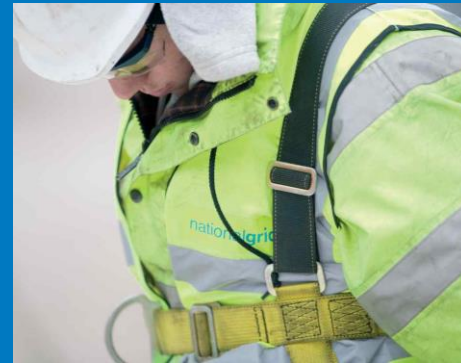


# Capacity Market Operational Coordination Event



**Transitional Arrangements**  
**2 June 2015**

# Agenda

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Session	Timings
Welcome and Introductions	9.30
Introduction to the Transitional Arrangements	
Prequalification	
Assessment	
Auction	
Break	10.30
Post Auction and Agreement Management	
Delivery Year	
Q&A and Close	

# Introduction to Transitional Arrangements

James Greenhalgh

## What are the TAs

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- Specific Auctions for DSR and small scale generation for Delivery in 2016 and 2017 ahead of the first full Delivery Year.

### Sector Aims

Help grow the DSR and small scale generation sectors prior to the first Delivery Year by:

- Limiting risk by reducing entry cost
- Encouraging enterprise
- Building confidence
- Providing Experience of Capacity Market Processes

### Government Aims

Learn from the TA on:

- The current composition of DSR in GB
- How the DSR sector responds to the TAs
- Inform thinking over potential future changes to regs/rules
- The readiness of the DSR sector to move onto the enduring Capacity Market Terms.

## Who can take part?

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### Eligible

- Non CMRS generation under 50MW
- Demand Side Response (including embedded generation)
- Electricity storage under 50MW
- Participation in Balancing Services\*
- New and existing resources permitted

### Ineligible

- Capacity receiving low carbon support
- Participants in UK's CCA Storage commercialisation programme
- Capacity below 2MW (possible to aggregate to qualify)
- CMUs with CM agreement from T-4 auctions.
- Interconnectors

\* Units can move from DSBR to Transitional and vice versa – but are not expected to participate in both in the same year.

# High Level Process



Apply as either

- Proven DSR
- Unproven DSR
- Generating CMU (new/ existing/ refurbishing)

Provide information required by the CM Rules

National Grid as Delivery Body will assess all applications.

Opportunity to appeal any unsuccessful Prequalification applications.

Confirm Entry to Auction  
 Confirm Bidding Capacity (if DSR CMU)  
 Confirm product type – Full or Time-banded

Participate in Auction

Exit Auction at lowest price you are willing to accept an agreement (£/kW) or stay in Auction and secure agreement.

DSR CMUs  
 Add DSR components (if unproven DSR CMU)

DSR Test

DSR & Generating CMUs  
 Metering Assessment and Test (if required)

In the event of a warning and a System Stress Event required to delivered Capacity

For Time-banded product, delivery required between 9-11am and 4-8pm on Working Days in Winter.

For the Full Product delivery could be required at any time.

Receive Capacity payments but pay penalties for underdelivery.

# Operational Plan

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- Regulations & Rules due to be finalised and published 4 weeks before the Prequalification window opens
- Prequalification window open for 4 weeks (so Rules are available 8 weeks before application “deadline”)
- T-4 and DSR Transitional Auctions (TA)
  - Processes run in parallel through Prequalification and up to the completion of Tier 2 Appeals (DSR can prequalify for both auctions)
  - The DSR TA process is then halted until the after the final T-4 auction results are published (DSR cannot obtain Capacity Agreements in both auctions)
  - DSR which is successful in the T-4, but which also pre-qualified for the DSR TA, will be removed from the DSR TA process

# 2015 TA Timeline – Key dates

When	What	Who
By 1 <sup>st</sup> June	Submit Electricity Capacity Report to SoS	Delivery Body
Late June	Publication of final CM Rules	Ofgem
Late June	CM Pre-qualification System available to applicants	Delivery Body
29 <sup>th</sup> June	Publish “Formal” Auction Guidelines (T-4 & TA)	Delivery Body
20 <sup>th</sup> July – 14 <sup>th</sup> Aug	Prequalification window open for Applicant submissions (T-4 & TA)	Applicants
14 <sup>th</sup> Aug – 25 <sup>th</sup> Sept	Assessment of Prequalification submissions (T-4 & TA)	Delivery Body
25 <sup>th</sup> Sept	Prequalification Results Day (T-4 & TA)	Delivery Body
5 <sup>th</sup> Jan 2016	Publish “Final” Auction Guidelines & Bidder details (TA only)	Delivery Body
13 <sup>th</sup> Jan 2016	Run “Mock” Auction (TA only)	App / DB
26 <sup>th</sup> – 29 <sup>th</sup> Jan 2016	Run “Full” Auction and notify bidders of provisional results (TA only)	App / DB
2 <sup>nd</sup> Feb 2016	Auction Monitor report submitted to SoS (TA only)	Auction Monitor
10 <sup>th</sup> Feb 2016	Auction Results Day (TA only)	DB / DECC
26 <sup>th</sup> Feb 2016	Issue Capacity Agreements (TA only)	Delivery Body



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**Questions?**

# Prequalification

Robyn Jenkins

## Step 1

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# Registration

# Registering for CM Prequalification

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- High Level Principles
  - All Companies that wish to participate in either the Capacity Market or Contracts for Difference will need to register
  - Registration of the company and a Portal Main Administrator 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 proposed main administrator
  - Companies registered during 2014 will not need to register again
  - Registration is the same for T-4 and Transitional

# Registering for CM Prequalification

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- Each Company needs to nominate at minimum
  - Company Secretary/Director (Authorised Person) – somebody recognisable in the public domain –
  - Main Portal “Company Administrator”
- Proposed “Company 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 will be password and PIN protected

# Registration Form

Company Section		
Company Name *	<input type="text"/>	Company Registration Number <input type="text"/>
Company Registration Type *	<input type="text" value="CM"/>	Address 1 * <input type="text"/>
Address 2	<input type="text"/>	Address 3 <input type="text"/>
City/Town *	<input type="text"/>	Post Code * <input type="text"/>
Country *	<input type="text" value="United Kingdom"/>	

Authorised Person Section		
First Name *	<input type="text"/>	Last Name * <input type="text"/>
Landline Number	<input type="text"/>	Email Address * <input type="text"/>
Role/Position *	<input type="text"/>	
	<input type="button" value="Copy Address details"/>	Address 1 * <input type="text"/>
Address 2	<input type="text"/>	Address 3 <input type="text"/>
City/Town *	<input type="text"/>	Post Code * <input type="text"/>
Country *	<input type="text" value="United Kingdom"/>	

