016	
2015 TA	New Build  1 <sup>st</sup> report	27/07/2016	



# DSR Proving



## Issues

- DSR Tests must be complete before the start of prequalification assessment
- Applicant is required to get accurate data from Half Hourly
- Aggregators to provide to Elexon, feedback is that it is more difficult than expected with the HHA.
- ESC and EMR DB joint letter on escalating the timeline with participants

# SO Obligations within Capacity Mechanism

David Preston – Business Lead, Strategic Projects



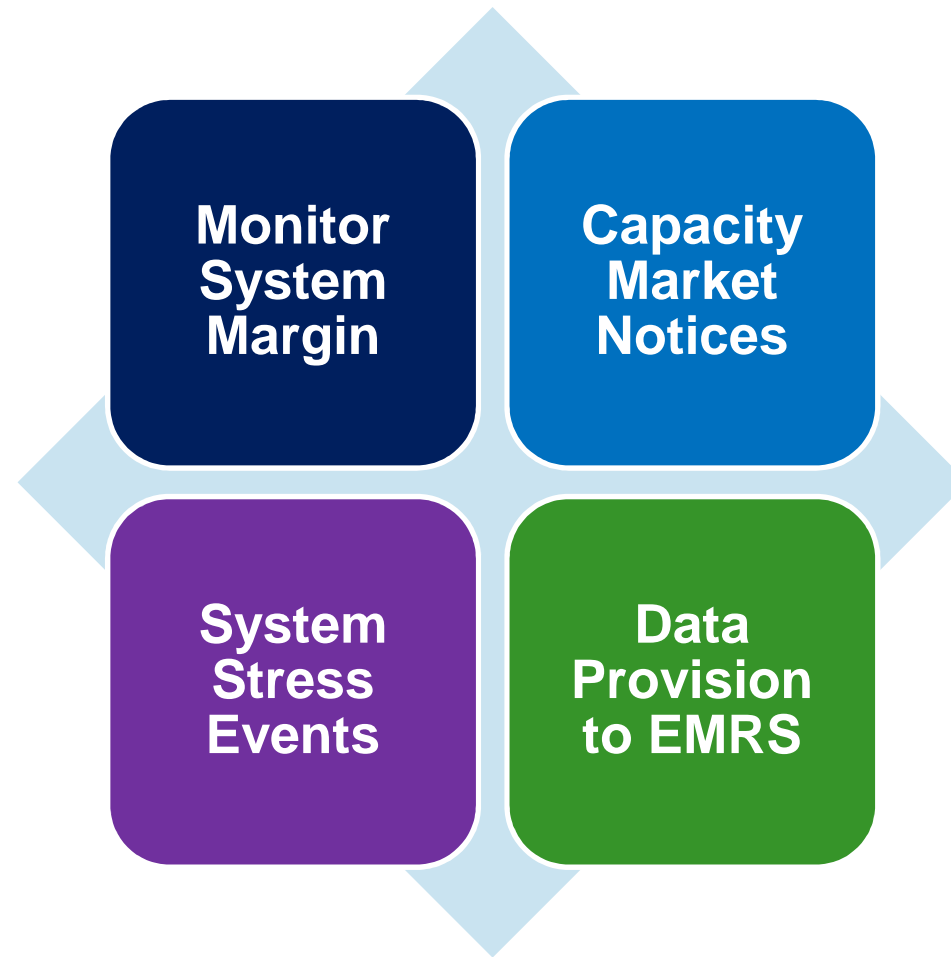
## Content

---

- System Operator role in Capacity Mechanism
- A recap of key messages
- Capacity Market Notices (CMN) recap
- CMN Scenarios recap
- Draft website visuals
- Next steps and communications timetable

## System Operator role in Capacity Mechanism

---



## A recap of key messages

---

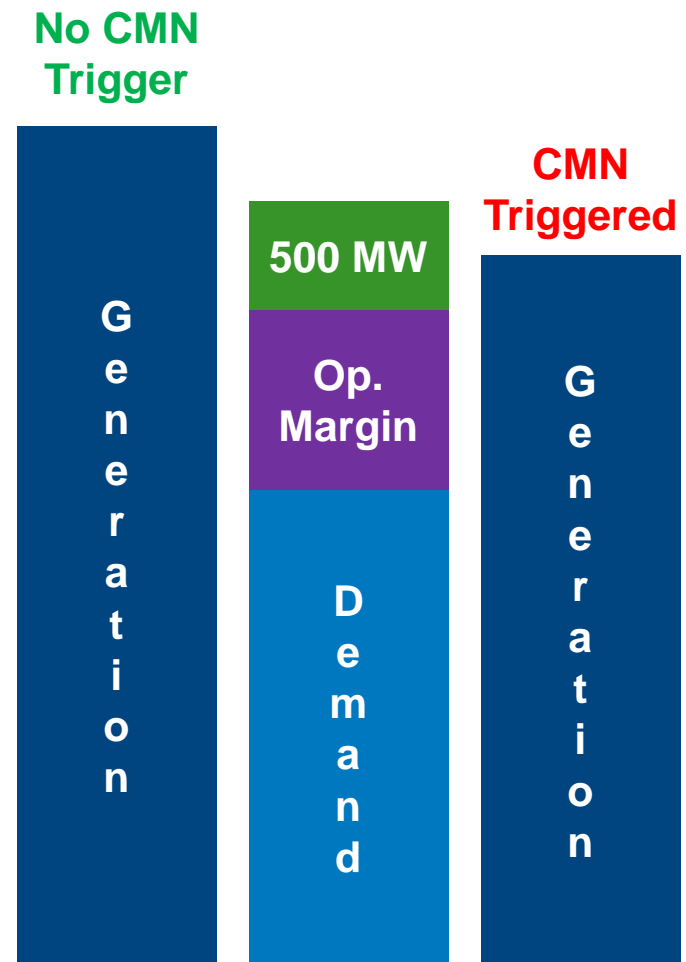
- Capacity Mechanism goes live on 01 October 2016
- 2016/17 Transition Period is an opportunity to learn
- Particular interest in 4hr and 500MW (threshold) constants
- CMNs are not an operational dispatch tool
- Operational messages will continue to appear on BMRS
- System Stress Event confirmation follows SO analysis
- A discrete website is being developed for CMNs, Stress Events

# Capacity Market Notices (CMN) recap

## Comparison with Notification of Inadequate Margin (NISM)

CMN	vs	NISM
Automated	<b>Trigger</b>	Manual
500MW above Margin requirement	<b>Threshold</b>	500-700MW below Margin requirement
Not included	<b>Constraints</b>	Included
4 hours out (for initial alert)	<b>Lead time</b>	Flexible

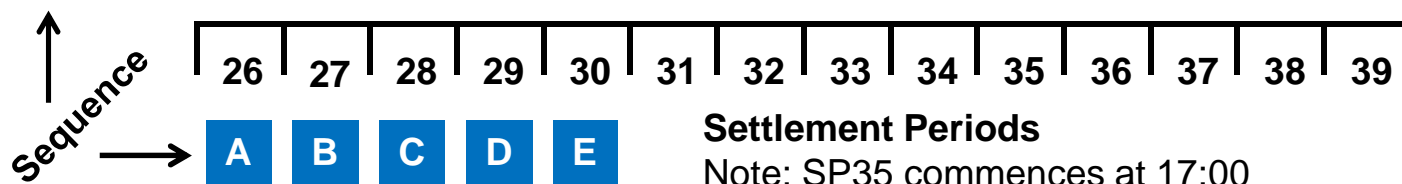
## How Triggered?



## CMN scenarios recap

**Note:** Where National Grid is managing a margin challenge within 4 hours, and a CMN is not active, all communications will be managed through traditional routes via the System Warnings page on BM Reports

- E**
  - No margin issue during SP39 @ 4 hrs out
  - No analysis for earlier SPs required as no active CMN in place → ● No CMN required
- D**
  - No margin issue for any SP in next 4 hrs → ● ● ● ● CMN cancelled and communicated to market
- C**
  - Margin issue for SP 35 relaxed @ 3 hrs out
  - Margin issue for SP 36 persists @ 3.5 hrs out → ● ● ● Original CMN remains in place from 17.00
    - No margin issue for SP37 @ 4 hrs out
- B**
  - Margin issue for SP 35 persists @ 3.5 hrs out → ● ● Original CMN remains in place from 17.00
    - Margin issue for SP 36 @ 4 hrs out
- A**
  - Margin issue for SP 35 @ 4hrs out → ● CMN active from 17.00 and communicated to market on discrete website



## GB Electricity Capacity Market Notices

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed accumsan sollicitudin nibh eu tristique. Proin id tellus lacus. Sed semper feugiat luctus or sit amet, consectetur adipiscing elite get.

Maecenas sodales, neque id maximus rhoncus, leo justo consectetur nibh.

Subscribe to notifications

### Confirmation of Electricity System Stress Event

Posted by National Grid (System Operator) on Thursday 19th January 2017 at 8:32pm

Start time of System Stress Event	Thursday 19th January 2017 at 7:41pm
End time of System Stress Event	Thursday 19th January 2017 at 8:32pm

### Message from System Operator

Posted by National Grid (System Operator) on Wednesday 18th January 2017 at 7:58pm

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam luctus mauris quis ex sodales dignissim. Curabitur eu pretium ex. Phasellus tincidunt tristique enim eu sagittis. Nulla tempus dolor quis ante pretium, non aliquam risus placerat. Nunc vel dictum est, id blandit augue. Mauris mi libero, dictum lacinia sodales et, ultrices in libero. Proin tincidunt dui in velit semper, vel molestie augue dictum. Praesent eleifend odio diam, vitae sodales velit lobortis ac.

### Electricity Capacity Market Notice Cancelled

Posted by National Grid (System Operator) on Tuesday 17th January 2017 at 6:25pm

The Capacity Market Notice originally active from 5:00pm on Tuesday 17th January 2017 is being cancelled from 6:30pm on Tuesday 17th January 2017.

### Filter Notifications

#### Sort posts by

☰ Date Posted ASC ▾

#### Categories to view

- Capacity Market Notices
- System Stress Events
- General Notifications

#### Date range

📅 22 May 2016 - 16 Jun 2016 ▾



## My Subscription Settings

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed accumsan sollicitudin nibh eu tristique. Proin id tellus lacus. Sed semper feugiat luctus.

### Email Address

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent tincidunt scelerisque odio nec laoreet

#### Email Address

### Unsubscribe

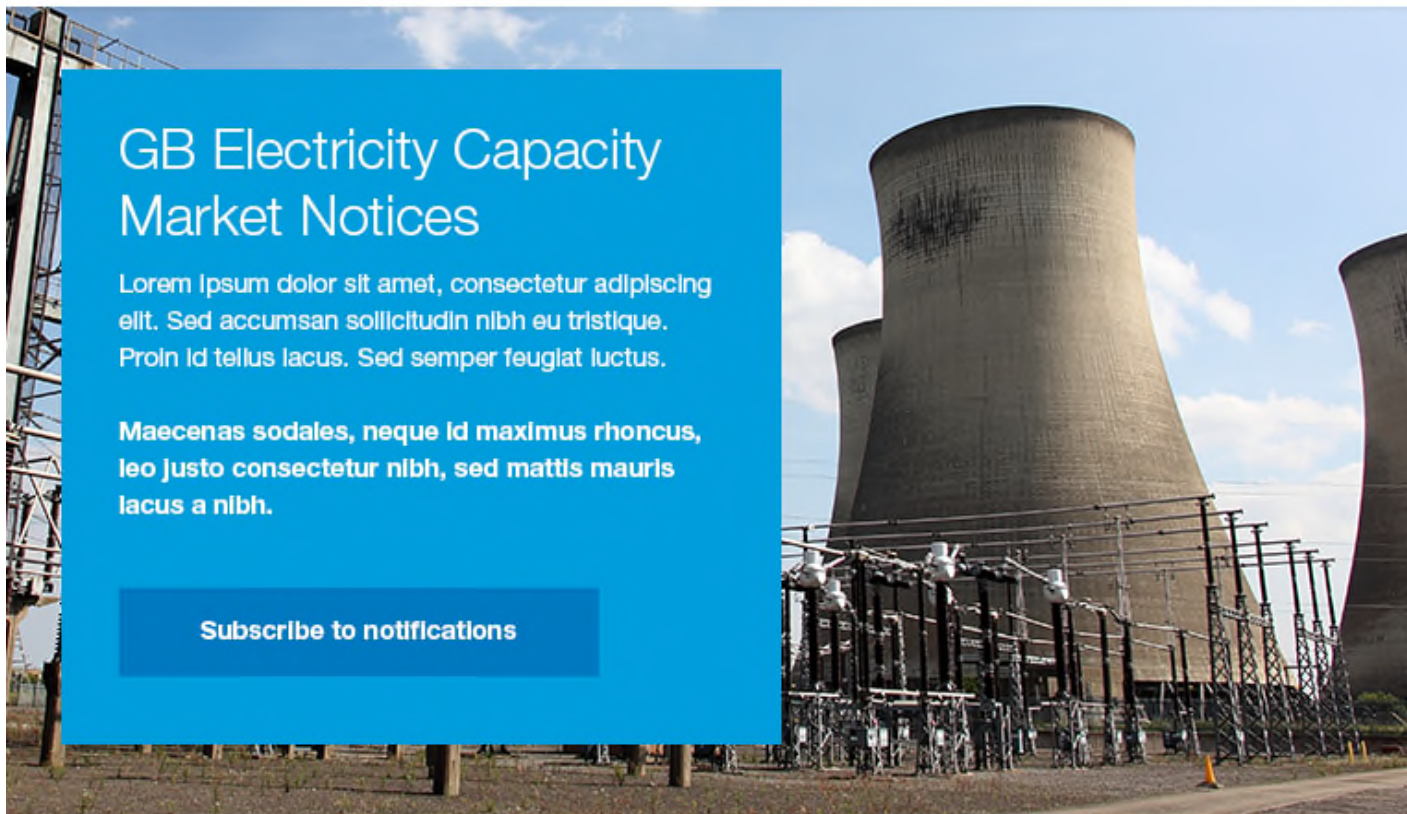
Yes, please unsubscribe **sam@edgeoftheweb.co.uk** and all mobile numbers. I no longer wish to receive any notifications.

### Mobile Numbers

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent tincidunt scelerisque odio nec laoreet. Vestibulum accumsan massa in massa ultrices imperdiet.

07705 123 456 <span>✓ Verified</span>	<input type="button" value="Remove"/>
07705 123 456 <span>✗ Unverified</span>	<input type="button" value="Verify"/> <input type="button" value="Remove"/>
07705 123 456 <span>✗ Unverified</span>	<input type="button" value="Verify"/> <input type="button" value="Remove"/>

### Add Mobile Number



## GB Electricity Capacity Market Notices

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed accumsan sollicitudin nibh eu tristique. Proin id tellus lacus. Sed semper feugiat luctus.

**Maecenas sodales, neque id maximus rhoncus, leo justo consectetur nibh, sed mattis mauris lacus a nibh.**

[Subscribe to notifications](#)

### Notifications

 FILTER

### Confirmation of Electricity System Stress Event

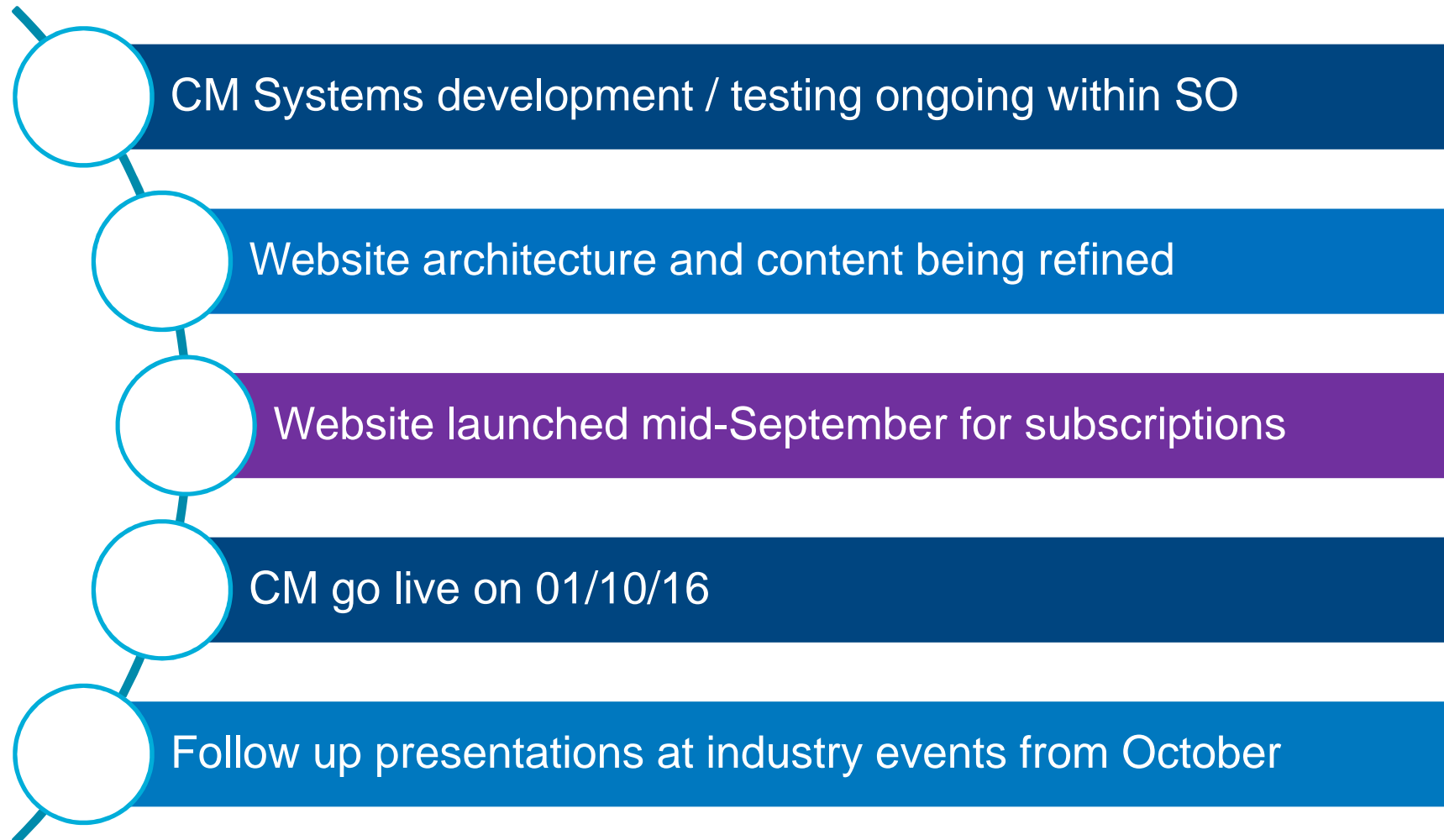
Posted by National Grid (System Operator) on Thursday 19th January 2017 at 8:32pm

Start time of System Stress Event	Thursday 19th January 2017 at 7:41pm
End time of System Stress Event	Thursday 19th January 2017 at 8:32pm



## Next steps and communications timetable

---





Matthew Johnson, ESC



# Metering assurance update

19 July 2016



# Electricity Settlements Company

## Role and responsibilities

---



**ESC – The Settlement Body set up by DECC**

### **Capacity Market financial transactions**

- Auction Credit Cover collection / approval
- Invoicing suppliers for Capacity Market costs
- Payments to and penalties collection from Capacity Providers

EMR Settlements Ltd operates as our settlement agent covering day to day activities.

### **Capacity Market metering configuration assurance**

EMR Settlements Ltd operates as our metering services provider covering day to day activities.

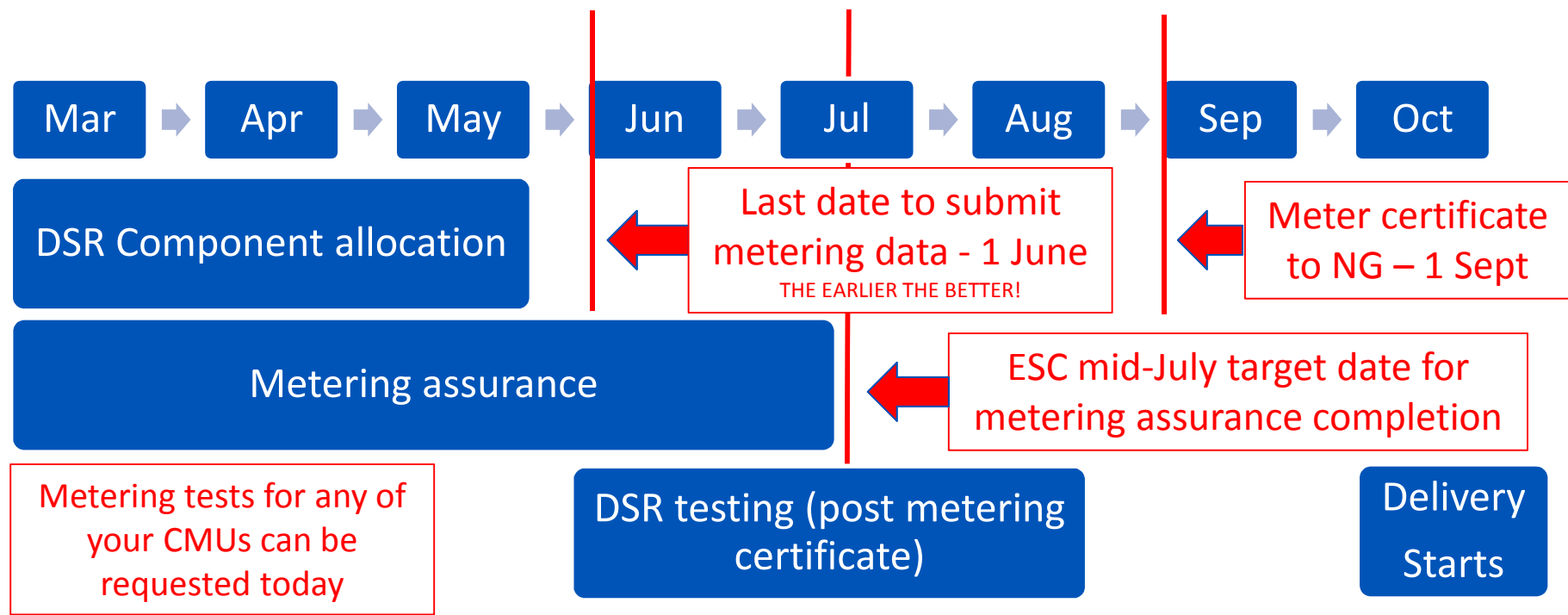


# Electricity Settlements Company TA metering assurance timeframe



Recommended timeline as previously communicated

ESC has been constant in its messaging that ESC cannot guarantee to complete metering test requests / statements received after 1 June 2016. However, test requests remain low and not one component has passed a metering test for the 2016/17 TA delivery year.