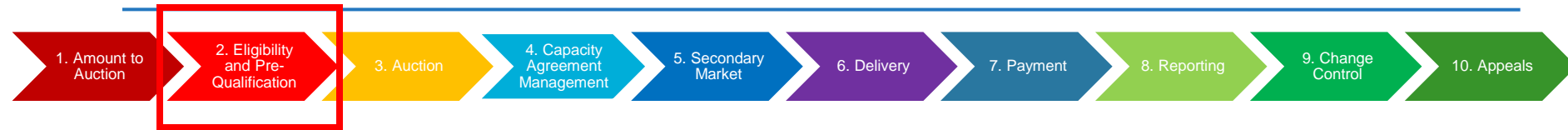
Main Company Admin User Section		
First Name *	<input type="text"/>	Last Name * <input type="text"/>
Landline Number	<input type="text"/>	
Country *	<input type="text" value="United Kingdom"/>	Country Code * <input type="text" value="44"/>
Mobile Number *	<input type="text"/>	Confirm Mobile Number * <input type="text"/>
Email Address *	<input type="text"/>	Confirm Email Address * <input type="text"/>
	<input type="button" value="Copy Address details"/>	Address 1 * <input type="text"/>
Address 2	<input type="text"/>	Address 3 <input type="text"/>
City/Town *	<input type="text"/>	Post Code * <input type="text"/>

## Step 2

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# Creating A Prequalification Application

# Prequalification Overview



## ■ Key Prequalification Dates for 2015

### ■ System Available – late June 2015

- Applications can start to be built as soon as system is available

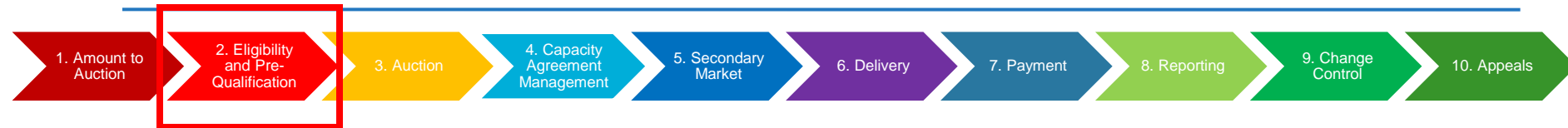
### ■ Prequal Submission Window Opens: Monday 20 July

### ■ Prequal Submission Window Closes: 5pm Friday 14 August

### ■ Prequal Results Day: Friday 25 September



# Prequalification Overview



- Prequalification is required to “verify” on paper 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 (where the applicant has two directors)
  - Applications must be submitted by the end of the Prequalification Window currently planned for **5pm on Friday 14 August**
  - Can apply for TA and T-4 – but must withdraw from the TA if you secure a T-4 Agreement

# What's Required in an application

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- Submissions during Prequalification must include:
  - Information relating to the Capacity Market Unit (CMU) eg, Address, Size of plant, etc
  - Connection Capacity and Technology Class
  - Declarations to include solvency, Low Carbon Exclusion, Low Carbon Grant Status, Short Term Operating Reserve (STOR) Status and Conduct of Applicant (complying with all Laws & not engaged in Market Manipulation)
  - Prequalification Certificate
  - Agent Nomination Form (if required)
  - Legal Opinion (from a qualified Lawyer)
  - Certificate of Incorporation

# CMU Types

## DSR CMU

A commitment to provide an amount of capacity by a method of demand side response by reducing the DSR customers import of electricity or by exporting electricity from one of more permitted on-site generating units

### Proven DSR

A DSR CMU which has completed a DSR test.

To prequalify as Proven DSR you must complete the test before Prequalification – this is covered later in the session.

Will add all components at Prequalification

### Unproven DSR

A DSR CMU which has not yet undertaken a DSR test

Unproven DSR CMUs will have to provide credit cover (£500/MW)

May add components after prequalification

## Non-CMRS Generating CMU (with connection capacity no greater than 50MW)

A generating unit provides electricity, is capable of being controlled independently from any other generating unit, has a net output measured by one or more half hourly meters and has a connection capacity greater than 2MW.

### Existing

A generating unit (or combination of units) which is able to generate and can prove its performance.

### Refurbishing

An Existing Generating CMU (or combination of units) which is subject to an application as a Prospective Generating CMU by virtue of an improvements programme that will be completed prior to the start of the

### New Build

A generating unit (or combination of units) which when commissioned will meet the definition above.

# Specific Contents – Proven DSR

Information	Details	Comment																		
DSR Test Certificate	DSR Test 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 Prequal System																		
Business Model	<p>EMR Delivery Body</p> <p>Business Model for a Proven DSR CMU</p> <table border="1" data-bbox="546 829 1051 865"> <tr> <td>Proven DSR CMU to which the Construction Plan Applies</td> <td>(insert CMU ID)</td> </tr> </table> <table border="1" data-bbox="546 879 1456 1125"> <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> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>By signing this DSR Business Model I declare that it is</p> <ol style="list-style-type: none"> <li>1) to the best of my knowledge and belief based upon reasonable assumptions</li> <li>2) accurately describes the manner in which any DSR Capacity has been secured</li> <li>3) not misleading</li> </ol> <p>Signed: _____ Date: _____</p>	Proven DSR CMU to which the Construction Plan 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									Data to be entered directly in Prequal System
Proven DSR CMU to which the Construction Plan 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													

# Specific Contents – Unproven DSR

Information

Details

Business Plan

EMR Delivery Body  
Business Plan for an Unproven DSR CMU

Please DSR CMU to which the Construction Plan Applies:

Please provide details of the Unproven DSR CMU proposal including the steps already taken to acquire the DSR Capacity and/or Contractual DSR Control

Please complete the following table for each DSR CMU Component with which the DSR Provider has already established a relationship:

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 production 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

Page 1 of 2

By signing this DSR Business Plan I declare that it is:

- to the best of my knowledge and belief based upon reasonable assumptions
- accurately describes the manner in which any DSR Capacity has been secured
- not misleading

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Page 2 of 2

Please complete the following table as far as information is available for each DSR CMU Component with which the DSR Provider intends to establish a relationship:

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 production 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

Please provide details of the programme or strategy for procuring any further DSR CMU Components to ensure that the Unproven DSR Capacity is available, including:

- Method(s) of achieving load reduction
- Equipment controlled or installed, or to be controlled or installed
- Details of how the DSR Capacity of the DSR CMU has, or will be secured to the DSR Provider
- Any additional information previously specified as being required by the Delivery Body (in the Auction Guidelines) for an Unproven DSR CMU

Page 2 of 2

Data to be entered directly in Prequal System

## Specific Contents – Generating CMU

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### All Generating CMUs:

Proof of connection – Either Connection Agreement, Connection Offer or written confirmation from the DNO (can be deferred for prospective CMUs)

### Existing:

- Previous Settlement Period Performance and Supplier Letter to verify
- Single Line Diagrams
- Metering Assessment

### Refurbishing:

- As new build for post refurbishing
- As existing for pre-refurbishment

### New Build:

- Relevant Planning Consents
- Construction Plan

## For more information

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- Further information on contents of an application and how to structure a CMU see the following.
  - Slides presented at O/C event on 15 April  
<https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Stakeholder%20Event%2015%20April%20final.pdf>
  - 2014 CM User Guide (this will be updated for 2015 when the Rules are finalised)  
<https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Capacity%20Market%20User%20Support%20Guide.pdf>

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**Questions?**



# Assessment

Robyn Jenkins

# National Grid Prequalification Assessment

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- **Items that National Grid will be focussing on in the 6 week Application assessment period**
  - Ensure that all of the required Additional Information has been submitted by the Applicant
  - Check that a Generating CMU is not a Defaulting CMU or an Excluded CMU
  - Verify that the three highest metered output figures provided by an Existing Generating CMU are accurate
  - That the Connection Capacity figure – if calculated – has been done so in accordance with the Rules
  - That any documentary evidence provided corroborates the statements made in the application – e.g. Low Carbon Support does expire by the date stated
  - that no other application has been submitted in respect of the generating unit(s) or MPAN(s) in a CMU