# Electricity Settlements Company

## TA metering assurance next steps



- 
- ESC encourages TA Capacity Providers to submit metering test request / statements to EMRS ASAP. ESC is operating meter assurance on a “first come first served basis”. A test takes an average of 5 hours to complete – we only have 31 working days until the deadline.
  - Metering test requests / statements should be of high standard to ensure efficient use of metering test resources. Effort spent failing tests is effort that could be used to pass tests.
  - If a Capacity Provider has any questions or requires technical assistance regarding metering assurance they should contact EMRS.
  - If a Capacity Provider expects to withdraw from the CM process it would be appreciated if they inform ESC/EMRS so resources can be reallocated as required.
  - Any retesting driven by rectification / resubmissions must be completed within the given timescales. The deadline of 1 September to present metering certificates to National Grid still applies.
  - Again, ESC cannot guarantee to complete any submissions of metering test requests / statements after 1 June. Any Capacity Provider who is unable to present a metering test certificate to the CM Delivery Body as required on 1 September 2016 will face termination.
-

# Electricity Settlements Company

## Meter Sampling



- The 2016 rule changes will allow ESC to perform meter testing on a risk based sample basis.
- However, there is no tangible impact on Capacity Providers as metering test requests / statements must still be submitted for all components - ESC selects the sample not the Capacity Provider.
- Sample size will be determined by:
  - The largest component will be tested (a CMU of 1 component will be subject to testing)
  - Applicant's company country of registration
  - Component size
    - all components over a maximum capacity value
    - a predetermined percentage below a minimum capacity
  - Applicant's trading length
  - Applicant's credit rating
  - Applicant's net worth (positive or negative)
  - Sample size will be increased in the event of component failure
- ESC will be issuing guidance on sampling in the near future.

# Electricity Settlements Company

## 2014 T-4 metering assurance deadline

---



- Meter test requests / statements for 2014 T-4 auction for Existing Generators and Proven DSR CMUs must be submitted in a timely manner to allow ESC to issue metering certificates by end of March 2017.
- Missing this deadline will be a termination event for these CMUs.
- ESC encourages applicants to submit high quality metering test requests / statements by 31 December 2016.
- Metering certificates issued here can also be used for the supplementary / early capacity 2017/18 delivery year if a CMU consists of the same component configuration.



# Electricity Settlements Company

## TA metering test contact details

---



We are open for business:

### Request a Metering Test

- [contact@emrsettlement.co.uk](mailto:contact@emrsettlement.co.uk)
- 020 7380 4333

### Metering Test Queries

- [iain.nicoll@elexon.co.uk](mailto:iain.nicoll@elexon.co.uk)
- 020 7380 4162

# 2016 Future Energy Scenarios & 2016 Electricity Capacity Report



Capacity Market Operational Coordination Event  
19<sup>th</sup> July 2016

## Agenda

---

- Future Energy Scenarios – FES in “five”
- Executive Summary - ECR
- Summary of key modelling developments since 2015 ECR
- Recommended capacity to secure for 2020/21
- Recommended capacity to secure for 2017/18
- Indicative capacity to secure for 2018/19
- Interconnected country de-rating factor ranges
- Conventional plant de-rating factors
- Questions

# Future Energy Scenarios



## The 2016 key messages

---

Traditional sources of energy supply are being replaced with an ever-divergent mix.



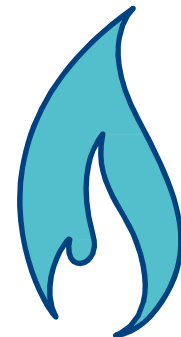
Significant progress needed in heating and transport sectors to meet 2020 renewable energy target.



Action needs to be taken this decade to drive progress towards the 2050 carbon reduction target.

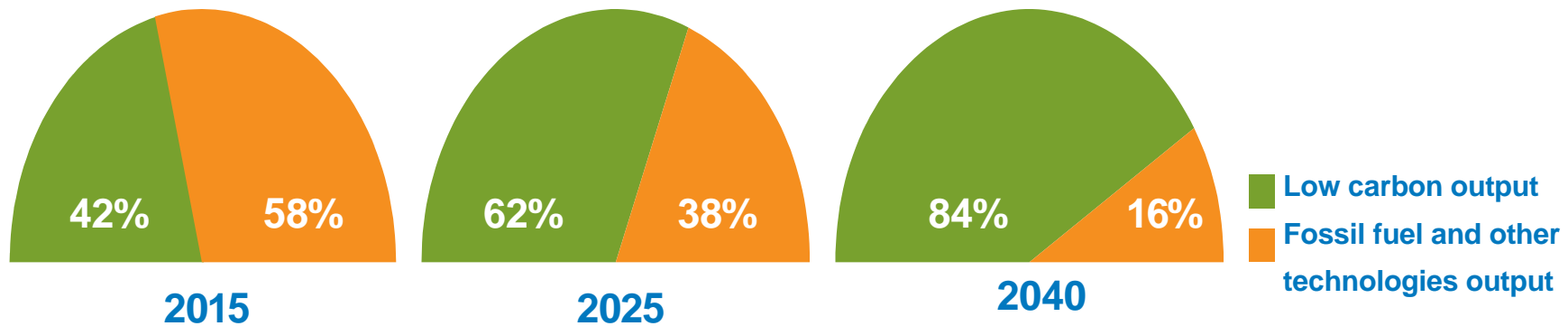


Gas will play an essential role in energy decarbonisation.

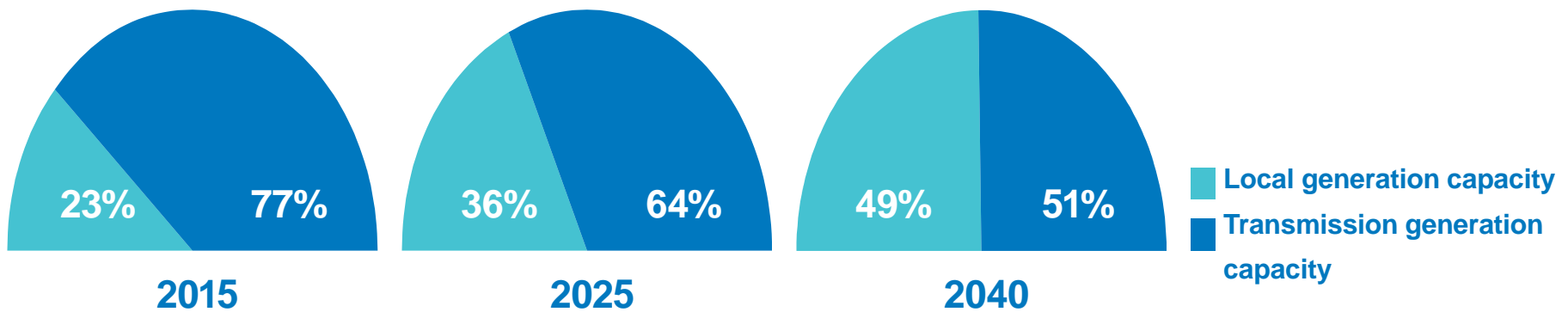


# A significant shift in generation

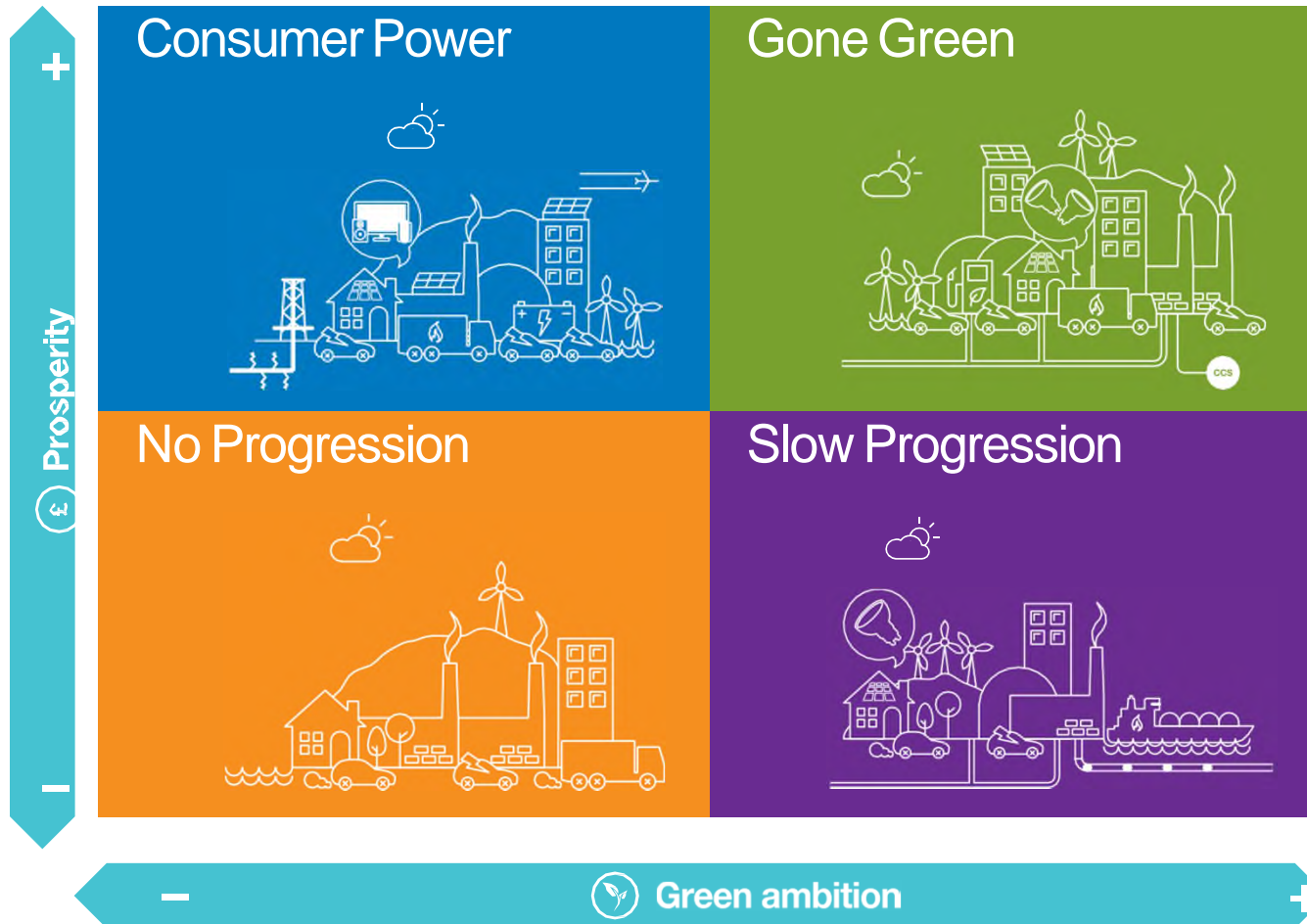
## Moving away from carbon intensive sources (Gone Green)



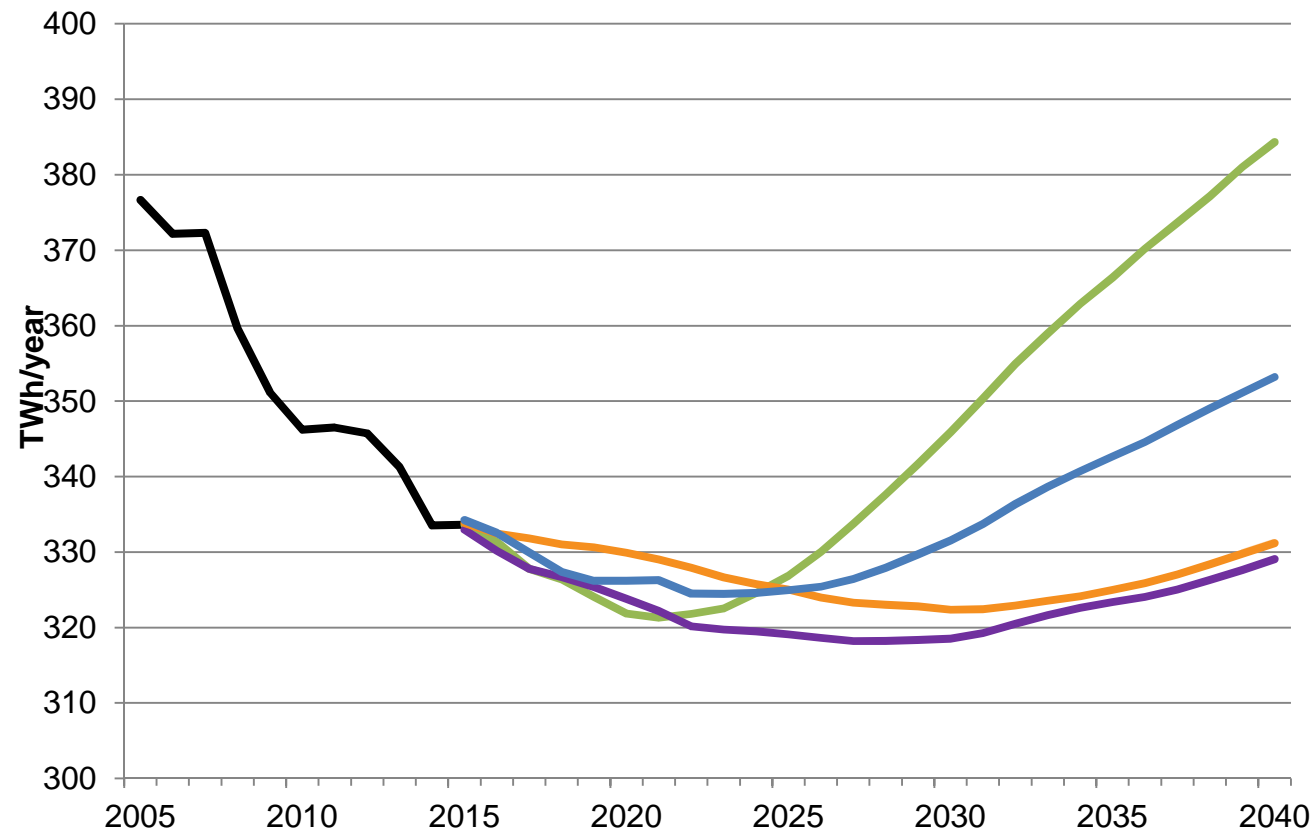
## Increasing role of local generation (Consumer Power)



# Evolution of our scenarios



# Annual Electricity Demand





# Executive Summary



## Executive Summary – The Why & What

---

- Licence obligation to submit Electricity Capacity Report (ECR) to DECC before 1<sup>st</sup> June
- ECR published on 8<sup>th</sup> July 2016
- Modelling scrutinised by DECC, DECC's Panel of Technical Experts & Ofgem
- This year's ECR contains 2 recommendations for 17/18 (Early Auction) and 20/21 (T-4 auction) plus an indicative requirement for 18/19 (T-1 auction)
- To reflect the risks around early coal closures we have incorporated in our modelling new coal closure non-delivery sensitivities
- We have incorporated a number of modelling enhancements,
- ECR also contains recommended ranges of de-rating factors for interconnected countries for 2017/18 and 2020/21 auctions
- The Secretary of State determines:
  - the capacity to secure and, for 2020/21 the split between T-4 and T-1 auctions
  - the auction parameters including the demand curve
  - individual interconnector de-ratings for use in the CM auctions

## Executive Summary – Key Messages

---

- 2017/18 Early Auction (T-1) and 2020/21 T-4 recommendations are higher with the inclusion of the coal non-delivery sensitivities than they would have been without these sensitivities
- Over the period 17/18 to 20/21 the capacity to secure recommendations have remained broadly consistent with a slight downward trend due to increases in renewable generation
- 18/19 T-1 indicative requirement increases significantly from 2.5GW to 7.3GW as we assume some plant with CM contracts default. If these plant are successful in the 17/18 CM auction and subsequently stay open then this requirement reduces to 4.6GW
- Interconnected countries de-ratings ranges show small increases compared to last year's analysis for all countries except Ireland which increases due to the assumption of more effective market coupling post introduction of I-SEM
- Conventional plant de-rating factors are similar to those used in the 2015 ECR. We welcome feedback on the methodology used to calculate conventional plant de-rating factors.

## Executive Summary - Capacity to Secure

- ECR uses probabilistic modelling of a range of scenarios and sensitivities and a Least Worst Regret (LWR) decision tool to select recommended or indicative capacity:

Year	Total Eligible Capacity Requirement(GW)	Capacity already secured & adjustments (GW)	Recommended / indicative requirement (GW)	Secretary Of State's Decision (GW)
<b>2020/21 (T-4)</b>	53.2	-3.5	<b>49.7</b>	<b>52.0 (T-4)</b> <b>0.6 (T-1)</b>
<b>2017/18 Early Auction</b>	53.8	n/a	<b>53.8</b>	<b>53.8</b>
<b>2018/19 (T-1)</b>	2.5	+4.8*	<b>7.3</b>	<b>N / A</b>

- Recommendation for 2020/21 covers 18 out of 22 cases modelled. Target increased for new information (after ECR submitted) on plants defaulting on formal milestones and DECC's lower view of autogeneration opting out of CM (which will not be known until post pre-qualification when this target figure will change again!)
- Recommendation for 2017/18 covers 14 out of 20 cases modelled
- Indicative capacity for 2018/19 covers 21 out of 26 cases modelled

## Executive Summary - Country De-rating Factors

- We provide range of interconnected countries' de-rating factors from which Sec. Of State decides de-rating factor for each interconnector to use in the CM

Country	2017/18	2020/21	2019/20 (2015 ECR)	Interconnector	Decision (2017/18)	Decision (2020/21)
France	45-86%	45-88%	50-70%	IFA IFA 2 Eleclink	59% N / A N / A	60% 62% 65%
Ireland	2-58%	25-50%	2-10%	Moyle & EWIC	30%	26%
Netherlands*	70-82%	70-82%	62-80%	Britned	74%	74%
Belgium	n/a	65-92%	58-70%	NEMO	N / A	77%
Norway	n/a	76-96%	n/a	NSL	N / A	78%

- Top of range is based on Baringa's pan European modelling with the bottom based on Pöyry's historical modelling
- Ireland's lower end of the 17/18 range allows for a potential delay in the effectiveness of I-SEM introducing market coupling (last year's range for 2019/20 based more on historical analysis and less effective market coupling)

# Summary of key modelling developments since 2015 ECR



## Summary of developments

### Data Input Assumptions

- New offshore wind power curve
- Wider range of sensitivities including coal non-delivery
- Updated interconnector distributions for 17/18 & 20/21 from Baringa's pan European model
- Updated interconnector assumption and sensitivities for 18/19

### Modelling Changes

- DDM upgrades: T-1 auctions, wind streams
- DDM analysis confirming model output accuracy and impact of modelling at GB level
- Change from 36 to 10 year wind history
- Wind/demand scaling of pooled 10 year data
- High and low wind output sensitivities

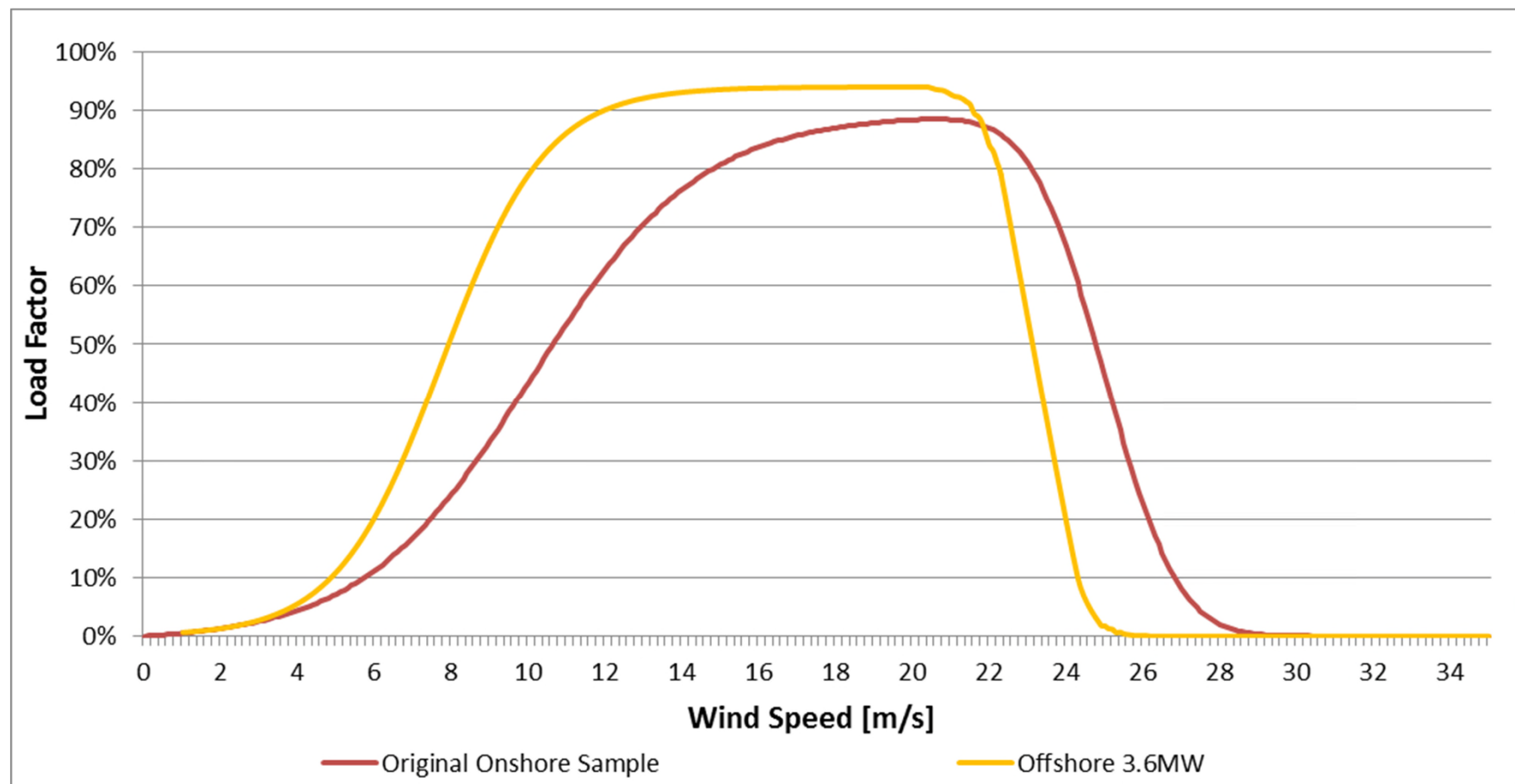
### Result Interpretation

- Base case consistent with demand forecasting accuracy incentive
- Sensitivities applied to Base Case
- Confidence Interval range for capacity requirement
- LWR ratio of VoLL / CONE\* needs to be consistent with Reliability Standard

\*Value of Lost Load (VoLL) / Cost of New Entry (CONE)

## Offshore Wind Power Curve

- Derived from data available for turbines (<4 MW) at 3 sites in winter 2014/15
- Data is limited – curve will be reviewed in future years as more data becomes available

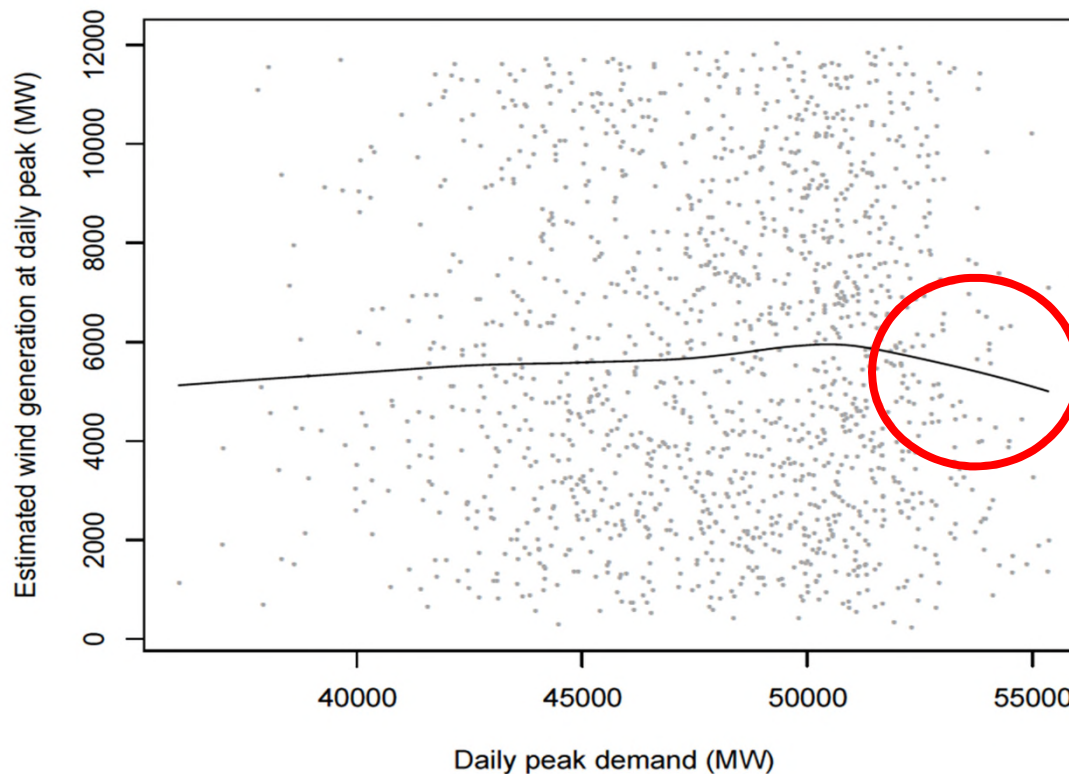




## Modelling Changes – wind demand relationship

- Research commissioned on whether wind output should be scaled at high demand
- Analysis based on 10 winters (Nov-Mar) paired data rather than pooled data
- For 2016 ECR base assumption uses 10 years pooled history which is scaled (by 0.9)
- Low wind (0.8 scaling) and high wind (1.0 scaling) sensitivities included

Wind generation against demand at times of daily peak demand

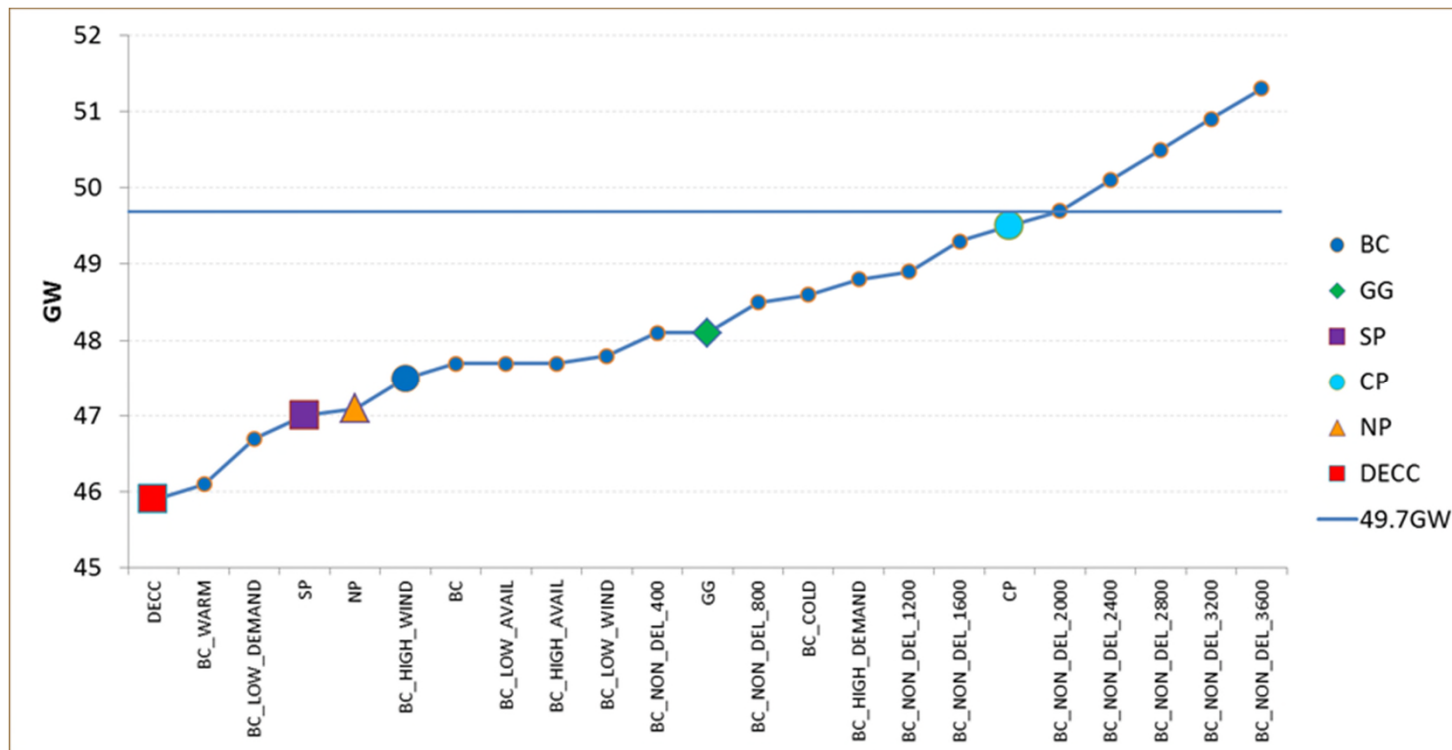


## Recommended capacity to secure for 2020/21



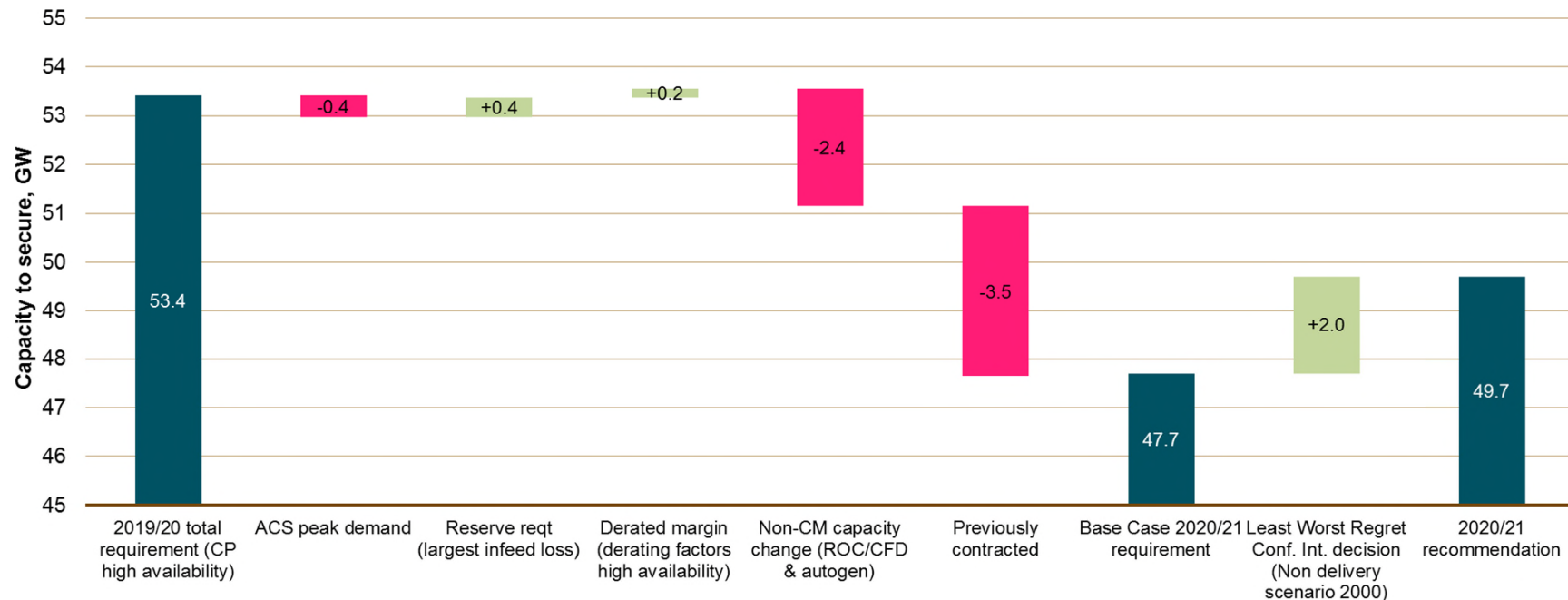
## 2020/21 Capacity to secure

- CM eligible capacity is total capacity minus capacity receiving support via RO, CfD or FiTs
- The chart shows the level of CM capacity required in each scenario and sensitivity to meet the Reliability Standard of 3 hours LOLE in 20/21. It excludes any CM plants with 3, 14 or 15 year contracts from the 18/19 and 19/20 T-4 auctions assumed to operational in 2020/21
- LWR outcome is 49.48 GW (CP). Nearest base case sensitivity within confidence interval is 49.65 GW (2 GW non-delivery). Hence recommendation after rounding is 49.7 GW



## 2020/21 waterfall from 2019/20

- The following waterfall chart shows how the original 53.4 GW total requirement for 2019/20 (derived from the 2015 Consumer Power High Availability sensitivity) has changed into total CM-eligible requirement of 49.7 GW (derived from the 2016 Base Case 2000 MW non-delivery sensitivity):



## 2020/21 – Key Points

---

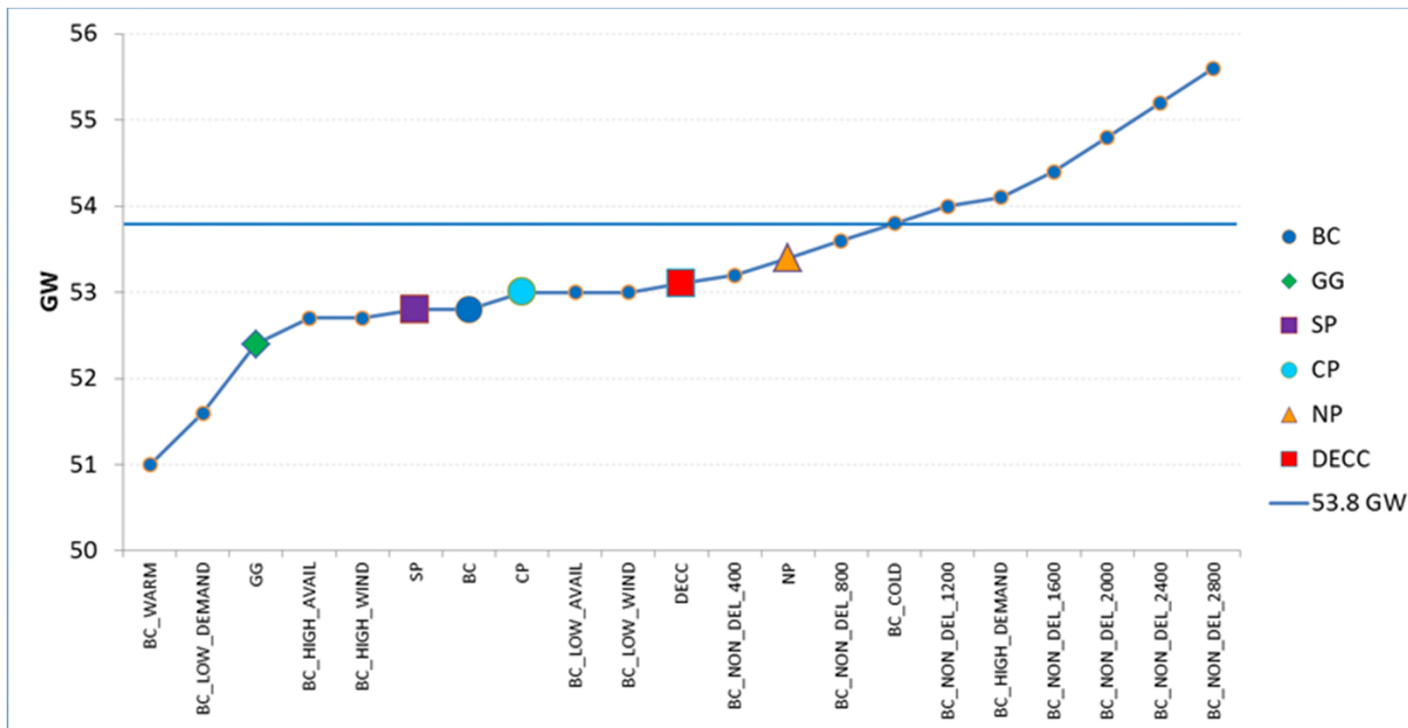
- Sensitivity range 46.1-51.3GW (with lowest Warm Winter and highest Non-delivery 3.6GW)
- When compared to 19/20 recommendation before any adjustments (e.g. T-1 held back) higher renewable generation and non-CM autogeneration decrease requirement with wider range of non-delivery sensitivities increasing requirement
- Warm Winter sensitivity is key to LWR result
- Raw LWR selects the Consumer Power scenario (because it assumes significant closure of previously contracted plant); however, this doesn't align with demand forecasting incentive so the nearest sensitivity to this value is chosen (but within the confidence interval)
- LWR recommendation is 49.7GW (Non-delivery sensitivity 2GW).
- Secretary of State decided to increase requirement to 52.6 GW to account for new information (after ECR submitted) on plants defaulting on formal milestones and DECC's lower view of autogeneration opting out of CM and lower growth in small scale renewables
- Secretary of State decided to hold back 0.6 GW for T-1 auction leaving 52.0 GW target for the T-4 auction.
- Pre-qualification to determine adjustments required e.g. opted out plant that will remain operational or plants with different closure assumptions to the Base Case

## Recommended capacity to secure for 2017/18



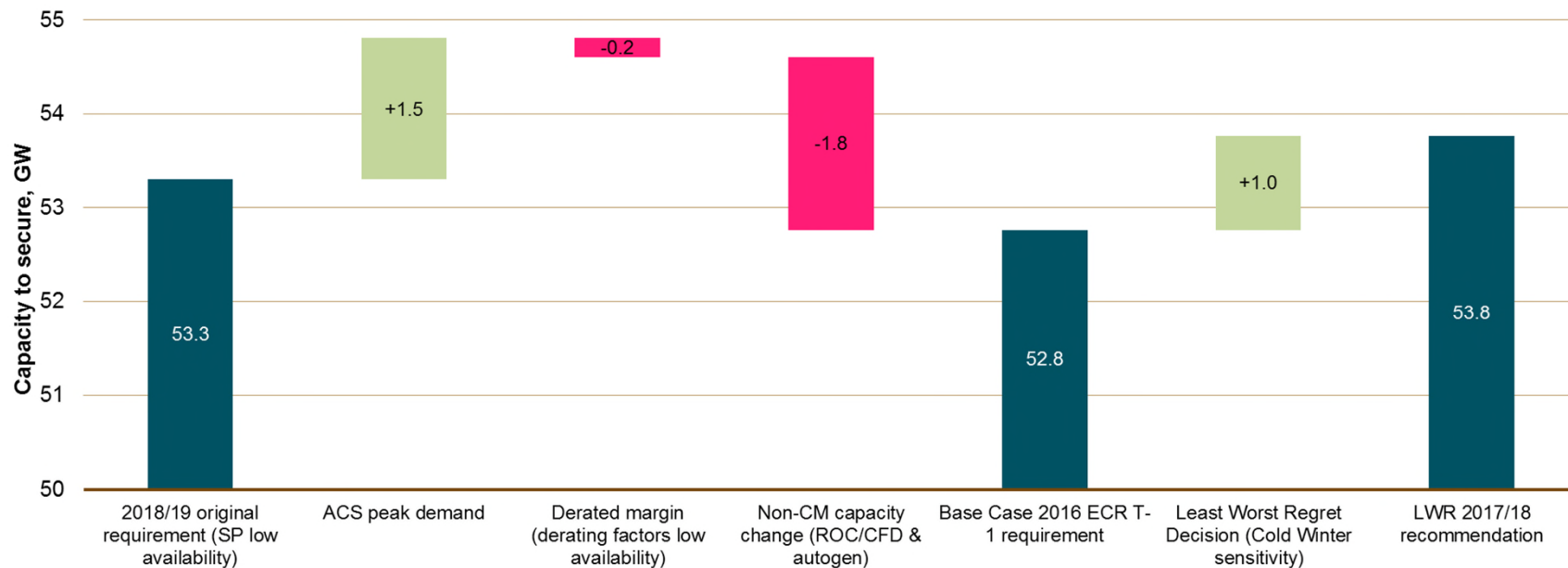
## 2017/18 – LWR Decision from Range

- The chart shows the level of CM capacity required in each scenario and sensitivity to meet the Reliability Standard of 3 hours LOLE in 2017/18. There are no previously contracted plants for 2017/18
- LWR outcome and recommendation for 2017/18 is 53.8 GW (Cold Winter sensitivity)



## 2017/18 waterfall from 2018/19

- The following waterfall chart shows how the original 53.3 GW total requirement for 2018/19 (derived from the 2014 Slow Progression Low Availability sensitivity) has changed into total CM-eligible requirement of 53.8 GW (derived from the 2016 Base Case cold winter sensitivity):