# National Grid Prequalification Assessment

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- **Items that National Grid will NOT be focussing on in the 6 week Application assessment period**
  - Whether the Applicant is the legal owner or despatch controller
  - That any declarations made by an Applicant are indeed truthful – e.g. planning consents, no disclosure of Confidential Information, compliance with Bribery Act, no receipt of Low Carbon Support etc
  - That any documentary evidence provided alongside the application is genuine

# Results

- **National Grid will provide a notification to each party that submitted an Application informing them if they were successful or otherwise by 5pm on Prequalification Results Day.**

<b><u>Notice of Prequalification Decision</u></b> <b>The First Transitional Capacity Market Auction – 2016/17 Delivery Year</b>	
Prequalification Decision	Conditionally Prequalified
Identity of CMU	TACMU1
Type of CMU	Unproven DSR CMU
De-rated Capacity	18.227 MW
Whether the unit is currently prequalified as a Price-Maker or Price-Taker	Price Maker
If successful at Auction is the CMU subject to a Metering Test	Deferred
Whether Prequalification is conditional on providing credit support pursuant to Rule 4.5.1(b)(ii) or Rule 4.5.1(b)(iii) or Rule 4.5.1(b)(iv)	Credit Cover Required £9113.50
Additional Information	This box will contain reasons for the prequalification decision and any other relevant information



Public

# Capacity Market

**Applicant Credit Cover Process - DSR Transitional Auction**

Tuesday 2 June 2015

Hannah Pargeter

# Who are we? What does our role involve?

Regulations, Rules or Publications	Official Title
Settlement Body	Electricity Settlements Company
Settlement Agent	EMR Settlement Services Provider

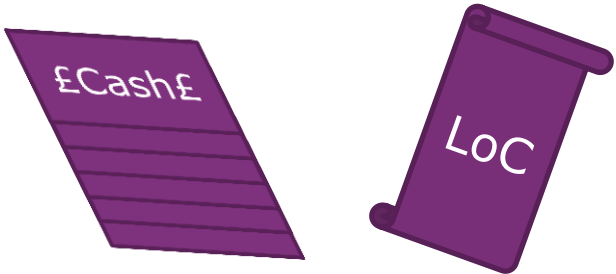
Our role includes:

- Receive metered data
- Calculate payments and charges
- Invoice and collect payments due
- Manage settlement and reconciliations of payments
- Manage credit cover

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# What can I lodge as credit cover and how?

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<p><b>1</b> What types of credit cover can be used?</p>	
<p><b>2</b> How do I lodge credit cover?</p>	<p>Funds Transfer '<b>cash</b>' to a specified GBS bank account</p> <p>Submit a '<b>Letter of Credit</b>' (LoC) to specified address</p>

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# How much credit cover do I need to lodge?

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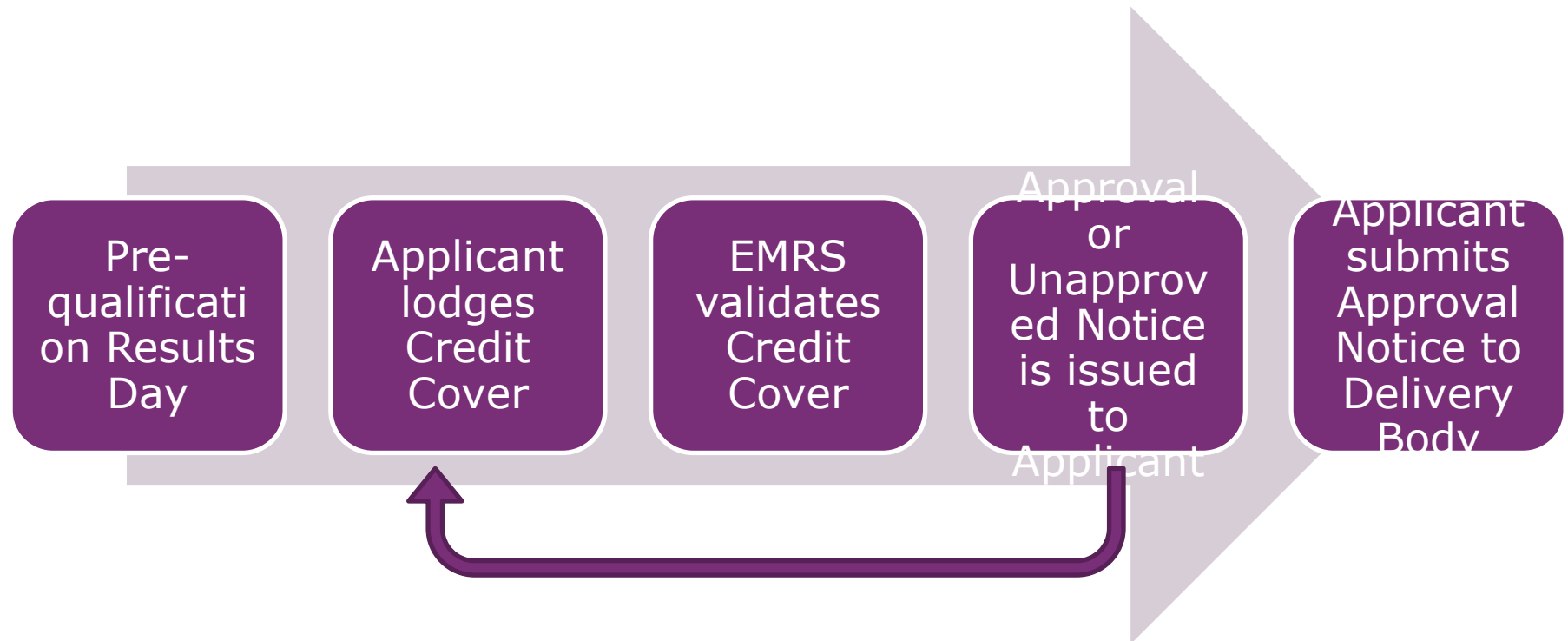
- Prequalification Results Day
  - Conditional prequalification notice confirms the de-rated capacity
- An application to prequalify for a DSR transitional auction, an amount equal to £500 per MW of the de-rated capacity of CMU



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## What is the process?

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- If an unapproved notice is received, an Applicant may have the opportunity to re-submit Credit Cover

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## What further information will be provided?

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- Applicant (Capacity Provider) Registration Form Working Practice
- Applicant Credit Cover Working Practice (updated)
- Letter of Credit and GBS Bank Account details
- We will be publishing updated versions on the EMRS website:  
<https://emrsettlement.co.uk/>
- Also, do have a look at the designated Capacity Provider webpage:  
<https://emrsettlement.co.uk/stakeholder-support/capacity-provider/>
- At a future event we will be covering the timings and the process in more detail for both auctions



**EMR**  
SETTLEMENT  
LIMITED

## Credit Cover – when placed...

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When an Applicant is notified by the EMR Settlement Body that the Applicant's Credit Cover has been approved the Applicant needs to provide the Delivery Body with a copy of such notice **no later than 32 working days after Prequalification Results Day, Tuesday 10 November.**

The Applicant's CMU will also be amended to Prequalified on the CM Register.  
(subject to Rule 4.7 for Planning Consents)

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**Questions?**

# Transitional Auction

Ian Nicholas

# Applicant Price Maker Status

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Price Maker; able to submit an exit bid at any price between the price cap and 0.01p

-Proposed, DSR, Refurb

Price Taker; exit bid must be below the Price Taker Threshold (PTT) and above 0.01p

- existing

# Applicant Price Maker Status

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Applicants for an Existing Generating CMU that wish to be a Price Maker must lodge a Price-Maker Memorandum with Ofgem in accordance with any published guidance and by **5pm on Tuesday 12 January** submit to the Delivery Body:

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

Within **two working days** the Delivery Body will notify the Applicant that it is a Price Maker.