## 2017/18 – Key Points

---

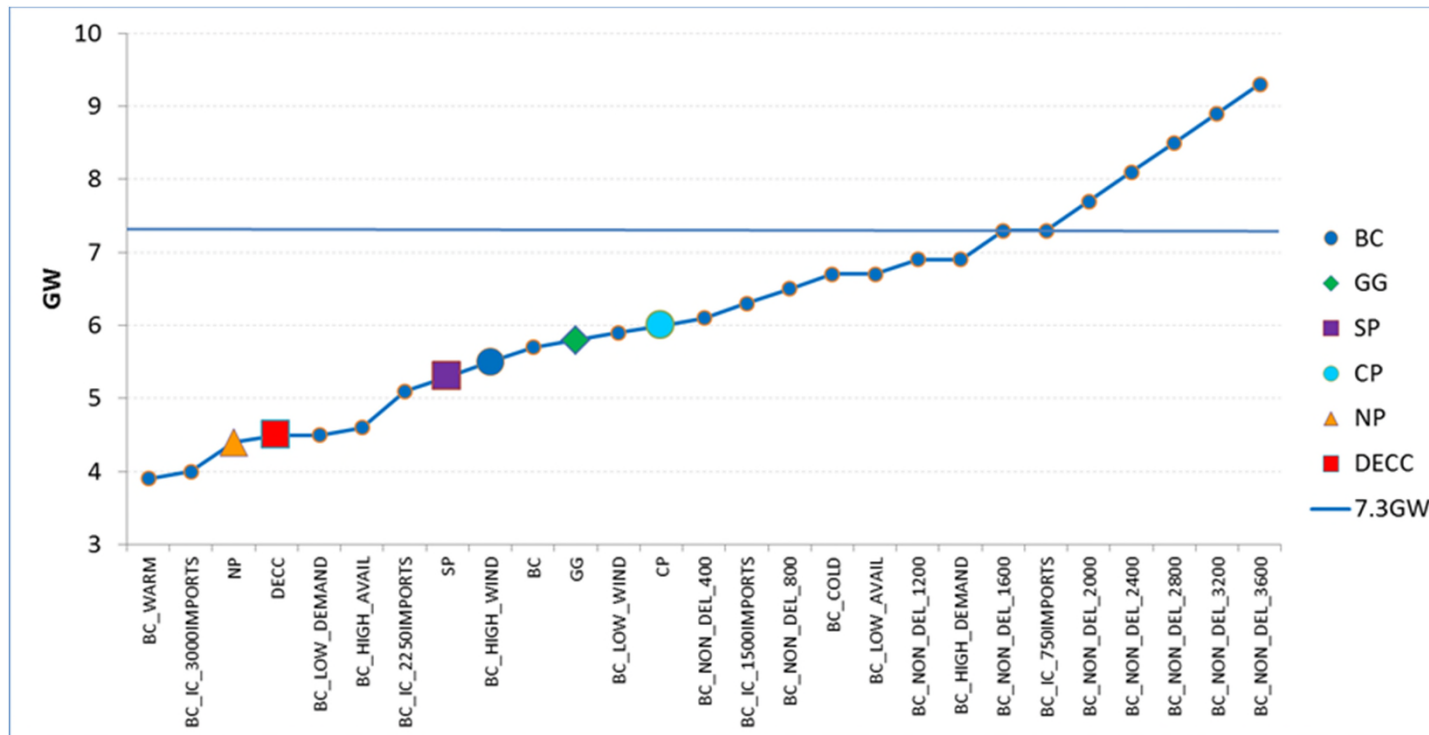
- Sensitivity range 51.0-55.6GW (with lowest Warm Winter and highest Non-delivery 2.8GW)
- When compared to 18/19 recommendation before any adjustments (e.g. T-1 held back) higher demands are cancelled out by higher non-CM autogeneration with the wider range of non-delivery sensitivities increasing the requirement
- Non-delivery 2.8GW sensitivity is key to LWR result
- LWR result is 53.8GW (Cold Winter sensitivity)
- Pre-qualification to determine adjustments required e.g. opted out plant that will remain operational or plants with different closure assumptions to the Base Case
- Secretary of State decided target capacity is 53.8 GW [none held back since no T-1 auction]
- Transition from CBR to CM gives a similar level of risk to consumers

## Indicative capacity to secure for 2018/19



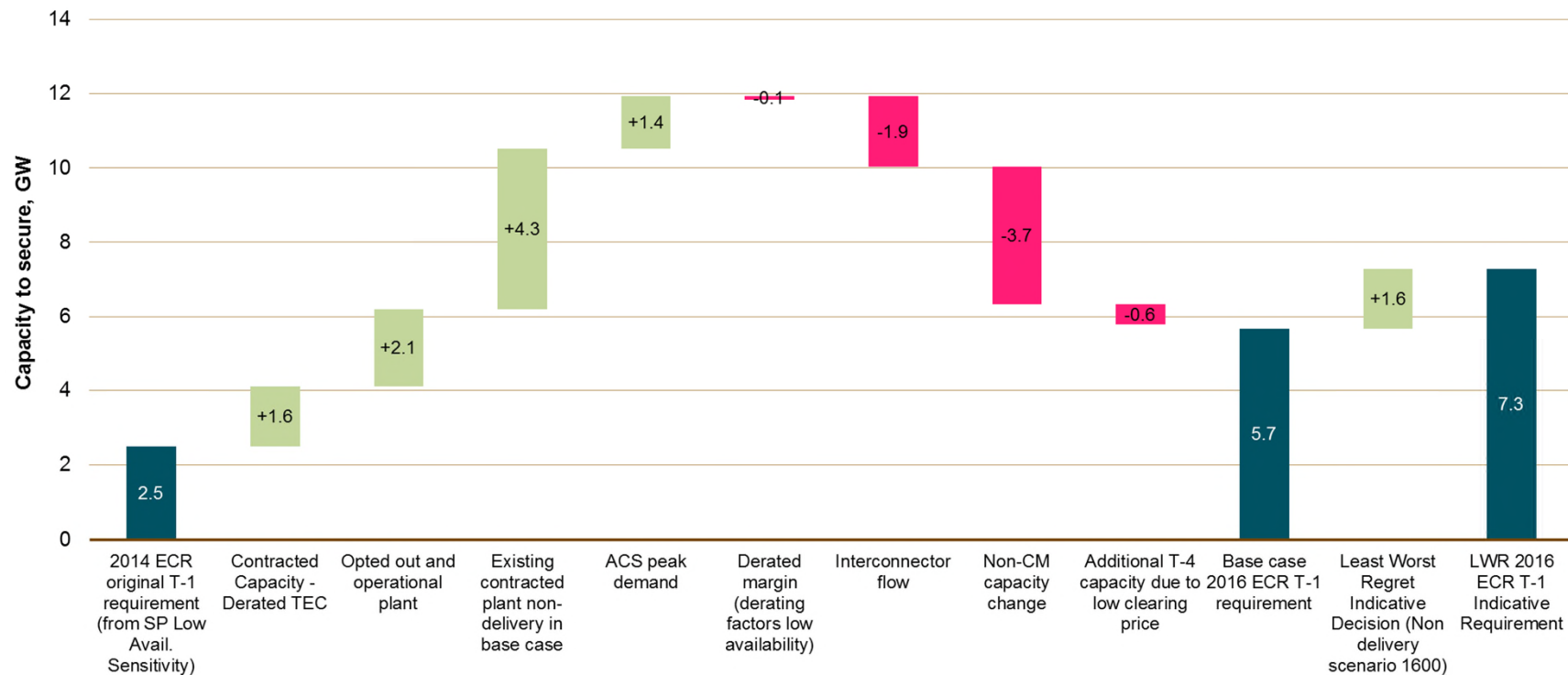
## 2018/19 – LWR Indicative Decision from Range

- The chart shows the level of CM capacity required in each scenario and sensitivity to meet the Reliability Standard of 3 hours LOLE in 2018/19. It excludes any CM plant with contracts for 2018/19 from the T-4 auction assumed to operational in 2018/19
- LWR outcome and indicative capacity for 2018/19 is 7.3 GW (Base Case 1600MW sensitivity and also the 750 MW continental imports sensitivity)



## 2018/19 waterfall from 2018/19 T-1 held back

- The following waterfall chart shows how the original 2.5 GW requirement held back for the 2018/19 T-1 auction (derived from the 2014 Slow Progression Low Availability sensitivity) has changed into an indicative requirement of 7.3 GW (derived from the 2016 Base Case 1600 MW non-delivery sensitivity):



## 2018/19 – Key Points

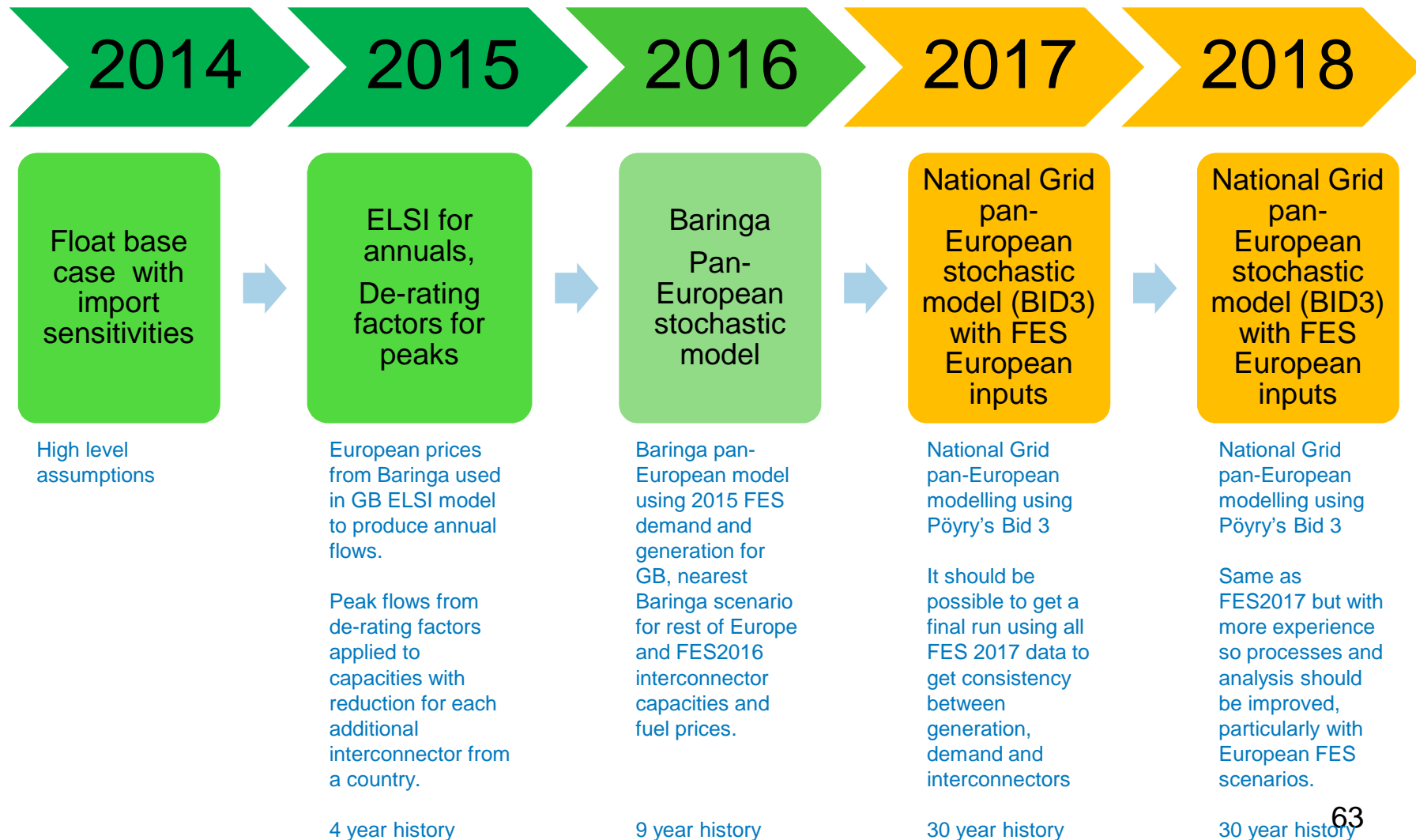
---

- Compared to original 2.5GW held back for T-1, increase in the indicative requirement due to; contracted capacity being greater than de-rated TEC, “opted out but operational” plant closing (or opting in), closure of contracted plant in Base Case and higher demand
- Decrease in the indicative requirement due to; higher imports (non-CM), higher renewable contribution, additional capacity bought in T-4 auction
- With the wider range of non-delivery sensitivities increasing the requirement
- Warm Winter sensitivity is key to LWR result
- LWR result is 7.3GW (Non-delivery sensitivity 1.6GW)
- This indicative view highlights the risk of contracted coal plant defaulting which in itself may prevent them closing thus reducing the requirement by up to 2.7GW to 4.6 GW

## Interconnected country de-rating factor ranges

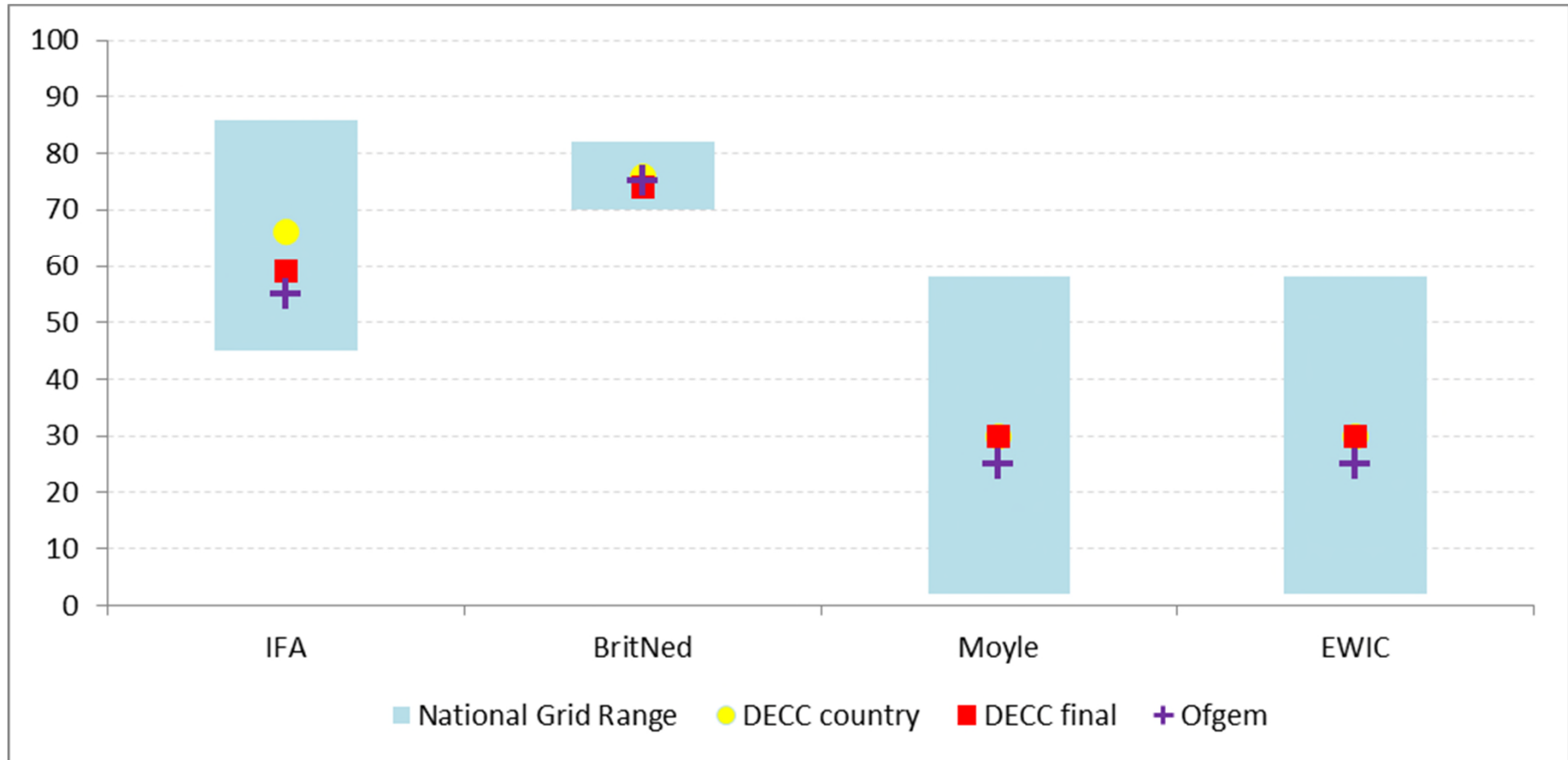


# Interconnector Analysis Timeline

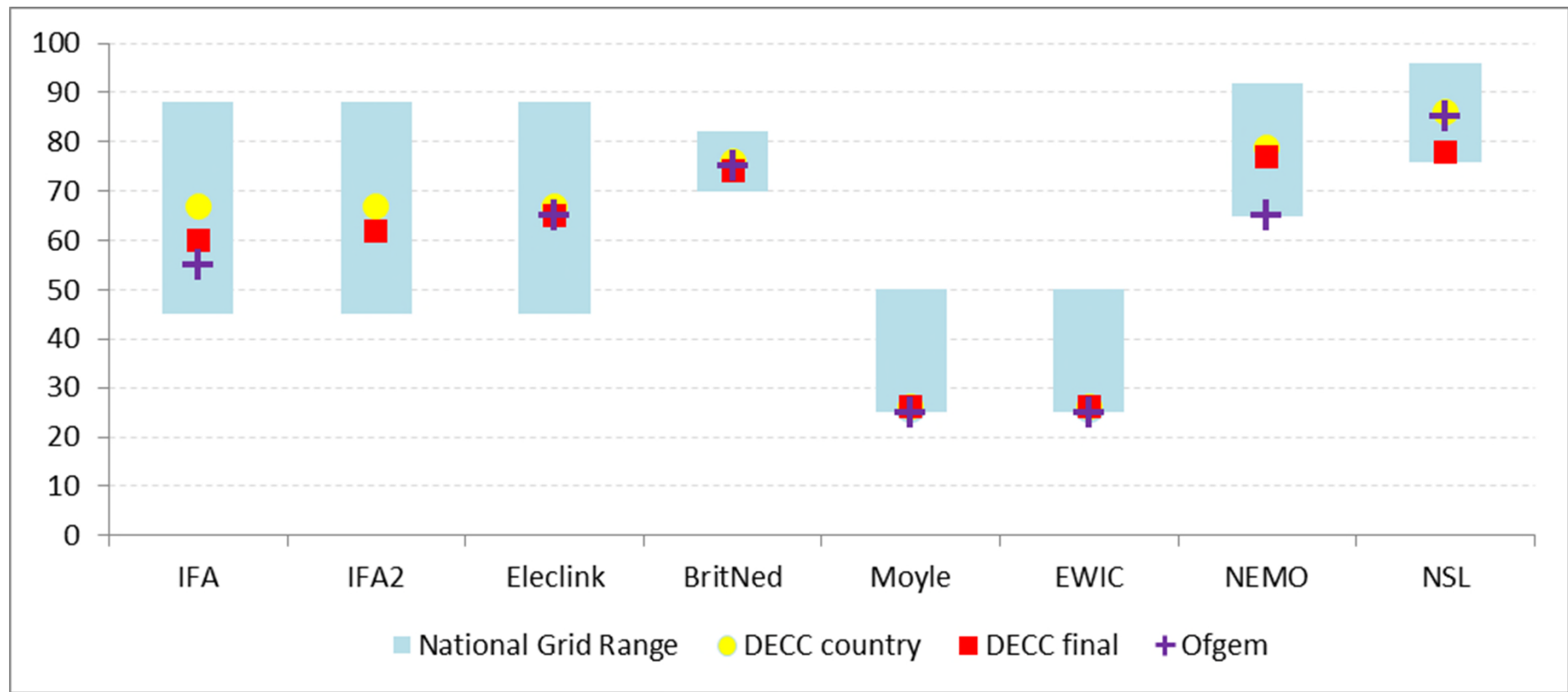




# Interconnector de-rating factors for 2017/18



# Interconnector de-rating factors for 2020/21



## Conventional plant de-rating factors



## 2016 Conventional plant de-rating factors

Technology class	Plant types included	Early Auction 2017/18	T-4 2020/21
Oil-fired steam generators	Conventional steam generators using fuel oil	85.44%	85.44%
OCGT and reciprocating engines (non-autogeneration)	Gas turbines running in open cycle fired mode Reciprocating engines not used for autogeneration	94.17%	94.17%
Nuclear	Nuclear plants generating electricity	84.36%	84.36%
Hydro	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	86.16%	86.16%
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).	96.29%	96.29%
CCGT	Combined Cycle Gas Turbine plants	87.60%	90.00%
CHP and autogeneration	Combined Heat and Power plants (large and small-scale) Autogeneration – including reciprocating engines burning oil or gas	90.00%	90.00%
Coal / biomass	Conventional steam generators using coal or biomass	86.92%	86.92%

**We are keen to hear your views on how we determine conventional plant de-rating factors. Should we continue with / evolve the current approach or should we do something different?**





Break





David O'Neill, Ofgem



# Ofgem update.

NGET CM event, 19/7/16

David O'Neill, Ofgem

---

Today:

1. This year's CM rule change process
  2. Ofgem's (other) roles in the CM
  3. Questions
-

# Overview of CM governance



## This year's CM rules change process: recent past

---

- We received 70 proposals in January (+ nine of our own)
  - We consulted in April: 23 responses
  - We published our decision in early July: Take forward 28 changes, consider further 3 changes
  - We published the consolidated Rules last week
-

# This year's CM rules change process: coming next

---

We will consult soon on:

- **the definition of Mandatory CMUs** to ensure it no longer includes any types of 'excluded capacity' as defined by the Regulations .
- **the LFCO formula** to ensure it scales obligations correctly during the first delivery year of the Transitional Arrangements.

There are other changes we are also taking forward:

- connection capacity.
- adding DSR capacity (when delivery partner systems are ready to enable the change).

**We are looking at moving away from an annual cycle of rule changes.**

---

## Ofgem's other CM roles

---

- Receiving Price Maker memorandums
  - Monitoring and taking enforcement action
  - Overseeing NGET's delivery of EMR roles
  - Reporting on the operation of the CM and NGET's delivery
-

## Questions / Thank you

NGET CM event, 19/7/16

David O'Neill, Ofgem

---





Jonathan Robinson, BEIS



Department for  
Business, Energy  
& Industrial Strategy

# Consultation and Policy Update

19 July 2016

Jon Robinson



## The new Department for Business, Energy and Industrial Strategy

- The Prime Minister appointed **Greg Clark** as **Secretary of State for Business, Energy and Industrial Strategy** on 14 July.
- There is a clear and strong rationale from the Prime Minister for this change.
  - It enables a united focus on markets, investors and consumers.
  - The new Department will work to promote the UK's global competitiveness, affordability, innovation and growth.
  - It will make sure we have the 21<sup>st</sup> century infrastructure we need.
  - Business will have a strong champion in government.
- Energy and climate change will continue in a single department ensuring efficient paths to carbon reduction.

*“I am thrilled to have been appointed to lead this new department charged with delivering a comprehensive industrial strategy, leading government’s relationship with business, furthering our world-class science base, delivering affordable, clean energy and tackling climate change.”*

Secretary of State for Business, Energy and Industrial Strategy Greg Clark



# Consultations

- Two formal consultations:
  - The October 2015 consultation
  - The March 2016 consultation
- Formal and informal consultation indicated
  - fundamental support the capacity mechanism
  - but that it needs to buy more capacity and buy it earlier to fully realize the intention of supporting investment in new secure generation.

# WHAT WE CONSULTED ON

- New build assurance
- Termination fees
- Cumulation of State aid
- Eligibility for Transitional Arrangements
- Prequalification timings
- Review of the Capacity Market rules
- Proposals to introduce an early capacity auction in 2017 for the delivery year 2017/18



# What we decided

- bring forward the Capacity Market by holding an early auction in January 2017 for delivery in 2017/18
- increase pre-auction credit cover requirements for new build bidders
- increase termination fees for those who renege on their capacity agreements
- narrow eligibility of the second TA to turn down DSR and reduce the minimum threshold level for participation in the TA from 2MW to 500kW
- unproven DSR will be eligible to bid into the T-4 auction
- make changes to the Regulations regarding the timing and processes associated with the prequalification procedure
- not to make a final decision on cumulation of State Aid but instead to consult further on our proposals in Autumn 2016

# CAPACITY MARKET ANNOUNCEMENTS

## JULY 2016

- The Government response to March consultation and related Impact Assessment.
- Secretary of State letter setting out determination that three capacity auctions will be held:
  - T-4,
  - Early Capacity Auction and
  - TA auction).
- The Regulations were made
- The (DBEIS) Rules were laid

# The Electricity Capacity (Amendment) Regulations 2016

- The Electricity Capacity (Amendment) Regulations 2016 No. 742 -published to legislation.gov.uk:  
<http://www.legislation.gov.uk/id/uksi/2016/742>
- The Regulations implement the outcomes of the two consultation exercises above, in particular through:
  - the Early Capacity Auction, to mitigate the increased risk to security of supply in 2017/18;
  - tougher sanctions to incentivise those who win a capacity agreement to deliver that capacity;
  - a secondary trading market to support investment; and
  - targeting funding through the next DSR transitional auction to turn-down DSR.



# Capacity Market Rules

- The (DBEIS and Ofgem) Rule changes and informal consolidation are now live on the website:  
<https://www.gov.uk/government/publications/capacity-market-rules>
- The rules provide the detail for implementing the operating framework set out in regulations.
- The DBEIS rule amendments:
  - Early Capacity Auction – detail
  - Requirements for new-build CMUs
  - Termination fees
  - Obligation trading and volume reallocation
  - Transitional Action eligibility and metering
  - Review of the Rules
  - Operational timetable

# Next steps

- We expect:
  - to consult again on a small number of issues including: cumulation of State Aid and; supplier levy arrangements in Autumn 2016
  - further updates from Defra on emissions regulations
  - further updates from Ofgem on their embedded benefits review



Matthew Magill and Eleanor Brogden

# REGISTRATION

## High Level Principles

- All Companies that wish to participate in either the Capacity Market or Contracts for Difference will need to register
- Registration is necessary to ensure a publically recognised officer of the company has approved the registration
- Thereafter other “company users” of the Portal may be added by the company main administrator
- Companies previously registered will not need to register again
- A single Registration allows applications for T-4, Early and Transitional Auctions

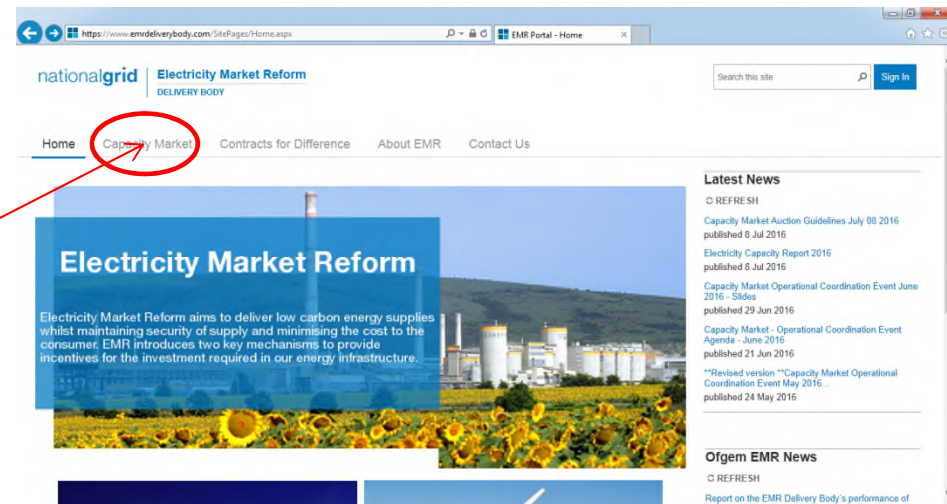
# Registering for CM Prequalification

- Each Company needs to nominate at minimum
  - Company Secretary/Director (Authorised Person) – somebody recognisable in the public domain –
  - Portal Company “Main Administrator”
- Proposed “Main Administrator” fills in online form to nominate themselves. Also completes details of Authorised Person
- Registration form is generated and needs to be printed on company letter headed notepaper, signed, scanned uploaded to portal
- NG cross-checks company details against public records and upon successful cross-check will allow full log-in details to be created by both parties
- All log-ins are password and PIN protected

# Registration

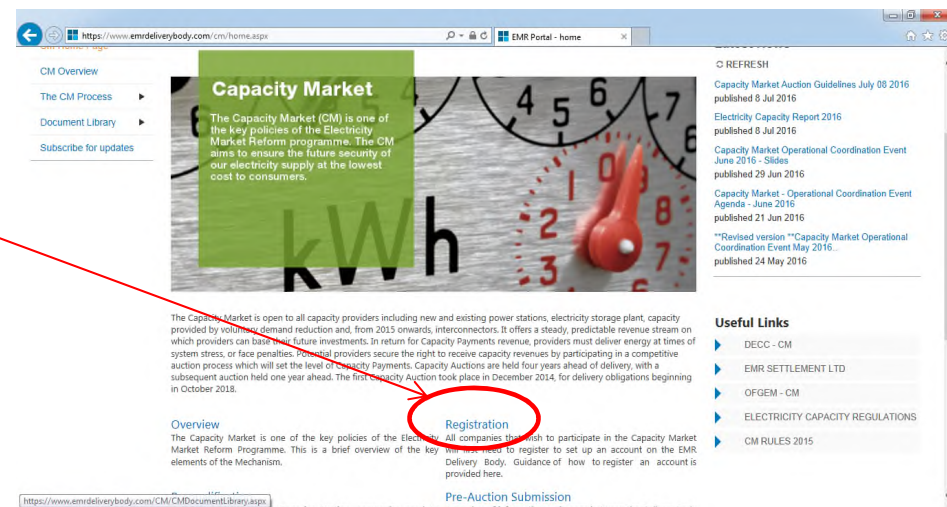
- To register go to [www.emrdeliverybody.com](http://www.emrdeliverybody.com)

- Click on “Capacity Market”



- Scroll to the Registration link and click it

- Follow the on-screen instructions to complete the Registration form



# Registration Form

- Registration form contains the key data items to set up the Main Company account in the Portal
- Important that email and mobile numbers are accurate as these used to issue passwords and PINs
- Copy of registration form must be printed on company letter head, and signed by a director or company secretary
- Please register at your earliest opportunity, registration is open 365 days of the year and may be done ahead of any prequalification application

The screenshot displays a registration form with three main sections:

- Company Section:** Includes fields for Company Name, Company Registration Type (set to CM), Address 1-3, City/Town, Post Code, and Country (set to United Kingdom).
- Authorised Person Section:** Includes fields for First Name, Last Name, Landline Number, Email Address, Role/Position, and Address 1-3. A 'Copy Address details' button is present.
- Main Company Admin User Section:** Includes fields for First Name, Last Name, Landline Number, Mobile Number, Email Address, Country (set to United Kingdom), Country Code (set to .44), Confirm Mobile Number, Confirm Email Address, and Address 1-3. A 'Copy Address details' button is present.

At the bottom right of the form, there are 'Submit' and 'Cancel' buttons.



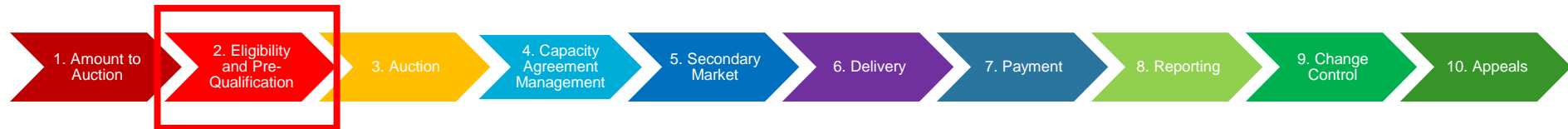
# PREQUALIFICATION

# Prequalification Overview



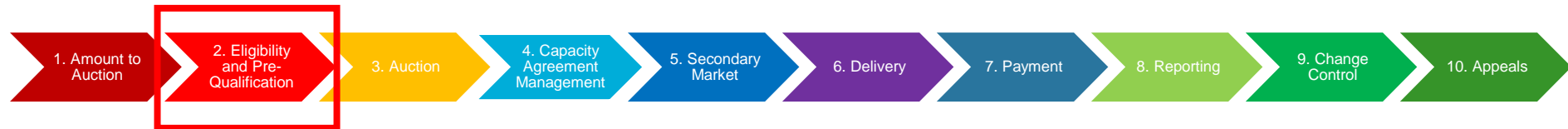
- Prequalification is required to “verify” that potential sources of capacity are genuine physical resources
- Key considerations for a Prequalification Application
  - The Applicant must be either the **Legal Owner** of the asset or its **Despatch Controller** (with agreement from the Legal Owner)
  - Must be accompanied by **declarations signed by two directors or officers** of the Applicant
  - Applications must be submitted by the end of the Prequalification Window, via the EMR portal, by **1700 on Friday 26 August**

# Prequalification Overview



- Key prequalification dates for 2015
  - System is updated & now available –
    - Applications, company registrations & structures, can be built now in advance of the submission window
  - Submission Window Opens: 0900 Monday 01 August
  - Submission Window Closes: 1700 Friday 26 August
  - Prequalification Results Day: Friday 23 September
    - Only Applicants informed of their results in 2016 – CM Register is published by 1700 14 October

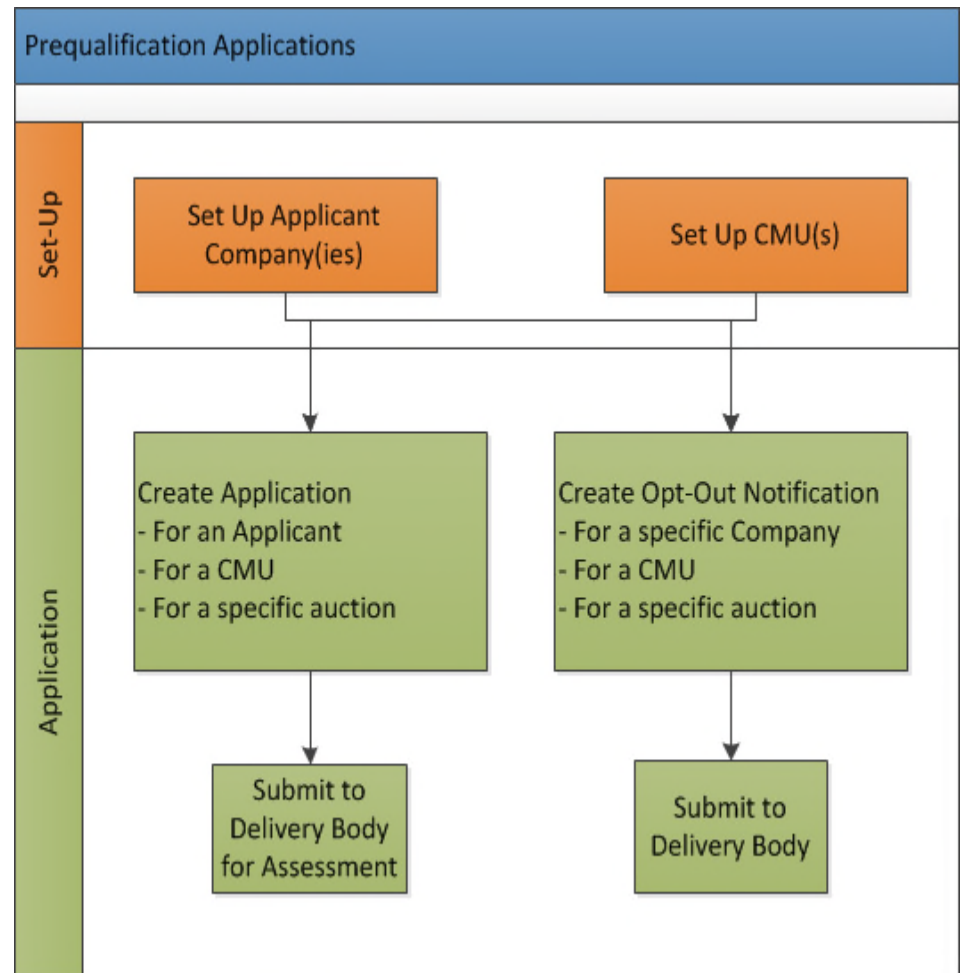
# Prequalification Overview



- Prequalification process “user driven”
  - System is designed to guide parties through the prequalification process
  - National Grid DB is able to answer queries about the prequalification portal
  - National Grid DB will not be available to give “advice” about how a project should be presented into prequalification
  - No contact with National Grid DB during the assessment window (23 August till 23 September).

# Generic Structure of an Application

- Applications submitted in respect of a CMU and an Applicant Company
- Data and documents for these are inputted prior to the Application being created
- Data then transferred from CMU and Company into the Application (and can be reused for other future Applications)



# Setting up a Company

Set Up Applicant  
Company(ies)

- Basic company information created through a company registration process
- Following items also able to be uploaded against a company where it is required
  - A copy of the company's Certificate of Incorporation
  - Prequalification Certificate
  - Certificate of Conduct
  - **If the Applicant is part of a Group – the name of its direct Holding Company – this is not provided in the system – PLEASE DETAIL THIS ON THE PREQUALIFICATION CERTIFICATE IF APPLICABLE**
  - Where applicable, confirmation of an interconnection licence
  - ~~Legal Opinion & Bank Account details~~ – these items were removed in 2015 but are still present in the system, they do not need to be filled in

# CMU Type and Classification

- CMU Type is defined in the Regulations and the Rules
- The Applicant must select the correct CMU Type as you will be assessed as the Type you select & this cannot be changed
- The CMU Type selected drives the rest of the application

If CMRS CMU	If Non- CMRS
Existing Generating CMU	Existing Generating CMU
Existing Interconnector CMU	New Build Generating CMU
New Build Generating CMU	Refurbishing Generating CMU
New Build Interconnector CMU	Proven DSR CMU
Refurbishing Generating CMU	Unproven DSR CMU
Refurbishing Interconnector CMU	



# Ref. CMU Classification – CMRS and Non-CMRS

CMRS CMUs	Non CMRS CMUs
<p><b>Transmission CMU</b> A Generating or Interconnector CMU, each Unit of which Exports to the Transmission Network. The Metering System for the corresponding BMU is registered in the Central Meter Registration Service in accordance with the BSC.</p> <p>Or</p> <p><b>CMRS Distribution CMU</b> A Generating or Interconnector CMU, each Unit of which Exports to a Distribution Network. The Metering System for the corresponding BMU is registered in the Central Meter Registration Service in accordance with the BSC.</p>	<p><b>Non-CMRS Distribution CMU</b> A Generating Unit, each Generating Unit of which supplies Electricity to a Distribution Network. The Metering System is not registered with the Central Meter Registration Service.</p> <p><b>Proven DSR CMU</b> A DSR CMU for which a DSR test has been carried out.</p> <p><b>Unproven DSR CMU</b> A DSR CMU for which a DSR test has not been carried out.</p>

# Ref. Generating CMU Types

CMU Type	Definition
Existing Generating CMU	Regulation 4 – An Existing Generating Unit (or combination of two or more units) which provides electricity, is capable of being controlled independently from any other generating unit, net output is measured by half-hourly meters and has a connection capacity not less than the minimum capacity threshold (2MW).
New Build Generating CMU	Regulation 4 – a Prospective Generating Unit (or combination of 2 or more units) which, when commissioned, will be capable of being controlled independently from any other generating unit, net output is measured by half-hourly meters and has a connection capacity not less than the minimum capacity threshold (2MW). A Prospective Generating Unit means a generating unit or proposed generating unit that has not been commissioned.
Refurbishing Generating CMU	CM Rules and Regulation 4 – an Existing Generating Unit which is the subject of an Application as a Prospective Generating CMU by virtue of an improvements programme that will be completed prior to the commencement of the first Delivery Year.

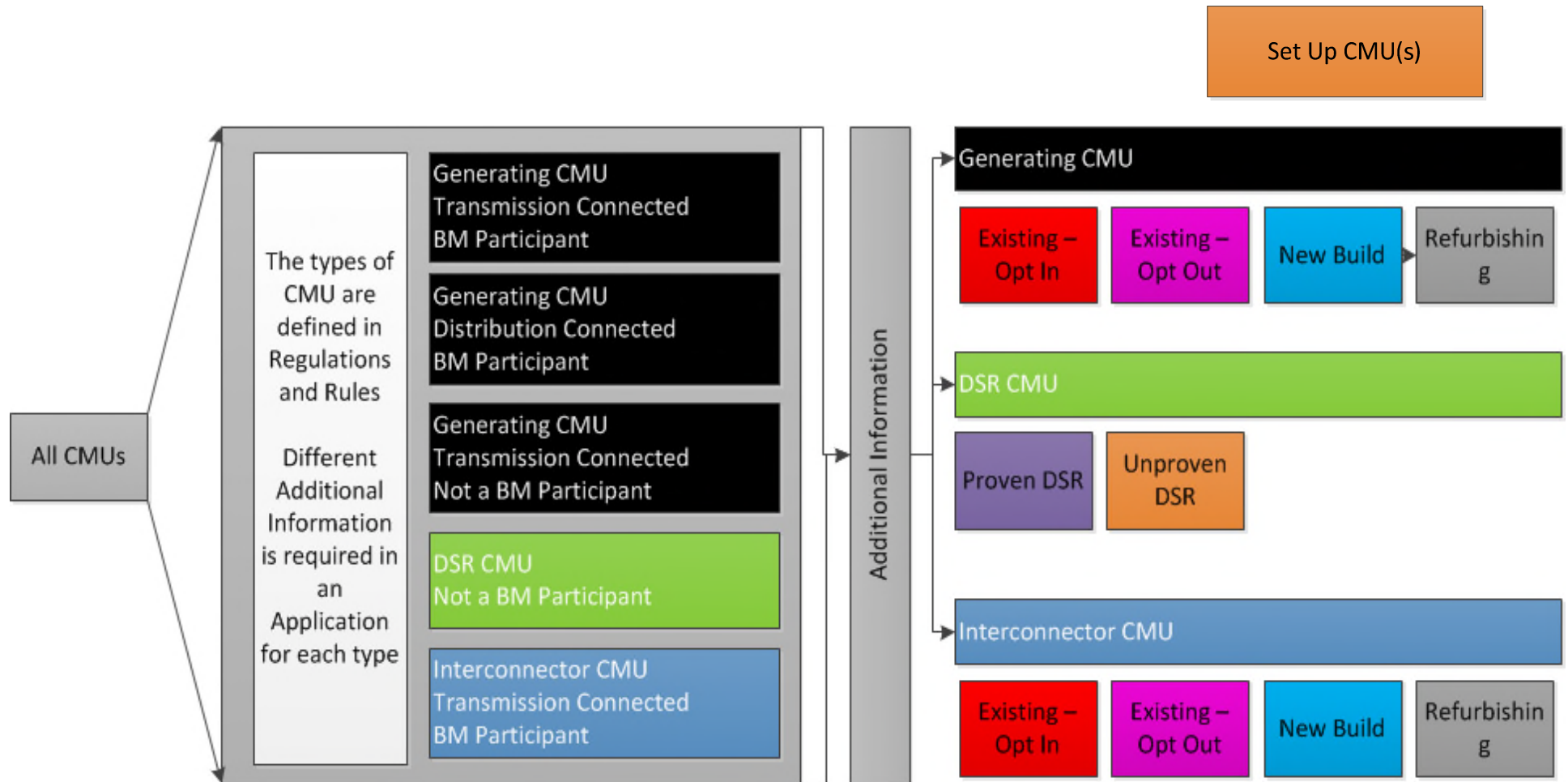
# Ref. Interconnector CMU Types

CMU Type	Definition
Existing Interconnector CMU	Regulation 5A – An Interconnector that has been commissioned, has a connection capacity greater than 2MW and the net output is measured by one or more half hourly meters.
New Build Interconnector CMU	Regulation 5A – an electricity interconnector or prospective interconnector which is not yet commissioned and, when commissioned, will have a connection capacity greater than 2MW and the net output is measured by one or more half hourly meters.
Refurbishing Interconnector CMU	CM Rules and Regulation 5A – an Existing Interconnector which is the subject of an Application as a Prospective Interconnector CMU by virtue of an improvements programme that will lead it to be recommissioned prior to the start of the Delivery Year.

# Ref. DSR CMU Types

CMU Type	Definition
Proven DSR CMU	Regulation 5 - A DSR CMU for which a DSR test has been carried out. The DSR provider must, in relation to each component, be the DSR customer, own the DSR customer or have contractual control over the DSR Customer.
Unproven DSR CMU	Regulation 5 - A DSR CMU for which a DSR test has not been carried out. The DSR provider must, in relation to each component, be the DSR customer, own the DSR customer or have contractual control over the DSR Customer.