## Confirmation of Entry (Rules 5.5.11 – 5.5.14)

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Refurbishing CMUs, New Build CMUs and DSR CMUs are required between 15 and 10 Working days ahead of the auction (**Tuesday 5 January and Tuesday 12 January**), to confirm that they wish to participate in the Capacity Auction, and must submit a notice to the Delivery Body to confirm this

- *An Applicant for a Refurbishing CMU must specify in any confirmation whether or not it also wishes to participate in the Capacity Auction with respect to the associated Pre-Refurbishment CMU.*
- *An Applicant for a DSR CMU can confirm its DSR Bidding Capacity which must be less than or equal to its “Prequalified” De-Rated Capacity. If it does not explicitly nominate a DSR Bidding Capacity then it will default to the “Prequalified” De-Rated Capacity.*
- *An Applicant for New Build, Refurbishing or DSR CMU must confirm they wish to participate in the auction.*
- **Failure to submit a confirmation will result in that applicant not being permitted to participate in the auction and release of Applicant Credit Cover.**
- *Existing Generating CMUs do not need to make any confirmation and will automatically participate in the Auction becoming eligible for Capacity Agreements*<sub>41</sub>

## Confirming Product

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- The Transitional Auction offers a choice of product
  - Full Capacity Product
  - Time-banded product (9-11am and 4-8pm Winter Working Days only)
- Rules state that following award of a capacity agreement you must immediately notify the DB which you would like.
- Subject to a Rule change proposal – expected to change such that you notify the DB in the D-10 Entry Declaration and have up until the end of the working day after the end of the auction to revise choice.

# Capacity Market - Auction

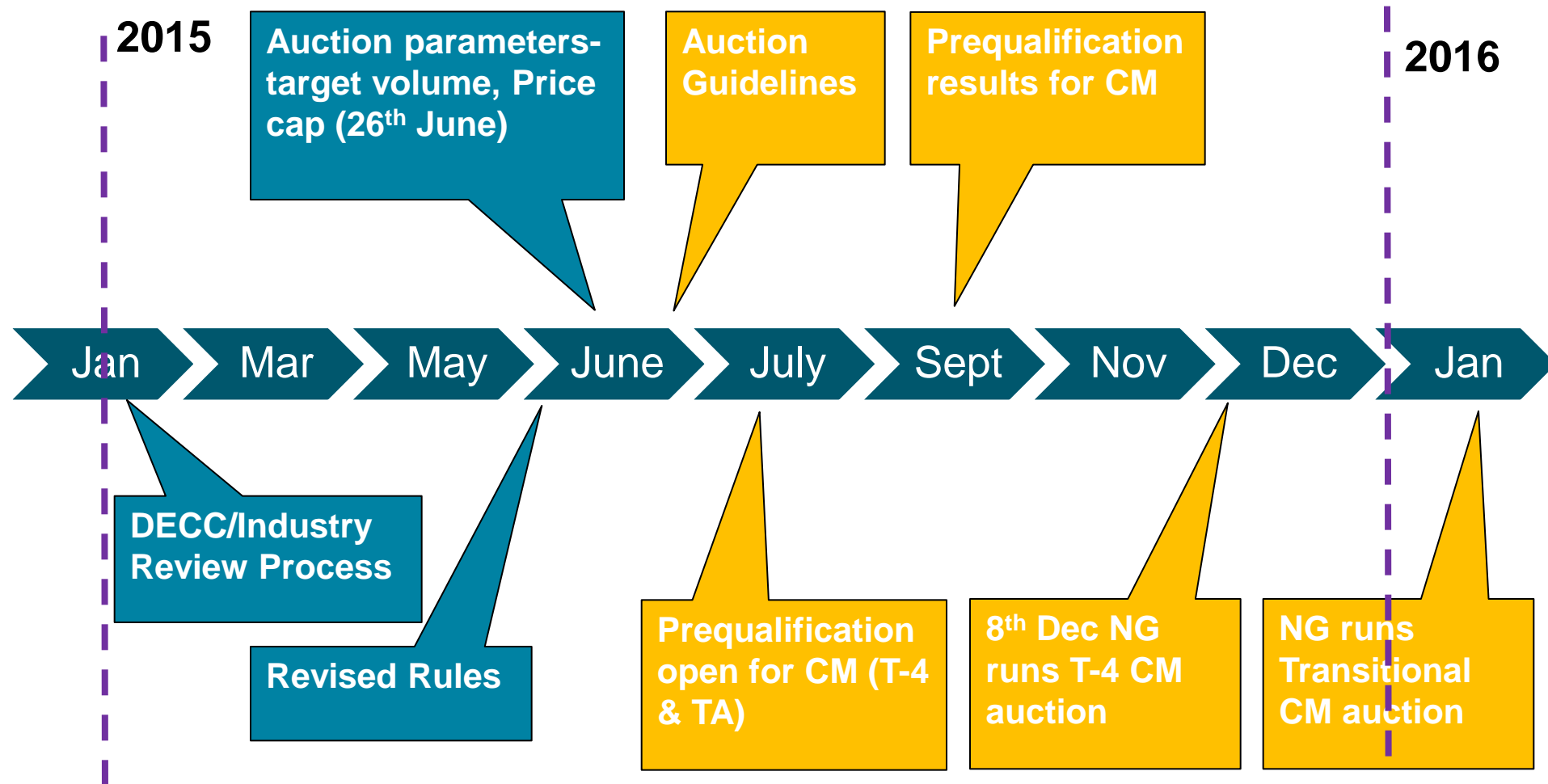
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## Auction Background

- Timeline
  - training, mock, real thing
- Auction explained
- Auction Access

# Overview of 2015 Capacity Market process

nationalgrid



# Timeline 2015 (as per project plan)

2016

Prequal results  
Results-  
25<sup>th</sup> Sep

Auction  
Demo

T- 10 Price-Maker  
decisions and  
decisions under  
Rules 5.5.11 and  
5.5.13 (2<sup>nd</sup> Dec)

T-4 Auction  
8<sup>th</sup> Dec

TA Auction  
26<sup>th</sup> Jan

Oct

Nov

Dec

Jan

Screen casts

User Guide

Auction system User  
training  
(various dates)

T-4 Mock  
Auction  
25<sup>th</sup> Nov

TA Mock Auction  
13<sup>th</sup> Jan

## Auction System

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- 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 (not in TA), random number)
- If clearing capacity not met exactly then clearing algorithm used (Customer Welfare Algorithm)

# Auction System

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- Exit bid takes you out of the auction (unless your exit bid is equal or less than clear price)
- Duration Bid amendment used to change agreement length (to 1 year – only 1 year in TA!)
- Duration Bid amendment - used to change from Refurb to Pre-refurb.
- Eligible participants who do nothing at auction will get an agreement at the clearing price

# Auction System

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- TA first round starts Tuesday 26<sup>th</sup> Jan
  - proposal to run over 2 days (assuming 15 rounds to get from Cap to floor, exact detail unknown)
- Provisional results known 07:00 following day
- 24h after auction closes the auction product can be decided (also done at the T-15 to T-10 window)
- T+2 auction monitor reports to SoS and Ofgem
- T+8 final results



## Access to the auction system

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- 2 AI's per registered Company advised- (4 max)
- Authorised Individuals secure with password and PIN
- No software to download
- Uses an ordinary browser.. with the right settings
- Auction system runs on a secure site hosted in the UK
- Simple intuitive interface - follows the rules
- Accessible from T-9 to login and check your CMUs

---

**Questions?**

**Break**

# DSR Test

Mark Duffield

# DSR Test: The Capacity Market Rules



Each DSR CMU must carry out a DSR test in accordance with rule 13.2 of 'The Capacity Market Rules'.