# Setting up a CMU: Data Requirements



The Prequalification System will “walk the user through” the data entry process

# Setting up a CMU

## All CMUs – CMU Information

Set Up CMU(s)

Information	Details	Comment
Nomination relating to the CMU	Name of CMU Type of CMU – which sets the Additional Information Required	System generated Drop-Down Box

## CMU Component Information

Information	Details	Comment
Nomination relating to the CMU Component	Description of and location of the CMU component MPAN numbers and other relevant meter numbers BMU ID or Balancing Services ID (if applicable)	Data to be entered in Prequalification System
Connection Capacity & Tech. Class	Connection Capacity or DSR Capacity of a component Technology Class of a component	(The system aggregates these to give CMU Connection Capacity)

# Setting up a CMU

## All CMUs – CMU Information

Set Up CMU(s)

### Metering Information (now optional for 2016 Applications)

Information	Details	Comment
Metering Assessment	Questions to establish if the Settlement Body will need to carry out a further detailed check of metering arrangements	
Metering Info	Line Diagrams and other data on the CMU's metering set-up	
Metering Config.	Confirmation of CMU's Approved Metering Configuration	

### Contact Details for Secondary Trading

Information	Details	Comment
Email Address & Telephone No.	Email Address and Telephone Number that can be used by a person wishing to discuss secondary trading in relation to the CMU	This is not provided in the system – DETAILS FOR HOW TO FOLLOW

### Primary Fuel Type

Information	Details	Comment
Primary Fuel Type	For Generating CMUS only, the Primary Fuel Type intended for the CMU at the time the Application is made <i>OCGT &amp; reciprocating engines – gas, diesel, &amp; other</i>	Please choose from the drop down menu in the CM Type

# Setting up a CMU

## Existing Generating CMU

Set Up CMU(s)

Information	Details	Comment
Connection Agreements	<p><b>Transmission Connected:</b>            Copy of one or more Grid Connection Agreement for at least the De-rated capacity by the start of the Delivery Year, or confirmation that they will have TEC by no later than 18 months prior to the delivery year</p> <p><b>Distribution Connected</b> – one of:</p> <p>a) Copy of one or more Distribution Connection Agreement for at least the de-rated capacity during the Delivery Year</p> <p>b) Copy of one or more Distribution Connection Offer for at least the de-rated capacity during the Delivery Year</p> <p><b>For Private Network connections</b> – a letter from the owner of that private network confirming the full output that CMU is able to export to the network and that the owner of the Private Network has a Distribution Connection Agreement or Offer.</p>	This must be uploaded in electronic copy



# Setting up a CMU

## New Build Generating CMU

Set Up CMU(s)

Information	Details	Comment
<p>Planning Consents</p>	<p>Legal right to use the land and all Relevant Planning Consents obtained (or able to defer declaration to <b>22 Days</b> before auction) Documentary evidence of Planning Consents</p> <p><b>Additional Planning Consent requirements:</b></p> <ul style="list-style-type: none"> <li>• <b>If Planning Consent “time limited” evidence that the end date of the consent is after the expiry of any future Capacity Agreement</b></li> <li>• <b>If the MW capacity granted by the planning consent is less than the connection capacity of the CMU evidence justifying the difference</b></li> </ul>	<p>Declaration, evidence of Consents, and confirmation of right of use of land.</p>

# Setting up a CMU

## New Build Generating CMU

Set Up CMU(s)

Information	Details	Comment
Construction Plan	<p>Brief description of the works</p> <p>Schedule identifying :</p> <ul style="list-style-type: none"> <li>a) <b>Signing of EPC/equivalent Major Contract</b></li> <li>b) Start of construction works</li> <li>c) <b>Main Foundations Complete</b></li> <li>d) <b>Gas/Steam Turbine Delivery</b></li> <li>e) Back-feed Milestone</li> <li>f) <b>First Firing</b></li> <li>g) Substantial Completion Milestone</li> </ul> <p>Amount of Capital Expenditure proper to be incurred within 77 months of the commencement of the Delivery Year. That the expected Capital Expenditure exceeds 3 or 15 year thresholds (£130/kw and £255/kw)</p> <p><b>Capital Expenditure not previously considered in respect of any CMU which has a Capacity Agreement</b></p>	Data to be entered directly in Prequalification System

# Setting up a CMU

## New Build Generating CMU

Set Up CMU(s)

Information	Details	Comment
Connection Agreement	<p><b>Transmission Connected:</b> Copy of one or more Grid Connection Agreement for at least the De-rated capacity by the start of the Delivery Year, or confirmation that they will have TEC by no later than 18 months prior to the delivery year <b>(6 months prior for the Early Auction)</b></p> <p><b>Distribution Connected</b> – one of:</p> <p>a) Copy of one or more Distribution Connection Agreement for at least the de-rated capacity by the start of the Delivery Year</p> <p>b) Copy of one or more Distribution Connection Offer or at least the de-rated capacity by the start of the Delivery Year</p> <p>c) Declare the CMU will have such a connection offer at least 18 months prior to start of Delivery Year <b>(6 months prior for the Early Auction)</b></p> <p>d) <b>For private wire connections</b> Confirmation that the owner of the Private Network will have an agreement with the relevant DNO at least 18 months prior to the start of the Delivery Year. <b>(6 months prior for the Early Auction)</b></p>	Soft Copy to be uploaded with application
Credit Support	<p>Credit support to cover Termination Fee(s) and Draw Downs <b>Unless Credit Cover remains in place for the same CMU from a previous auction – this must be declared in the Application using any of the free text boxes and flagged to the Settlements Body.</b></p>	<i>Follows after Prequalification Results Day</i>

# Setting up a CMU

## Refurbishing Generating CMU

Set Up CMU(s)

- A Refurbishing CMU must provide Additional Information to cover both possible states of the CMU or submit an “Opt-Out Declaration for the “Pre-Refurbishment CMU” if it is a “Mandatory CMU”:
  - Exceptions
    - Planning Consents declaration not needed if no further consents required – please state if this is the case
    - Construction Plan need not specify a “Back-Feed Milestone”
    - Capital Expenditure allowed is that spent from Auction Results Day to start of Delivery Year
- Must also make additional statement in Prequalification Certificate if multi-year agreement is needed to undertake the refurbishment

# Setting up a CMU

## Proven DSR

Set Up CMU(s)

Information	Details	Comment																						
DSR Test Certificate	DSR Test <b>or Joint DSR Test</b> required to be completed prior to the commencement of the Prequalification Window – successful completion of which will see a DSR Test Certificate being issued	Upload of scanned document																						
Permitted On-Site Gen Units	Details of all such generating units and their electrical connections to the site where DSR Capacity is being provided	Data to be entered directly in Prequalification System																						
Business Model	<p><b>Template for Business Model for a Proven DSR CMU</b></p> <table border="1"> <tr> <td>Proven DSR CMU to which the Business Model Applies</td> <td>(insert CMU ID)</td> </tr> </table> <table border="1"> <thead> <tr> <th>Name &amp; Location of CMU Component</th> <th>Type of DSR effected by the DSR CMU Component</th> <th>Summary of the relationship between the DSR Provider and the DSR CMU Component</th> <th>Meter Point Administration Number(s) or details of other meter(s) used to measure provision of DSR (N/A if DSR Test Certificate included for CMU)</th> <th>Metering Test Certificate or metering configuration (N/A if DSR Test Certificate included for CMU)</th> <th>Method(s) of achieving load reduction</th> <th>Equipment control or installed or to be controlled and installed</th> <th>Details of how the DSR Capacity of the DSR CMU has been secured to the DSR Provider</th> </tr> </thead> <tbody> <tr> <td colspan="8"> <p><b>By signing this DSR Business Model I declare that it is</b></p> <ol style="list-style-type: none"> <li>to the best of my knowledge and belief based upon reasonable assumptions;</li> <li>an accurate description of the manner in which any DSR Capacity has been secured; &amp;</li> <li>not misleading.</li> </ol> <p><b>Please delete one of the following statements:</b></p> <table border="1"> <tr> <td><b>A</b></td> <td><b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)</td> </tr> <tr> <td><b>B</b></td> <td>This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18</td> </tr> </table> <p><b>Signed:</b> _____ <b>Date:</b> _____</p> </td> </tr> </tbody> </table>	Proven DSR CMU to which the Business Model Applies	(insert CMU ID)	Name & Location of CMU Component	Type of DSR effected by the DSR CMU Component	Summary of the relationship between the DSR Provider and the DSR CMU Component	Meter Point Administration Number(s) or details of other meter(s) used to measure provision of DSR (N/A if DSR Test Certificate included for CMU)	Metering Test Certificate or metering configuration (N/A if DSR Test Certificate included for CMU)	Method(s) of achieving load reduction	Equipment control or installed or to be controlled and installed	Details of how the DSR Capacity of the DSR CMU has been secured to the DSR Provider	<p><b>By signing this DSR Business Model I declare that it is</b></p> <ol style="list-style-type: none"> <li>to the best of my knowledge and belief based upon reasonable assumptions;</li> <li>an accurate description of the manner in which any DSR Capacity has been secured; &amp;</li> <li>not misleading.</li> </ol> <p><b>Please delete one of the following statements:</b></p> <table border="1"> <tr> <td><b>A</b></td> <td><b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)</td> </tr> <tr> <td><b>B</b></td> <td>This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18</td> </tr> </table> <p><b>Signed:</b> _____ <b>Date:</b> _____</p>								<b>A</b>	<b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)	<b>B</b>	This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18	Data to be entered directly in Prequalification System <b>Please note the new declarations</b>
Proven DSR CMU to which the Business Model Applies	(insert CMU ID)																							
Name & Location of CMU Component	Type of DSR effected by the DSR CMU Component	Summary of the relationship between the DSR Provider and the DSR CMU Component	Meter Point Administration Number(s) or details of other meter(s) used to measure provision of DSR (N/A if DSR Test Certificate included for CMU)	Metering Test Certificate or metering configuration (N/A if DSR Test Certificate included for CMU)	Method(s) of achieving load reduction	Equipment control or installed or to be controlled and installed	Details of how the DSR Capacity of the DSR CMU has been secured to the DSR Provider																	
<p><b>By signing this DSR Business Model I declare that it is</b></p> <ol style="list-style-type: none"> <li>to the best of my knowledge and belief based upon reasonable assumptions;</li> <li>an accurate description of the manner in which any DSR Capacity has been secured; &amp;</li> <li>not misleading.</li> </ol> <p><b>Please delete one of the following statements:</b></p> <table border="1"> <tr> <td><b>A</b></td> <td><b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)</td> </tr> <tr> <td><b>B</b></td> <td>This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18</td> </tr> </table> <p><b>Signed:</b> _____ <b>Date:</b> _____</p>								<b>A</b>	<b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)	<b>B</b>	This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18													
<b>A</b>	<b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)																							
<b>B</b>	This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18																							

eb...MM

# Setting up a CMU

## Unproven DSR (1 of 2)

Set Up CMU(s)

<b>Information</b>	<b>Details</b>
--------------------	----------------

**Business Plan**

**Template for Business Plan for an Unproven DSR CMU**

Unproven DSR CMU to which the Business Plan Applies	(insert CMU ID)						
Please provide details of the Unproven DSR CMU proposal including the steps already taken to acquire the DSR Capacity and/or Contractual DSR Control							
Name & Location of CMU Component	Type of DSR effected by the DSR CMU Component	Summary of the relationship between the DSR Provider and the DSR CMU Component	Meter Point Administration Number(s) or details of other meter(s) used to measure provision of DSR (N/A if DSR Test Certificate included for CMU)	Metering Test Certificate or metering configuration (N/A if DSR Test Certificate included for CMU)	Method(s) of achieving load reduction	Equipment control or installed or to be controlled and installed	Details of how the DSR Capacity of the DSR CMU has been secured to the DSR Provider
+ By signing this DSR Business Model I declare that it is <ol style="list-style-type: none"> <li>1) to the best of my knowledge and belief based upon reasonable assumptions;</li> <li>2) an accurate description of the manner in which any DSR Capacity has been secured; &amp;</li> <li>3) not misleading.</li> </ol>							
Please delete one of the following statements:							
<b>A</b>	<b>For TA Auction for delivery 2017/18 only</b> By signing this DSR business model I declare that none of the DSR capacity is achieved by a Generating Unit (as defined, in accordance with Rule 11.3.2A)						
<b>B</b>	This Business Model is not in respect of an Application for the TA Auction for Delivery Year 2017/18						
<b>Signed:</b>				<b>Date:</b>			

# Setting up a CMU

## Unproven DSR (2 of 2)

Set Up CMU(s)

Information Relating to:	Details	Comment
DSR Test Certificate	Confirmation that the a DSR Test will be completed prior to the start of the relevant Delivery Year	
Metering Assessment	Confirmation the a Metering Assessment will be completed and if necessary a Metering Test will be completed in each case prior to the start of the relevant Delivery Year	
Credit Support	Credit support to cover Bid Bond <u>To be provided to Settlement Body</u> <b>Unless Credit Cover remains in place for the same CMU from a previous Auction – this must be declared in the Application using one of the free text boxes</b>	

# Setting up a CMU

## Existing Interconnector CMU

Set Up CMU(s)

Information	Details	Comment
Interconnector Licence	Declare whether the Applicant holds an Interconnector Licence at time of applying.	
Connection Agreements	Provide copy of Connection Agreement (Grid Connection Agreement(s) or Distribution Connection Agreement(s) or letter from DNO) confirming that they permit the Generating Unit in the CMU in aggregate to export at least the Anticipated De-rated Capacity of the CMU	This must be uploaded in electronic copy
Technical Data	<ul style="list-style-type: none"> <li>- Technical specifications of the Interconnector</li> <li>- Country interconnector connects to GB</li> <li>- Forecast technical reliability for the relevant Delivery Year</li> </ul>	Data to be entered directly in Prequalification System



# Setting up a CMU

## New Build Interconnector CMU

Set Up CMU(s)

Information	Details	Comment
Planning Consents	<p>Legal right to use the land and all Relevant Planning Consents obtained (or able to defer declaration in 2015 to <b>22 days</b> before auction)</p> <p>Documentary evidence of Planning Consents</p> <p><b>Additional Planning Consent requirements:</b></p> <ul style="list-style-type: none"> <li>• <b>If Planning Consent “time limited” evidence that the end date of the consent is after the expiry of any future Capacity Agreement</b></li> <li>• <b>If the MW capacity granted by the planning consent is less than the connection capacity of the CMU evidence justifying the difference</b></li> </ul>	<p>Declaration, evidence of Consents, and confirmation of right of use of land.</p>

# Setting up a CMU

## New Build Interconnector CMU

Set Up CMU(s)

Information	Details	Comment
Construction Plan	<p>Brief description of the works</p> <p>Schedule identifying :</p> <ul style="list-style-type: none"> <li>a) <b>Signing of EPC/equivalent Major Contract</b></li> <li>b) Start of construction works</li> <li>c) <b>Main Foundations Complete</b></li> <li>d) <b>Commencement of Cable Laying*</b></li> <li>e) Back-feed Milestone</li> <li>f) <b>First Test Connection Date*</b></li> <li>g) Substantial Completion Milestone</li> </ul> <p>The Total Project Spend for the construction of the New Build Interconnector CMU. <b>Capital Expenditure not previously considered in respect of any CMU which has a Capacity Agreement</b></p>	<p>Data to be entered directly in Prequalification System</p> <p><b>* - These items are worded as per the generation equivalents in the Portal</b></p>
Technical Data	<ul style="list-style-type: none"> <li>- Technical specifications of the Interconnector</li> <li>- Country interconnector connects to GB</li> <li>- Forecast technical reliability for the relevant Delivery Year</li> </ul>	<p>Data to be entered directly in Prequalification System</p>

# Setting up a CMU

## New Build Interconnector CMU

Set Up CMU(s)

Information	Details	Comment
Connection Agreement	A copy of one or more Grid Connection Agreements with sufficient Transmission Entry Capacity for at least the De-Rated capacity secured by the start of the Delivery Year	Soft Copy to be uploaded into Auction System
Credit Support	<p>Credit support to cover Non-Completion Fee @ £5,000/MW</p> <p><u>To be provided to Settlement Body</u></p> <p><b>Unless Credit Cover remains in place for the same CMU from a previous auction – this must be declared in the Application using one of the free text boxes &amp; flagged to the Settlements Body.</b></p>	<p><u>Follows after Prequalification Results Day</u></p>

# Setting up a CMU

## Refurbishing Interconnector CMU

Set Up CMU(s)

- A Refurbishing Interconnector CMU must provide Additional Information to cover both possible states of the CMU; or submit an “Opt-Out Declaration for the “Pre-Refurbishment Int. CMU”:
  - Exceptions
    - Planning Consents declaration is not needed if no further consents required, but please state the same
    - Construction Plan need not specify a Back-Feed Milestone
    - Capital Expenditure allowed is that spent from Auction Results Day to start of Delivery Year
- Must also make additional statement in Prequalification Certificate that multi-year agreement is needed to undertake the refurbishment

# Setting up a CMU & Application / Opt-Out

---

- Bulk of all data required is set up against a CMU and, when completing the Application / Opt-out Notification, the system will copy all of the appropriate CMU and company data into the Application / Opt-out.
- This data once set-up can be reused each year if it has not changed.
- If some data changes then the new data can be updated without having to upload all of the unchanged data again.

# Creating an Application

Create an Application

Information	Details	Comment
<p>If the Application is from a company acting as the Despatch Controller or Joint Owner for the CMU then an Applicant Declaration signed by Directors of both the Legal Owner and the Despatch Controller / Joint Owners is required</p>	<div style="display: flex; justify-content: space-between;"> <div data-bbox="696 555 1088 1082"> <p><b>EXHIBIT D: FORM OF APPLICANT DECLARATION</b></p> <p>Applicant Declaration</p> <p>The following confirmations and declarations are made jointly by (Party A) the "Legal Owner" and (Party B) the "Despatch Controller" and, together with the Legal Owner, the "Relevant Parties" with respect to the following Generating CMU:</p> <p>(Description of CMU to be inserted)</p> <p>(In the "Relevant CMU" and in relation to the Application to which this declaration relates (the "Relevant Application").</p> <p>(a) Each of the Relevant Parties hereby confirms that:</p> <ul style="list-style-type: none"> <li>(i) the Legal Owner is the legal owner of each Generating Unit comprised in the Relevant CMU; and</li> <li>(ii) the Despatch Controller has Despatch Control with respect to each Generating Unit comprised in the Relevant CMU.</li> </ul> <p>(b) Each of the Relevant Parties hereby declares that:</p> <ul style="list-style-type: none"> <li>(i) the Despatch Controller is the Applicant for the Relevant CMU in relation to the Relevant Application;</li> <li>(ii) in the event that the Relevant CMU becomes a Prequalified CMU for the Capacity Auction to which the Relevant Application relates, the Despatch Controller will be the Bidder for the Relevant CMU in that Capacity Auction; and</li> <li>(iii) in the event that the Relevant CMU becomes a Capacity Committed CMU pursuant to the Capacity Auction to which the Relevant Application relates, the Despatch Controller will be the Capacity Provider for the Relevant CMU.</li> </ul> <p>Capitalised terms in used herein have the meaning given to them in the Capacity Market Rules 2014 unless otherwise indicated.</p> <p>DATED: [+]</p> <p>Signed for and on behalf of the Legal Owner</p> <p>Director _____ Director* _____ Print Name: _____ Print Name: _____</p> <p>Signed for and on behalf of the Despatch Controller</p> <p>Director _____ Director* _____ Print Name: _____ Print Name: _____</p> <p><small>* To execute signature is required for each director concerned, see Rule 1.5A.</small></p> </div> <div data-bbox="1133 555 1525 1082"> <p><b>EXHIBIT DA: FORM OF JOINT OWNER DECLARATION FOR EXISTING INTERCONNECTOR CMU</b></p> <p>Joint Owner Declaration for an Existing Interconnector CMU</p> <p>The following confirmations and declarations are made by (Party A: Party B; Party C as applicable) (the "Relevant Parties") who are together the Joint Owners in relation to the following interconnector CMU (the "Relevant CMU") and/or its associated Non-GB Part:</p> <p>(Description of interconnector CMU and Non-GB Part to be inserted)</p> <p>and are made in relation to the Application for the Relevant CMU (the "Relevant Application").</p> <p>(a) Each of the Relevant Parties hereby confirms that each is a Joint Owner in relation to the Relevant CMU; and</p> <p>(b) Each of the Relevant Parties hereby declares that:</p> <ul style="list-style-type: none"> <li>(i) [Party...] is the Applicant for the Relevant CMU in relation to the Relevant Application (the "Applicant Party");</li> <li>(ii) in the event that the Relevant CMU becomes a Prequalified CMU for the Capacity Auction to which the Relevant Application relates, the Applicant Party will be the Bidder for the Relevant CMU in that Capacity Auction;</li> <li>(iii) in the event that the Relevant CMU becomes a Capacity Committed CMU pursuant to the Capacity Auction to which the Relevant Application relates, the Applicant Party will be the Capacity Provider for the Relevant CMU.</li> </ul> <p>Capitalised terms used herein have the meaning given to them in the Capacity Market Rules 2014 unless otherwise indicated.</p> <p>DATED: [+]</p> <p>Signed for and on behalf of:</p> <p>Director _____ Director _____ Print Name: _____ Print Name: _____</p> <p>To be executed by each Relevant Party by the signature of two directors, unless Rule 1.5A (inserted by the Capacity Market (Amendment) Rules 2014) applies, or execution is on behalf of a company which is not a UK-registered company (in which case it is to be duly executed under the law of the place in which the company is incorporated).</p> </div> <div data-bbox="1570 555 1962 1082"> <p><b>EXHIBIT DC: FORM OF JOINT OWNER DECLARATION FOR PROSPECTIVE INTERCONNECTOR CMU</b></p> <p>Joint Owner Declaration for a Prospective Interconnector CMU</p> <p>The following confirmations and declarations are made by (Party A: Party B; Party C as applicable) (the "Relevant Parties") who are together the Joint Owners in relation to the following interconnector CMU (the "Relevant CMU") and/or its associated Non-GB Part:</p> <p>(Description of interconnector CMU and Non-GB Part to be inserted)</p> <p>and are made in relation to the Application for the Relevant CMU (the "Relevant Application").</p> <p>(a) Each of the Relevant Parties hereby confirms that each is a Joint Owner in relation to the Relevant CMU; and</p> <p>(b) Each of the Relevant Parties hereby declares that:</p> <ul style="list-style-type: none"> <li>(i) [Party...] is the Applicant for the Relevant CMU in relation to the Relevant Application (the "Applicant Party");</li> <li>(ii) in the event that the Relevant CMU becomes a Prequalified CMU for the Capacity Auction to which the Relevant Application relates, the Applicant Party will be the Bidder for the Relevant CMU in that Capacity Auction;</li> <li>(iii) in the event that the Relevant CMU becomes a Capacity Committed CMU pursuant to the Capacity Auction to which the Relevant Application relates, the Applicant Party will be the Capacity Provider for the Relevant CMU;</li> <li>(iv) any statement or declaration made or deemed to be made by the Applicant Party as Applicant, Bidder or Capacity Provider in accordance with the Capacity Market Rules 2014 is made or deemed to be made by or in respect of all Relevant Parties;</li> <li>(v) any certification required to be made by the Applicant, Bidder or Capacity Provider in accordance with Capacity Market Rules, including the Prequalification Certificate and the Certificate of Conduct, is made by or in respect of all Relevant Parties.</li> </ul> <p>Capitalised terms used herein have the meaning given to them in the Capacity Market Rules 2014 unless otherwise indicated.</p> <p>DATED: [+]</p> <p>Signed for and on behalf of:</p> <p>Director _____ Director _____ Print Name: _____ Print Name: _____</p> <p>To be executed by each Relevant Party by the signature of two directors, unless Rule 1.5A (inserted by the Capacity Market (Amendment) Rules 2014) applies, or execution is on behalf of a company which is not a UK-registered company (in which case it is to be duly executed under the law of the place in which the company is incorporated).</p> </div> </div>	<p>Identify 3 Settlement Periods of highest metered output in two most recent calendar years of operation (up to 1 month before the start of the Prequalification Window) when de-rated capacity was delivered Confirmation of output and <b>optional</b> line loss factor methodology applied for non-CMRS generating CMUs in letter from Supplier, <b>or evidence that output provided via balancing service</b></p>
<p>Previous Performance (Existing Generating CMUs, Existing Interconnector CMUs or pre-refurbishing element of Refurbishing CMUs only)</p>	<p>Identify 3 Settlement Periods of highest metered output in two most recent calendar years of operation (up to 1 month before the start of the Prequalification Window) when de-rated capacity was delivered Confirmation of output and <b>optional</b> line loss factor methodology applied for non-CMRS generating CMUs in letter from Supplier, <b>or evidence that output provided via balancing service</b></p>	<p>If a plant has been mothballed, then this could be in the last two years of operation, but it is key that the dates are identified for National Grid.</p>