The DSR test can be obtained prior to the prequalification window, in which case the applicant can apply as a proven DSR CMU; or

After the award of the capacity agreement but no later than one month prior to the delivery year, in which case the applicant must apply as an unproven DSR CMU.

A DSR test may not take place during the prequalification assessment window (14<sup>th</sup> Aug – 25<sup>th</sup> Sept). The DSR test will be the same for all applicants.



## DSR Test: What is Required?

The **Metering Point Administration Number(s)** of the meters for the site

Either a **Metering Test Certificate**, or if this has not been issued, confirmation of the **metering configuration** – Both done through the Settlement Body

**And, either**

**(Prior to prequalification only) historic data** that identifies 3 separate settlement periods within 2 years prior to the start of the prequalification window (**Data Driven Test**)

**(After Prequalification)** provide no less than 2 working days' notice of your intention to **test activate** the DSR CMU together with the settlement period in which the activation will be carried out (**Activation Test**).

# DSR Test: The Process



## Data Driven Tests & Activation Tests

Within 5 working days of NG receiving all the data we will notify the applicant of verified calculations of:

1. Baseline Demand
2. The DSR evidenced; and
3. The proven DSR Capacity

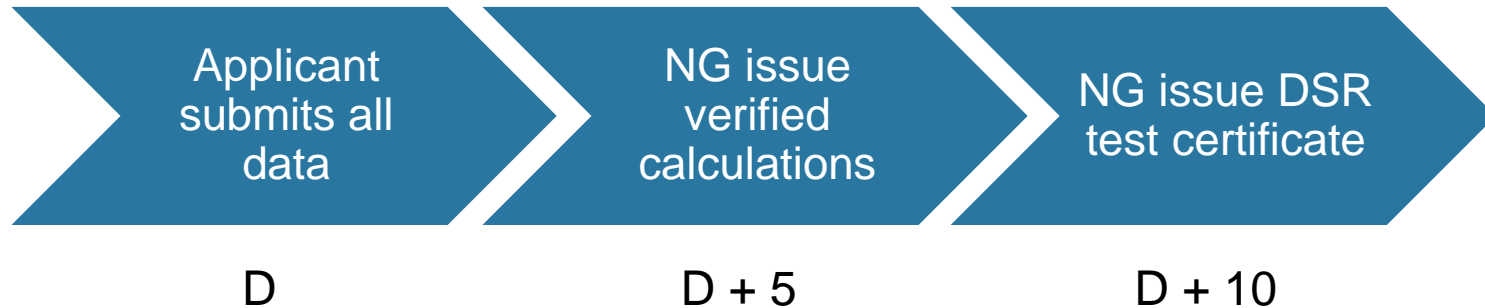
## Activation Tests only

Applicants who have carried out an activation test, have 2 working days of receiving this information to request a retest of the activation test, in which case the verified calculations above will be run again and become conclusive (even if the second tests output is lower).

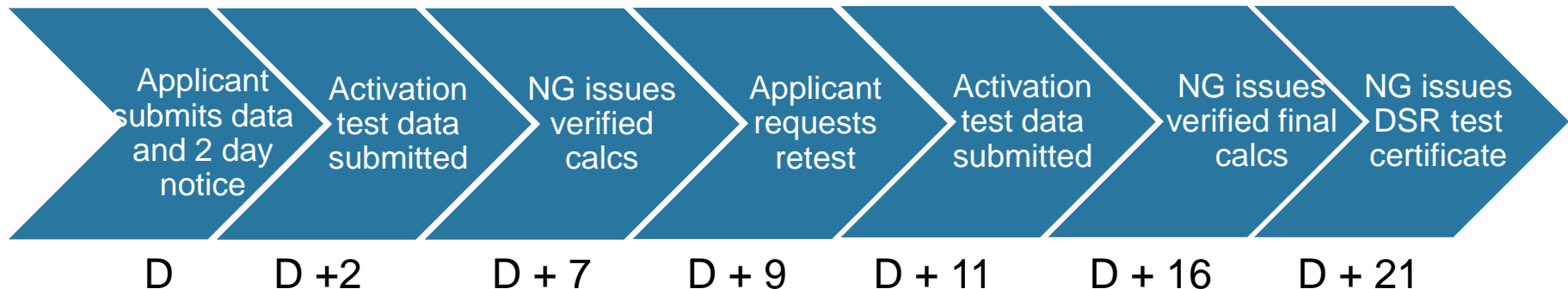
## Data Driven Tests & Activation Tests

Within 5 working days of receipt of the above information being issued to the applicant, NG will issue the applicant with a DSR test certificate.

## DSR Test: The Process



**Data Driven Test (prior to Prequalification)** - the above applicant has submitted all data including historical settlement data. They receive the DSR test certificate within 10 working days of the submission of data.

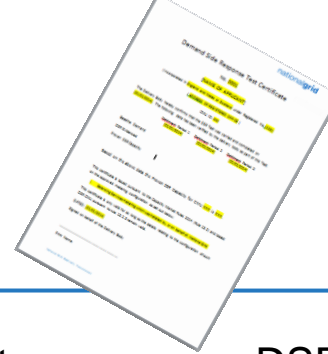


**Activation Test** - the above applicant has to carry out an activation test. The result of the verified calculations where challenged and a activation retest undertaken. They receive the DSR test certificate within 21 working days of the original application.



# DSR Test: In Summary

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If you want to enter the prequalification assessment as a proven DSR CMU, you will need to submit;

1. MPAN number
2. A statement confirming you comply with the approved metering configuration
3. Settlement data – your chosen 3 settlement periods
4. You calculated volumes for Baseline Demand, DSR evidenced and your Proven DSR Capacity.
5. Company Details

Prequalification Window closes at **5pm on Friday 14 August** so if planning to enter prequalification as a Proven DSR CMU an Applicant will need to have progressed through the process and received their DSR Test Certificate by this date.

## DSR Test: Further Guidance

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DSR Test Guidance Document is available on our website.

Email Address: [emr@nationalgrid.com](mailto:emr@nationalgrid.com)

Capacity Market Telephone helpline: **01926 655300**

Please contact us should you need any further help or guidance

# Transitional Auctions Delivery Year Activities

Mark Duffield

## Overview

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### **Within Delivery Year Obligations**

A set of obligations within the CM Rules that are designed to ensure that the DSR units or Generating Units that are the subject of a capacity agreement are physically capable of providing that capacity

A suspension / claw-back of capacity payments applies if these obligations fail to be met during the Delivery Year

# Delivery Year Agenda

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- Similarities & Differences to enduring arrangements
- Monitoring Satisfactory Performance
- Penalties and Warnings
  - Insufficient System Margin Warnings (Capacity Market Warnings)
  - Demand Control Instruction Warnings
  - System Stress Events & Capacity Market Penalties

# Agenda

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## **Similarities & Differences to Enduring Capacity Market Arrangements**

## Similarities & Differences

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- In general the within Delivery Year arrangements for Transitional Arrangements and the enduring Capacity Market (from 2018) are identical
- Key Differences
  - Secondary Trading – there is no secondary trading for obligations acquired through Transitional Auctions
  - CM Warning – two types of warning not one, but they are treated identically to the single warning effective from 2018

# Agenda

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## Monitoring Satisfactory Performance



## Monitoring Satisfactory Performance

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- Capacity Market Rules require a target output to be demonstrated across three half-hour settlement periods during each Delivery Year
  - Each settlement period identified must be on a separate day
  - Each of the days must be demonstrated during 1 October – 30 April to avoid loss of capacity payments
  - Failure to have 3 Satisfactory Performance Days confirmed by 1 May will see Capacity Payments suspended
- Slightly different process applies to DSR CMUs and Generating CMUs

# Monitoring Satisfactory Performance nationalgrid (DSR CMUs)

---

## DSR CMUs – Satisfactory Performance Requirements

- Options available to demonstrate Satisfactory Performance
  - Self-Despatch to a predetermined Target DSR Volume
  - Self-Despatch in response to a System Stress Event
  - Self-Despatch in response to a request for Balancing Services

# Monitoring Satisfactory Performance nationalgrid (Method 1)

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## DSR CMUs – Self Despatch to a predetermined Target DSR Volume

### Step 1 – Capacity Provider for DSR CMU contacts National Grid

Provider must give (between 9am and 4pm) National Grid a minimum of 6 hours notice of a proposed period that will meet requirements of Satisfactory Performance Day.

### Step 2 – National Grid responds with Target DSR Volume

No later than 4 hours in advance of the proposed period, National Grid confirms the Target DSR Volume. Ofgem change proposal to clarify this as the forecast ALFCO

### Step 3 – DSR CMU delivers energy and self-assesses performance

If Capacity Provider believes CMU has delivered energy equal to or greater than Target DSR Volume, notifies National Grid of occurrence of Satisfactory Performance Day

### Step 4 – National Grid verifies any claim

National Grid will confirm after verification of metered output (via Settlement Body data) whether the DSR CMU has in fact met the Satisfactory Performance requirements

# Monitoring Satisfactory Performance (Method 1)

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## DSR CMUs – Self Despatch to a predetermined Target DSR Volume

- Restrictions / Caveats
  - If proving performance through requesting a Target DSR Volume, no more than 6 requests may be made during the period 1 October – 30 April

# Monitoring Satisfactory Performance nationalgrid (Method 2)

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## DSR CMUs – Self Despatch in response to a System Stress Event

### Step 1 – National Grid reports the occurrence of a System Stress Event

Following post-event analysis of any Demand Control Instructions, National Grid determines that a System Stress Event has occurred for one or more half-hour periods

### Step 2 – Capacity Provider assess performance of DSR CMU

Capacity Provider determines if the DSR CMU met or exceeded its ALFCO during any of the half-hour periods in the System Stress Event

### Step 3 – Provider notifies National Grid of Satisfactory Performance

If Provider believes CMU has delivered energy equal to or greater than ALFCO, notifies National Grid of occurrence of Satisfactory Performance Day within 5 working days

### Step 4 – National Grid verifies any claim

National Grid will confirm after verification of metered output (via Settlement Body data) whether the DSR CMU has in fact met the Satisfactory Performance requirements

# Monitoring Satisfactory Performance nationalgrid (Method 3)

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## DSR CMUs – Self Despatch in response to delivery of a Balancing Service

**Step 1 – System Operator despatches a balancing service on DSR CMU**  
System Operator despatches a balancing service provided by the component parts of the DSR CMU

**Step 2 – Capacity Provider assess performance of DSR CMU**  
Capacity Provider determines if the DSR CMU met or exceeded its ALFCO during any of the half-hour periods during which a balancing service was delivered

**Step 3 – Provider notifies National Grid of Satisfactory Performance**  
If Provider believes CMU has delivered energy equal to or greater than ALFCO, notifies National Grid of occurrence of Satisfactory Performance Day within 5 working days

**Step 4 – National Grid verifies any claim**  
National Grid will confirm after verification of metered output (via Settlement Body data) whether the DSR CMU has in fact met the Satisfactory Performance requirements

# Monitoring Satisfactory Performance nationalgrid (Generating CMUs)

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## Generating CMUs – Satisfactory Performance Requirements

- Option available to demonstrate Satisfactory Performance
  - Self-Despatch

# Monitoring Satisfactory Performance nationalgrid (Method 1)

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## Generating CMUs – Self Despatch

**Step 1 – Capacity Provider self-despatches units in a Generating CMU**  
Generator self-despatches for any reason

**Step 2 – Capacity Provider assess performance of Generating CMU**  
Provider determines if the Generating CMU met or exceeded its Capacity Obligation (as awarded at auction) during any of the half-hour periods it has self-despatched

**Step 3 – Provider notifies National Grid of Satisfactory Performance**  
If Provider believes CMU has delivered energy equal to or greater than their Capacity Obligation, notifies National Grid of occurrence of Satisfactory Performance Day within 5 working days

**Step 4 – National Grid verifies any claim**  
National Grid will confirm after verification of metered output (via Settlement Body data) whether the DSR CMU has in fact met the Satisfactory Performance requirements