# Creating an Application

Create an  
Application

- Finally a set of declarations must be completed within the Application

Information	Details	Comment
STOR Declaration	Applicant must also declare that either: a) It is not the subject of a Relevant STOR Contract or b) It is the subject of a Relevant STOR Contract but irrevocably undertakes to withdraw from the contract should it be awarded a Capacity Agreement	Tick Box Declarations in Application
Low Carbon Exclusions	- Declarations relating to Low Carbon Exclusions and Low Carbon Grants	Tick Box Declarations in Application

# Creating an Opt-Out Notification

Create an Opt-Out Notification

- For an Opt-Out Declaration a CMU must be created and CMU Component data submitted (as if for an Existing CMU) before its Opt-Out Status is confirmed

Information	Details	Comment
Status Details	Must declare whether and provide reason for: a) Will be permanently non-operational by the start of the Delivery Year b) Will be temporarily non-operational for all the Winter of the Delivery Year c) Will remain operational for the Delivery Year	Data to be entered directly in Pre-Qual System



# Prequalification Results Day

**National Grid will provide a notification to each party that submitted an Application informing them if they were disqualified, successful, or otherwise by 1700 on Prequalification results day. It will contain:**

- Whether the unit has prequalified, what classification it is, and if it has:
  - The De-rated capacity of the CMU
  - If New Build or Unproven DSR or if TEC deferred that Prequal status is provisional pending Credit Support
  - If Planning Consents deferred that Prequal status is provisional pending declaration that Consents obtained
  - That the CMU is a Price-Taker if Existing Generating CMU or an Interconnector CMU, Price-Maker if otherwise
  - The maximum period the CMU may bid for a Capacity Agreement
  - Whether the CMU is a Transmission CMU, a CMRS Distribution CMU, a non-CMRS Distribution CMU, an Interconnector CMU or a DSR CMU
  - Whether a Metering Test will be required in the event the CMU successfully bids for a capacity agreement.

# Prequalification Results

<u>Notice of Prequalification success</u>	
Prequalification Decision	Prequalified or Conditionally Prequalified
Applicant	Applicant xxxa
Identity of CMU	CMU xx1
Type of CMU	CMU Type
De-rated Capacity	XMW
Whether the unit is currently prequalified as a Price-Maker or Price-Taker	Price-Maker/ Taker
If successful at Auction is the CMU subject to a Metering Test	Metering test required/not required
Whether Prequalification is conditional on providing credit support pursuant to Rule 4.5.1 (b) (ii) or 4.5.1 (b) (iii) or 4.5.1 (b) (iv)	Conditional – Please provide [the required amount of collateral] to the Settlement Body.
Whether Prequalification is conditional on providing Planning Consents requirement of Rule 4.7	Conditional - Planning consent declaration required
The Maximum Obligation Period of the Capacity Agreement it may bid for	Agreement duration x years
Additional Information	Any other pertinent information.

<u>Notice of Prequalification Rejection</u>	
Prequalification Decision	Rejected
Applicant	Applicant xxxa
Identity of CMU	CMUxx1
Type of CMU	CMU Type
De-rated Capacity	XMW
Additional Information	The reasons for rejection

- The Capacity Market Register will also be published **on 14 October** containing the information specified in chapter 7 of the Capacity Market Rules.



Viv Emery

July 2016

# IS UPDATE

# System changes from 2015

Two key themes:

## “Missing” Functionality

Such as...

- Prequalification Results
- Disputes & Credit Cover
- Setting up auction bidding groups

## Defects in Functionality

Such as...

- Port issue that saw some firewalls block the site
- “Look and feel” defects
  - Buttons, clearer descriptions
- Huge number of lower priority functional defects

**All data from 2015 process still in system – may be reused for 2016 process if required**

# June & July Releases

**The June & July releases are now live and includes the following additional functionality:**

## **Capacity Market System:**

- Functionality to enable EMRS Settlement reporting
- Technical enhancements
- A small number of high priority DECC/ Ofgem changes to facilitate this year's prequalification round
- CMU transfers (Rule 9.2.6)
- Security Interest (Rule 7.5.3)
- The "port fix"
- Certificate issue
- Priority customer defects

## **Contracts for Difference System:**

- All Contracts for Difference functionality has been deployed in this window. It will not however be switched on until Autumn 2016.

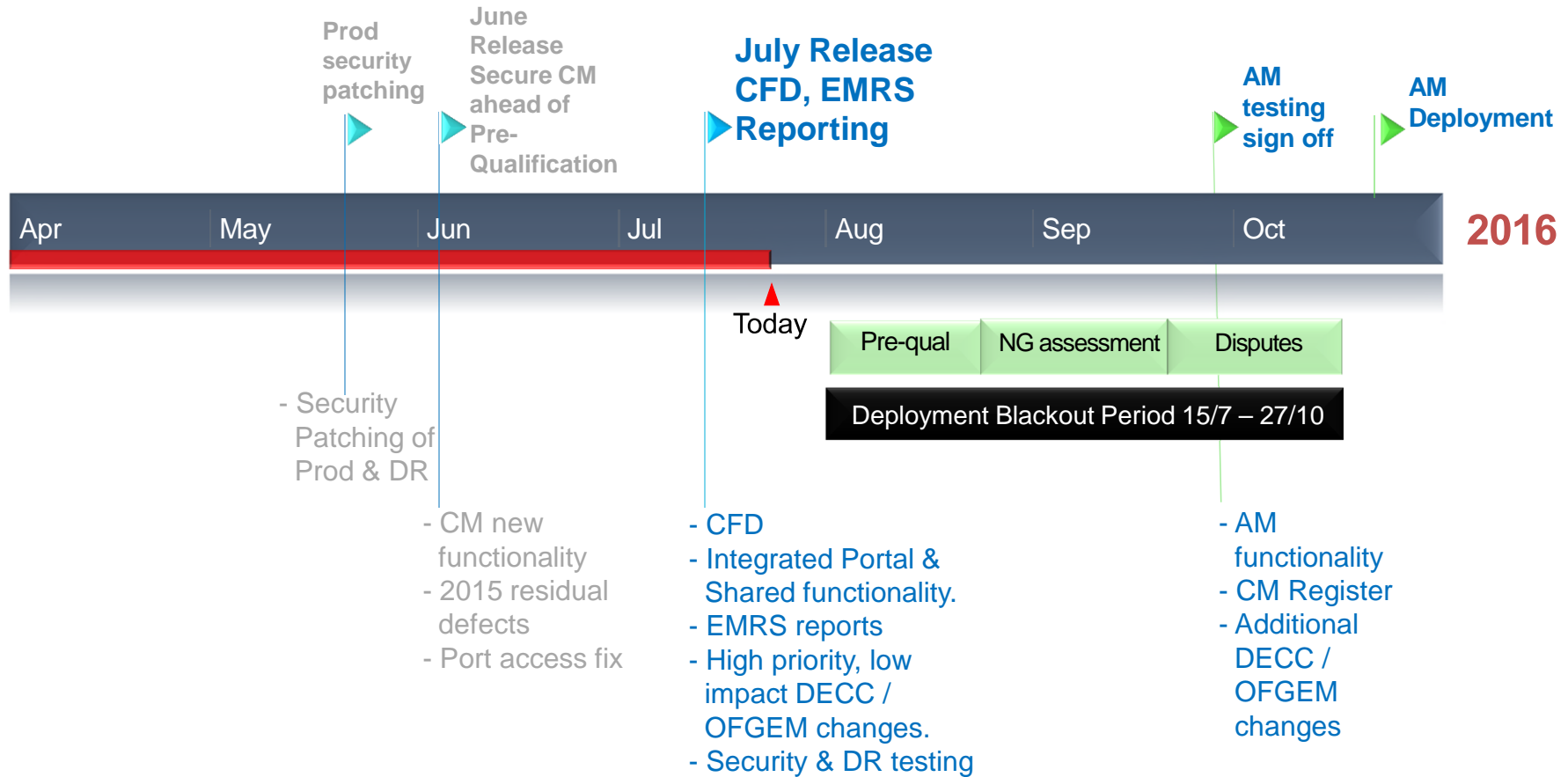
**Disaster Recovery and Security Testing also fully performed across both systems.**

# Recent Deployments – July

---

- The July deployment was successfully implemented and the system went live again a day ahead of schedule on Thursday 14 July.
- **ACTION: Please check that you can still log in and access the system and check it is performing as expected**

# EMR Live Admin System Deployments







Ian Nicholas

# Participant Guidance

**nationalgrid**

## EMR Company Registration and User Management

Guidance document for EMR participants



**nationalgrid**

## Capacity Market Auction Screencasts

Screen cast Library;

- Overview on the process
- Creating an Existing generation application
- Creating an Existing Interconnector application
- Creating a New Build generation application
- Creating a New Build Interconnector application
- Creating a refurbishing generation application
- Creating a refurbishing Interconnector application
- Creating a Proven DSR
- Creating a un-Proven DSR
- Creating a new Application for a CMU
- Opt out for existing generating CMU
- Opt out of the pre-refurbishing component of a Refurbishing CMU
- Cloning CMU's in the Admin system

**nationalgrid**

## Capacity Market Auction Guidelines

2016 Four year ahead Capacity Auction  
- Delivery year 2020/21

2017 Early Capacity Auction  
- Delivery year 2017/18

2017 Transitional Capacity Auction  
- Delivery year 2017/18

**nationalgrid**

## Capacity Market Auction Self Checks 2016

Guidance on how to complete your application

T-4  
Early Auction  
TA

- <https://www.emrdeliverybody.com>
- <https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/EMR%20Company%20Registration%20User%20Support%20Guide.pdf>
- [https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Capacity%20Market%20Prequalification%20User%20Support%20Guide%202015\\_T-4.pdf](https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Capacity%20Market%20Prequalification%20User%20Support%20Guide%202015_T-4.pdf)
- <https://www.emrdeliverybody.com/CM/T-4-Auction-2015.aspx#InplviewHash01bbf960-6f5b-4724-b93a-05dfce06b59e=FolderCTID%3D0x012001-WebPartID%3D%7B4D2162E8--C6B5--427C--A49B--14DC8FF01A08%7D>

# AUCTION OVERVIEW

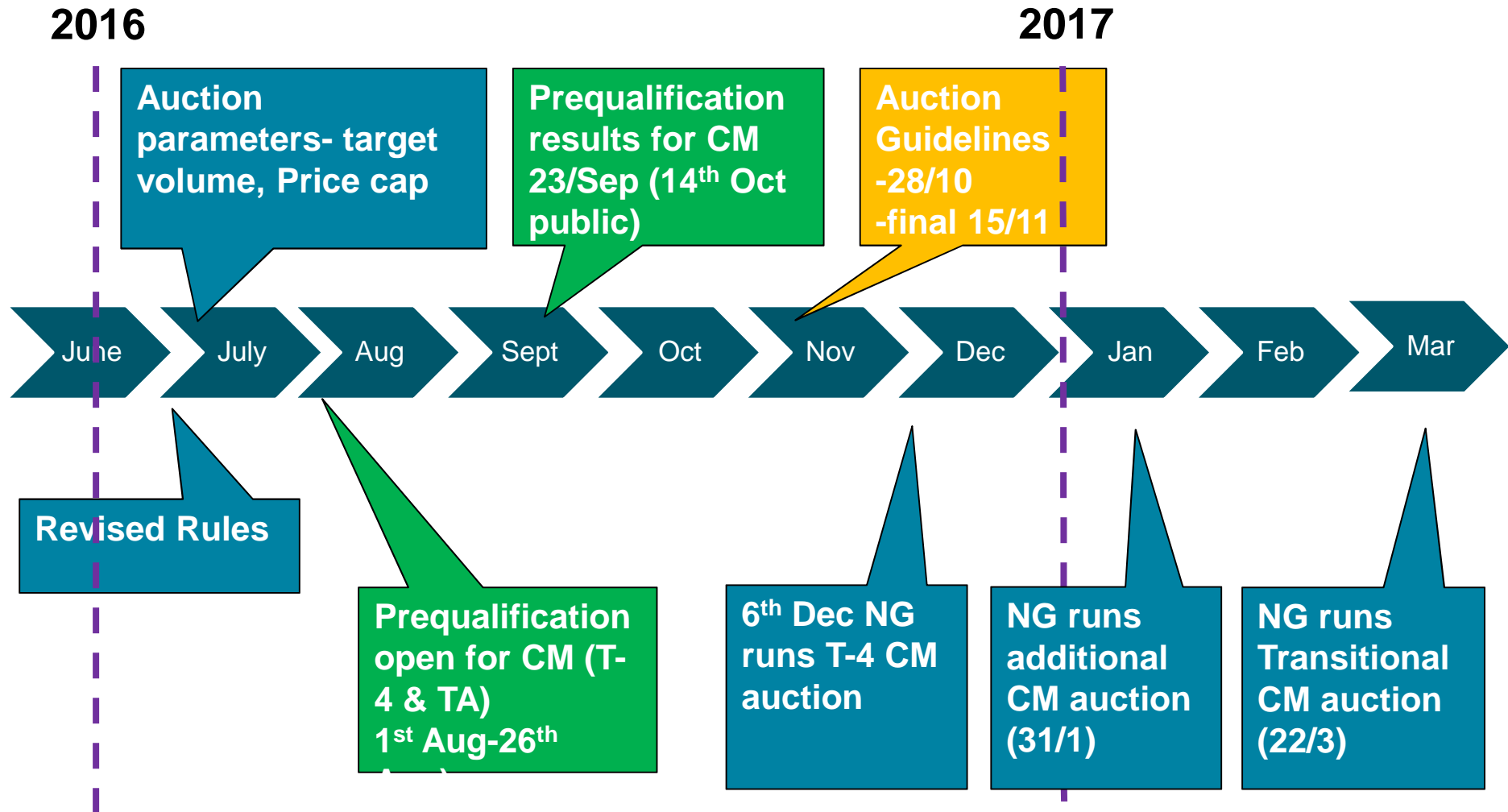
## Timetable

- Auction Parameter definitions
- Auction Parameters
- Demand/ Supply
- Auction detail
- Auction timeline
- Auction Reporting

# Timetable – dates not updated

	T-4 (Delivery 20/21)	EA (2017)	TA(2017)
Prequalification Window opens	1 August	1 August	1 August
Prequalification Window closes	26 August	26 August	26 August
Prequalification Results Day	23 September	23 September	23 September
Notification of Prequalified CMUs pursuant to Rule 5.5.10(b) and associated update of affected Auction Parameters	14 October	14 October	14 October
Notification of updated Auction Parameters and confirmation of the conditional Prequalified Applicants which have fully Prequalified pursuant to Rule 4.6.3	28 October	28 October	28 October
Confirmation of Entry and decisions under Rules 5.5.11, 5.5.13 and 5.5.14 notified to DB (T-15 T-10)	15 – 22 November	10 - 17 January	1 - 8 March
Mock Auction	24 November	19 January	9 March
Auction start	6 December 2015	31 January 2017	22 March 2017

# Overview of 2016/7 Capacity Market

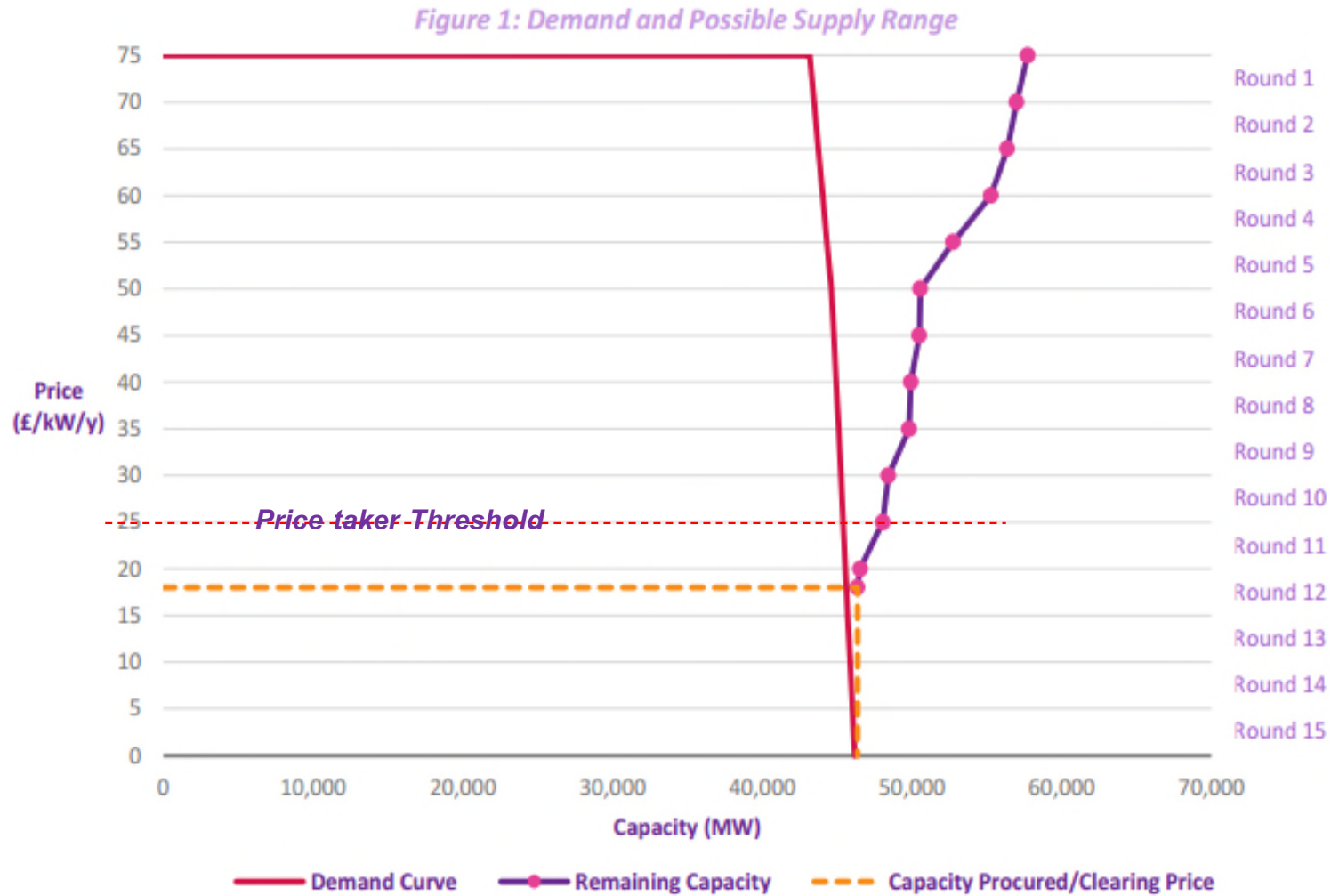


# Parameter definitions

---

- Net Cone – Implied Cost of new entry
- Target Capacity - capacity at net CONE
- Price Cap - the price at the minimum capacity to procure start of the auction and maximum possible clearing price
- Price Maker – CMU with no restriction on exit bid price
- Price Taker Threshold - level at which a price taker can exit the auction
- Price Taker – not a price maker