# Agenda

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## Penalties and Warnings

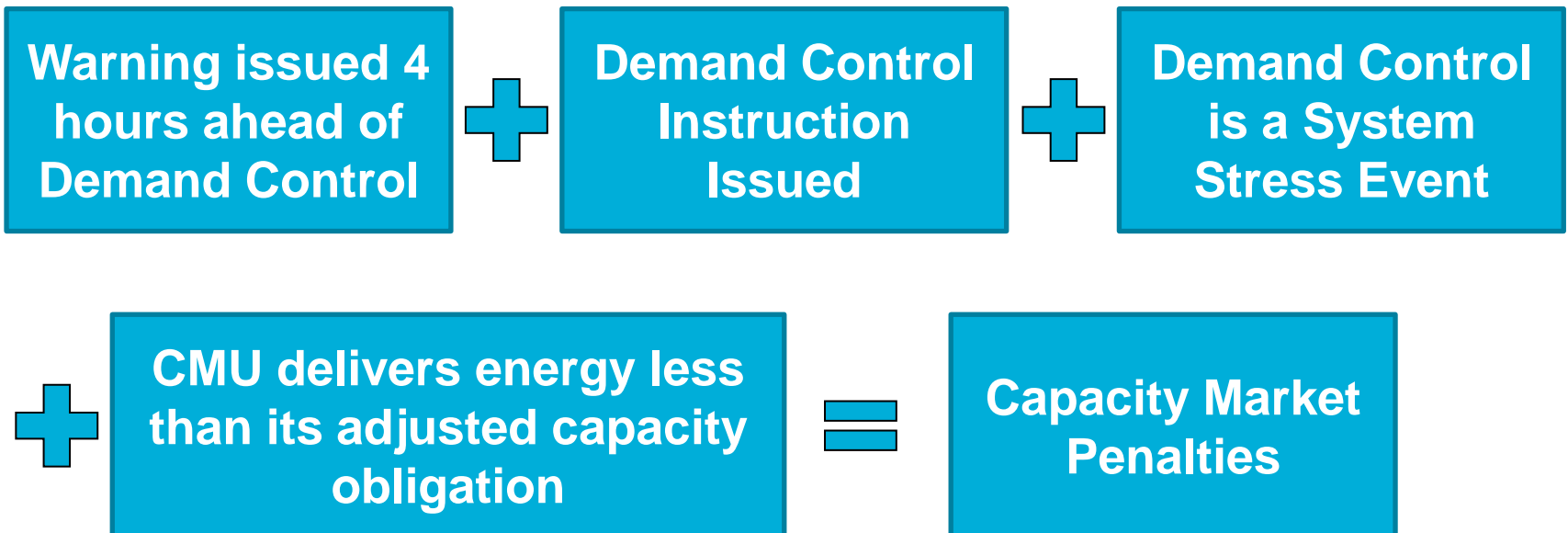
## Penalties and Warnings

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- Should a System Stress Event occur, then a Capacity Provider is exposed to Capacity Market Penalties if it fails to deliver against its Capacity Obligation
- Number of safeguards including:
  - Warnings are given in periods where the expectation of a system stress event is higher than a threshold
  - If stress event completely unexpected then period of grace given before penalties apply
  - Capacity Obligations are adjusted to reflect prevailing demand and delivery against balancing service contracts
- However there are no explicit despatch instructions in the Capacity Market

# Penalties and Warnings

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# Agenda

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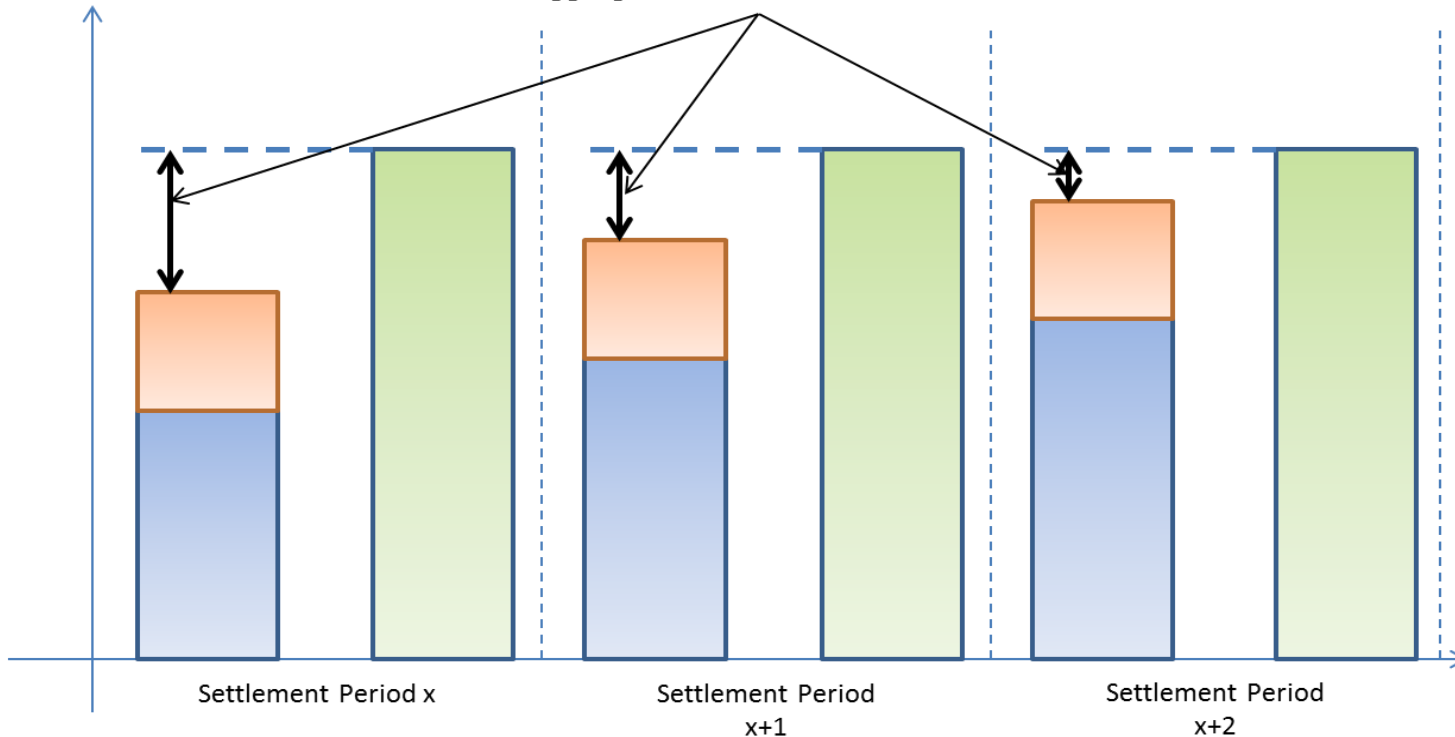
## Inadequate System Margin Warnings

Warnings that are given in periods where the expectation of a system stress event is higher than a threshold

# Inadequate System Margin

**Figure 1: Monitoring of System Margin**

There is “Inadequate System Margin” under the Capacity Market Rules if the difference between the Forecast Demand plus Operating Margin and the aggregate MELs is less than 500MW



Forecast settlement period Demand @ 4hrs ahead

Sum of accessible Generator MELs when dynamic parameters are accounted for @ 4hrs ahead

Operating Margin (Contingency Reserve plus Contingency Reserve)

## Inadequate System Margin

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- National Grid will issue a notice to the market whenever an Inadequate System Margin is identified
  - Will rely on existing channels for this e.g. <http://www.bmreports.com/bsp/bsw.php>
- Information in the warning will include
  - Commencement time of the notice
  - Information about the circumstances triggering the notice
  - Details about where providers may find information about
    - System Demand
    - Capacity expected to be delivered by BM Units
    - Capacity expected to be delivered by non-BM Units

# Agenda

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## **Demand Control Instruction Notifications**

Notifications that are given in periods where an demand control instruction has occurred

## Demand Control Instructions

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- Should the System Operator manually issue a Demand Control instruction under the Grid Code to a Distribution Network Operator to curtail demand, or
- Should automatic low-frequency relays installed and operated under the Grid Code automatically curtail demand
- National Grid will issue a notice stating that this has occurred through [www.bmreports.com](http://www.bmreports.com) from November 2015
  - A consequence of the recent Ofgem approval of change to the imbalance price arrangements under the Balancing and Settlement Code



# Agenda

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## Determining System Stress Events

Not all Demand Control Instructions issued mean that a System Stress Event has occurred. A number of further requirements need also to be met.