# Auction Reporting (2015 T-4)





# Auction Parameters

Parameter	T-4 (20/21)	EA (17/18)	TA(17/18)
Reliability standard (LOLE)	3h/year	3h/year	3h/year
15 year threshold	£255/kW	£255/kW	n/a
3 year threshold	£130/kW	£130/kW	n/a
PriceCap	£75/kW/yr	£75/kW/yr	£75/kW/yr
NetCone	£49/kW/yr	£49/kW/yr	£49/kW/yr
Price Taker Threshold	£25/kW/yr	£25/kW/yr	£25/kW/yr
Target Capacity	52,000MW	53,800MW	300MW
Maximum capacity at the price cap	Target capacity minus 1.5GW	Target -1.5GW	Target -100MW
Minimum capacity at £0/kW/year	Target capacity plus 1.5GW	Target +-1.5GW	Target +100MW

# Auction System

---

- Descending clock, pay as clear, multiple fixed rounds
- First round starts at the price Cap
- Each round has a fixed price spread
- Runs across multi rounds until demand is met by the supply- this final round is the Clearing round
- If clearing capacity met by multiple units - decided by ranking (size, duration, random number)
- If clearing capacity not met exactly then clearing algorithm used (Customer Welfare Algorithm)

# About the auction system

---

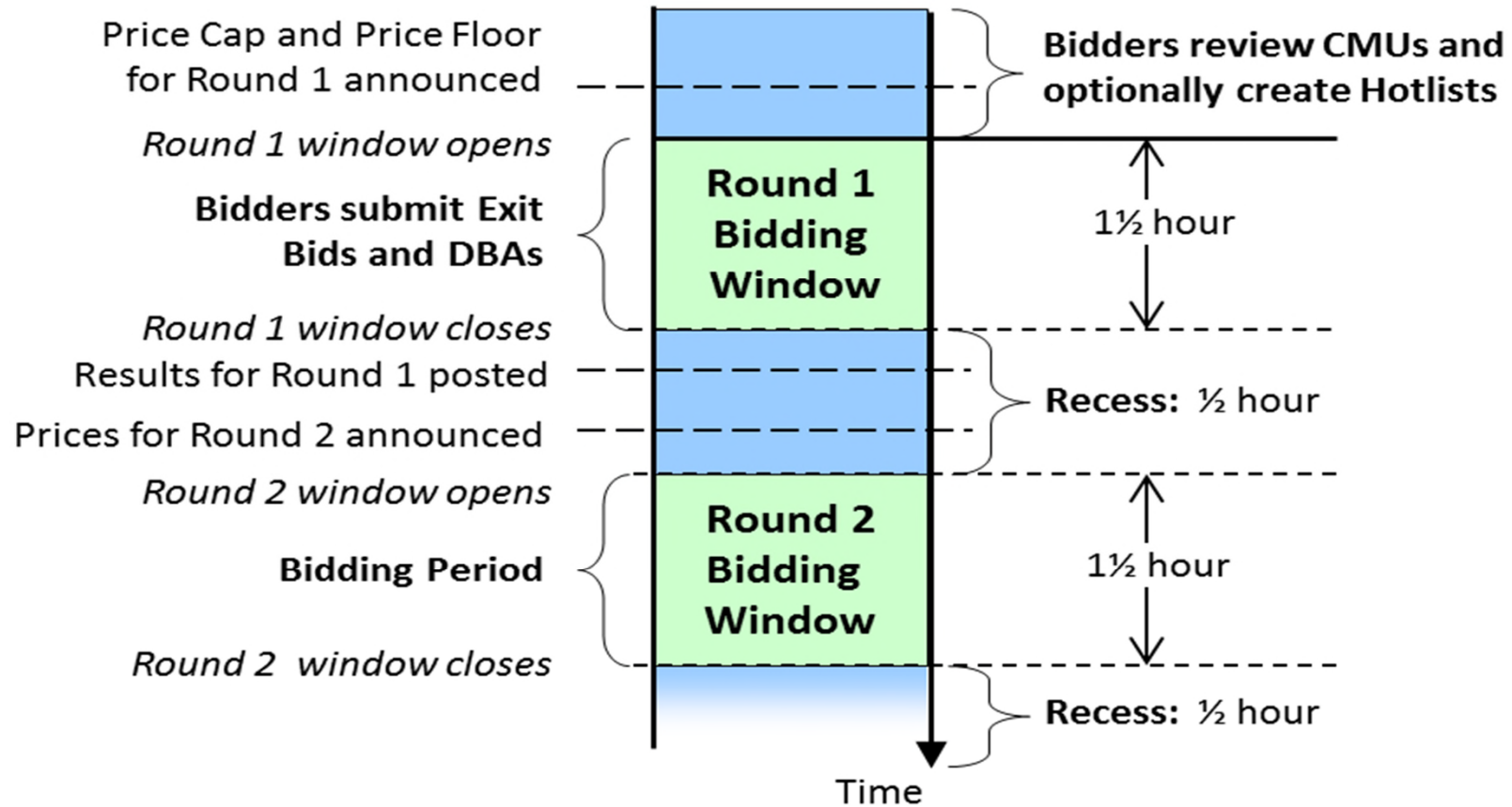
- No software to download
- Accessible with ordinary browser
- Auction system runs on a secure site hosted in the UK
- Authorised Individuals invited to obtain a password and PIN
- Accessible from T-9 to check your CMUs

# Auction System Testing

---

- Derived from the Electricity Regulations and the Capacity Market Rules.
- IBM, National Grid and Deloitte created models based on Chapter 5 independently ensuring the system design is consistent with the auction rules.
- Tested against 25 clearing scenarios and 300 functional tests as well as substantial penetration, performance and volume testing.

# The Auction Process



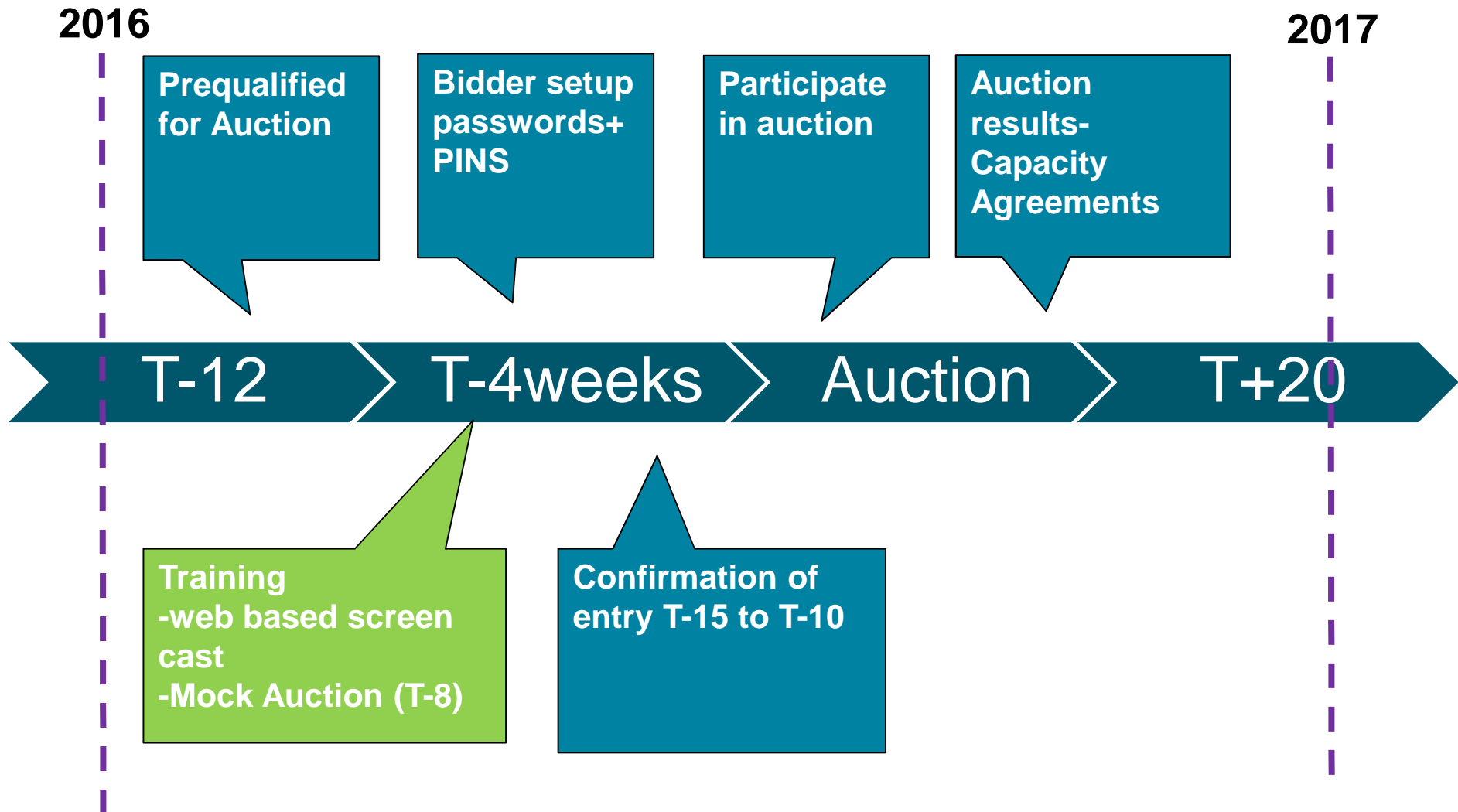
Timing of activity for Round 1 and Round 2

# Auction System

---

- Eligible participants who do nothing at auction will get an agreement at the clearing price
- Exit bid takes you out of the auction (unless your exit bid is equal less clear price)
- Duration Bid amendment used to change agreement length (to 1 year)
- Duration Bid amendment used to change from Refurb to Pre-refurb
- Internet based- easy access

# Overview of typical auction



# Auction Timetable

## T-4 (December 2016)

Round	Price range (£/kW/year)	Round Start	Round End	Recess
<b>Day 1 (6<sup>th</sup> Dec)</b>				
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
<b>Day 2 (7<sup>th</sup> Dec)</b>				
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
<b>Day 3 (8<sup>th</sup> Dec)</b>				
R9	35-30	09:00	10:30	30mins
R10	30-25	11:00	12:30	30mins
R11	<b>25-20</b>	13:00	14:30	30mins
R12	20-15	15:00	16:30	30mins
<b>Day 4 (9<sup>th</sup> Dec)</b>				
R13	15-10	09:00	10:30	30mins
R14	10- 5	11:00	12:30	30mins
R15	5-0	13:00	14:30	30mins



# Auction Timetable

## Early Auction (Jan 2017)

Round	Price range (£/kW/year)	Round Start	Round End	Recess
<b>Day 1 (31<sup>st</sup> Jan)</b>				
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
<b>Day 2</b>				
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
<b>Day 3</b>				
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
<b>Day 4</b>				
R13	15-10	09:00	10:30	30mins
R14	10- 5	11:00	12:30	30mins
R15	5-0	13:00	14:30	30mins

# Auction Timetable

## TA (2017)

Round	Price range (£/kW/year)	Round Start	Round End	Recess
<b>Round</b>	Price range (£/kW/year)	Round Start	Round End	Recess
<b>Day 1 (22nd March)</b>				
R1	75-70	09:00	10:00	30mins
R2	70-65	10:30	11:30	30mins
R3	65-60	12:00	13:00	30mins
R4	60-55	13:30	14:30	30mins
R5	55-50	15:00	16:00	30mins
<b>Day 2</b>				
R6	50-45	09:00	10:00	30mins
R7	45-40	10:30	11:30	30mins
R8	40-35	12:00	13:00	30mins
R9	35-30	13:30	14:30	30mins
R10	30-25	15:00	16:00	30mins
<b>Day 3</b>				
R11	25-20	09:00	10:00	30mins
R12	20-15	10:30	11:30	30mins
R13	15-10	12:00	13:00	30mins
R14	10-15	13:30	14:30	30mins
R15	5-0	15:00	16:00	30mins

# 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

- **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 in November

---

## When is the training?

- There are various training dates available and sessions will run from 09:30-14:00 across a number of days, we plan to send login details early November .

## How many users can be trained?

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

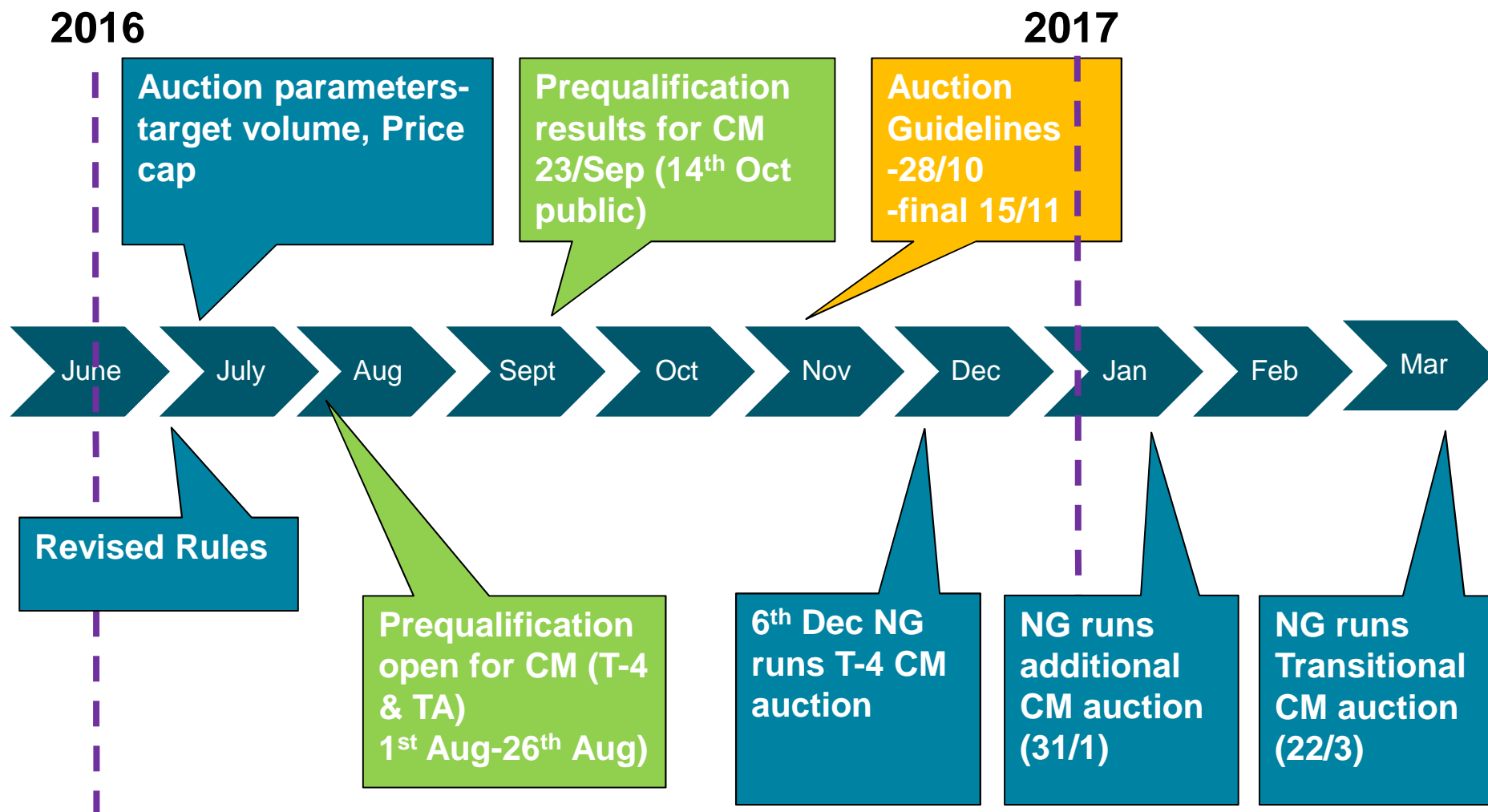
**If the auction clears in the first or second round of the day, the provisional results would be published at 20.00 that night:**

- First/Second round of the day the Auction clears.
- 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 20.00 and also publishes the Clearing Price on the Portal.
- DB will upload the full Provisional Results report to the EMR Portal at 20.00 the same evening.

**If the auction clears in the third or fourth round of the day, the provisional results would be published at 7am next morning:**

- Third/Fourth round of the day the Auction clears.
- 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 20.00 and also publishes the Clearing Price.
- DB will upload the full provisional report to DB website at 07.00 next morning.

# Overview of 2016/7 CM reminder





Matthew Magill, EMR Delivery Body, National Grid



# What's coming up?

## Plan for today

- Further 121's during lunch
- Visit the Electricity Capacity Report team
- Optional Q&A session this afternoon – please let us know your interest

## July and August

- CM Customer & Stakeholder Survey
- Registration & Prequalification webinar –
- 121's – to review applications and answer questions
- Keep providing us with feedback via survey monkey

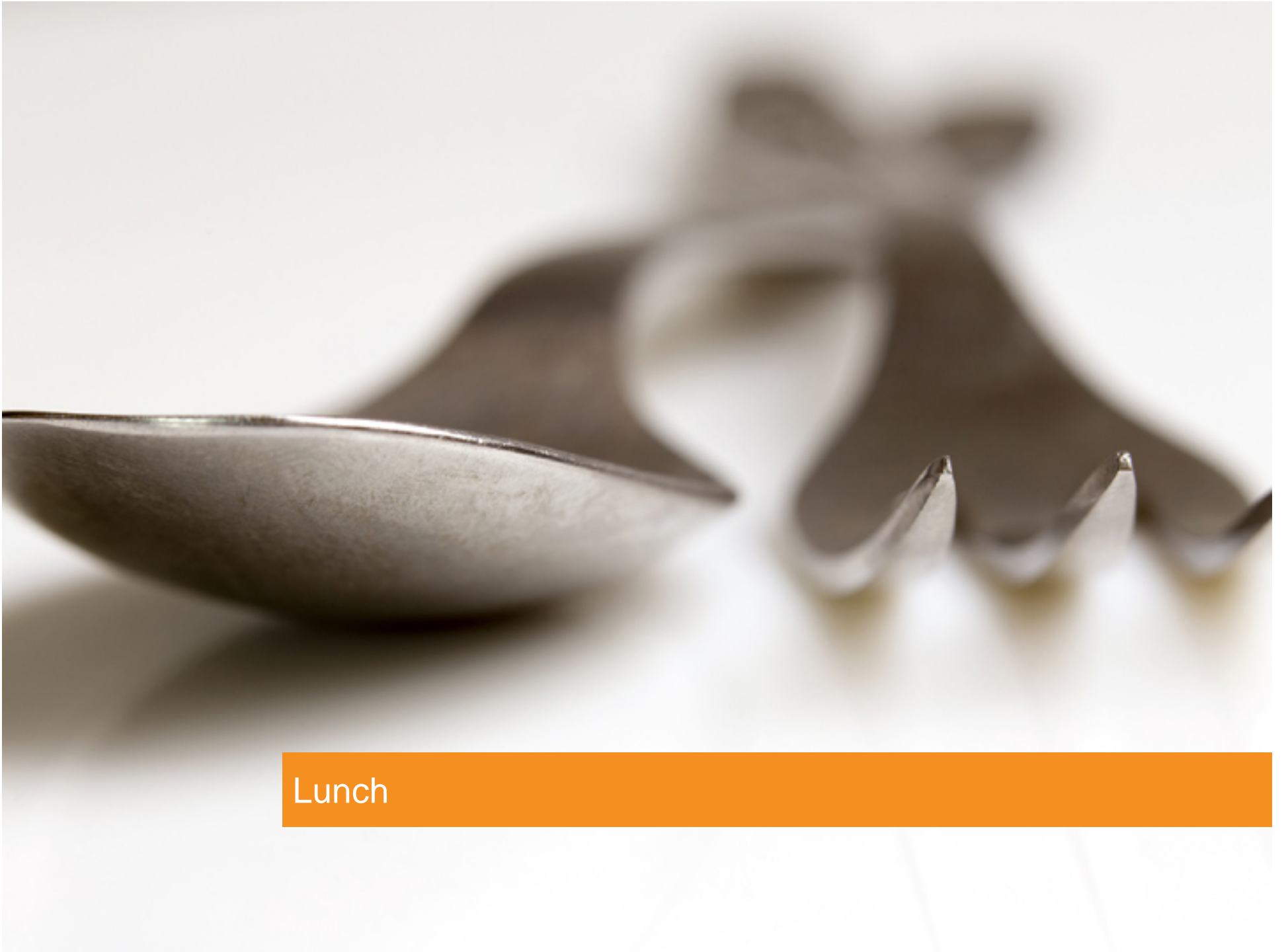
# Key Messages

We need to ensure that everything is in place for the first delivery year

- We are working towards the key dates for the three planned Capacity Market Auctions (including prequalification and other key milestones) in the Operational Plan
- IS deployments are on track thanks to your feedback
- Prequalification is coming
- Auction guidelines and volumes to procure are out
- DBEIS and Ofgem have explained the changes
- If not already please submit:
  - your Metering Assessments and request DSR tests
  - a Metering Test request and a Metering Statement<sup>1</sup> to EMRS

**Keep talking to us about prequalification!**





Lunch

# Breakout Groups

- This segment is scheduled for an hour
- Q&A topics are based on your feedback
- Suggested format – to visit all 3 subject areas for 20m
- We will indicate when to rotate between groups

- Q&A Group 1: DSR testing process - **Tim Gregory**
- Q&A Group 2: Prequalification process and rules - **Tushar Singh and Ian Nicholas**
- Q&A Group 3: DBEIS policy and consultation update - **Jonathan Robinson, Charles Phillips and Eleanor Brogden**