# System Stress Event Requirements

**A System Stress Event has occurred if (and only if):**

**Known close  
to Real Time**

**Requirement 1 – System Operator has issued a Demand Control Instruction or a Low Frequency relay has operated to curtail demand each in accordance with the Grid Code**

**Requirement 2 – The Demand Control Instruction is for a period greater than or equal to 15 minutes**

**Only known  
Post Event**

**Requirement 3 – The volume of Demand Control instructed is greater than the volume of generation curtailed by the System Operator in the same half hour**

**Requirement 4 – The Demand Control Instruction was not resultant from one or more faults on the transmission system or a distribution network**

# Agenda

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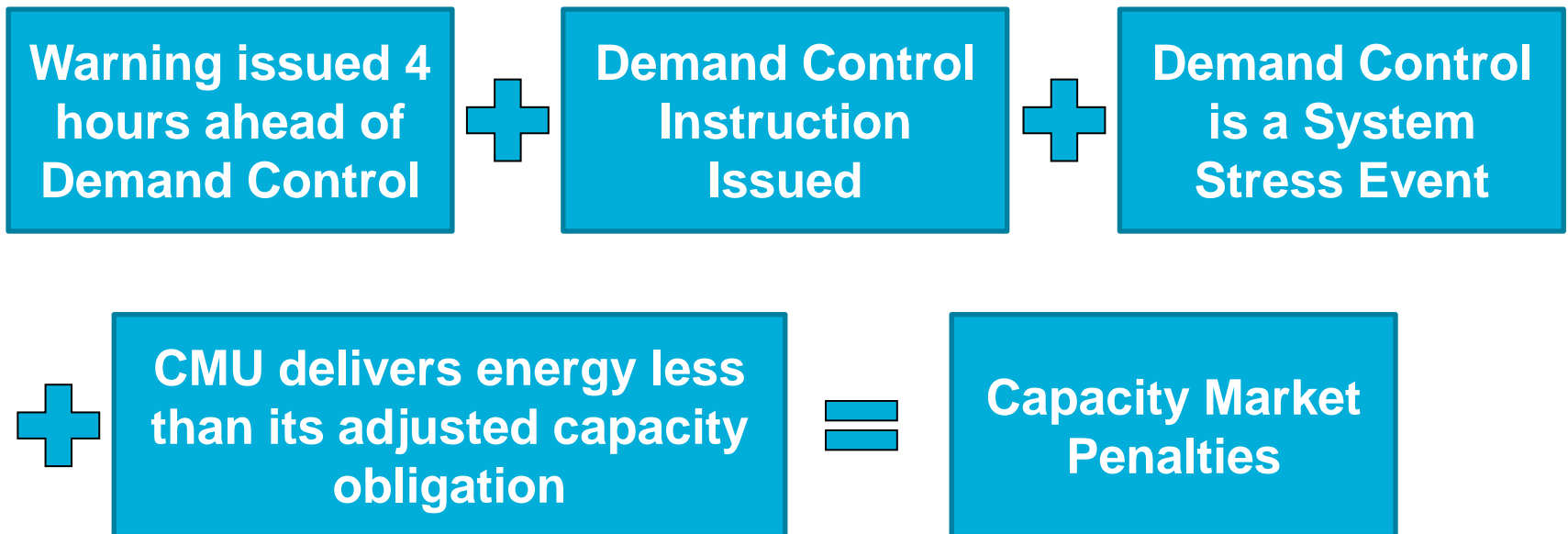
## Penalties

A CMU that has a Capacity Obligation must deliver energy equal to or greater than its “Adjusted Load Following Capacity Obligation” during the relevant periods, this process works as follows:

# Penalties and Warnings

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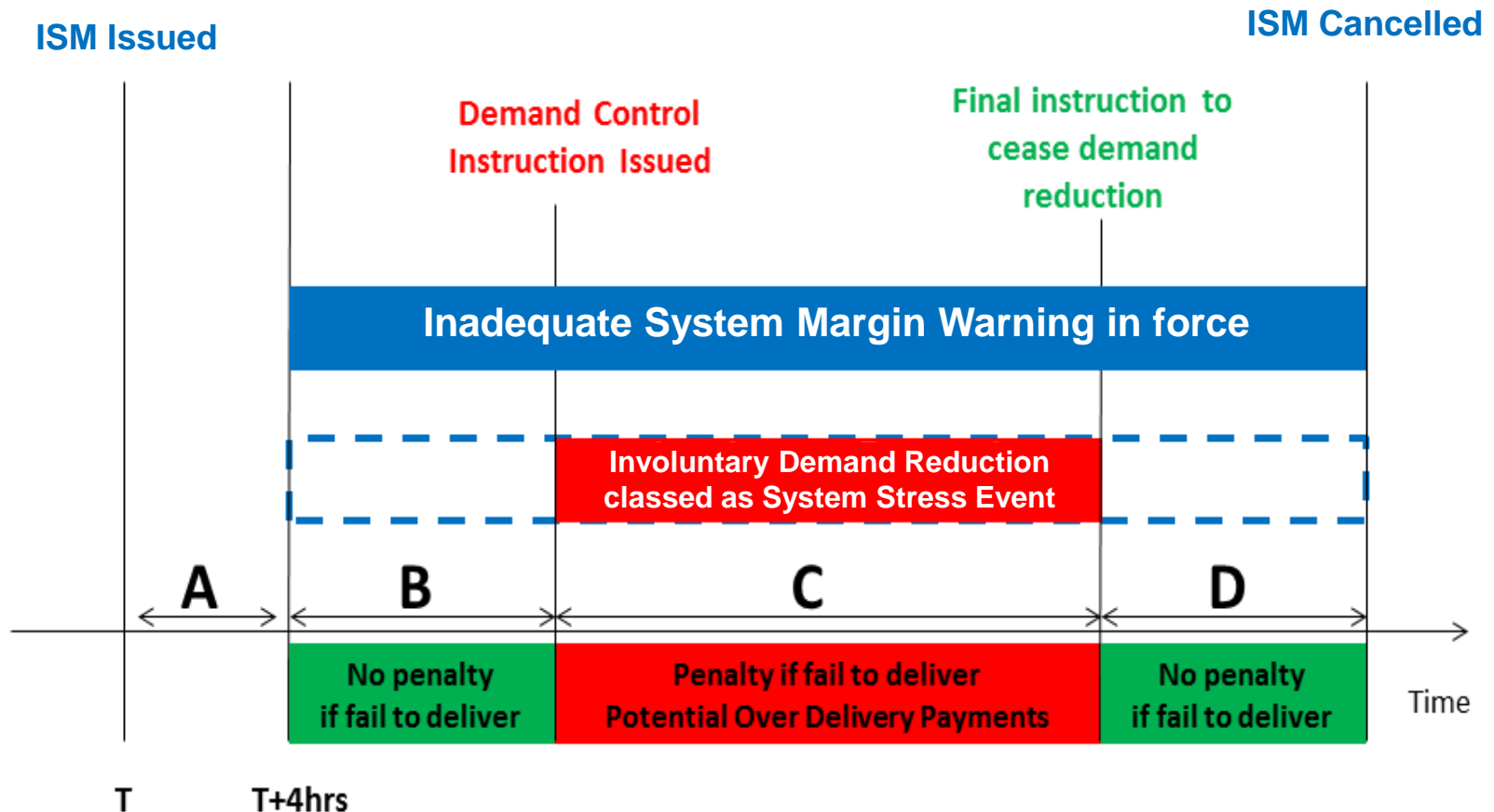
- To recap...



- The following slides demonstrate this more figuratively

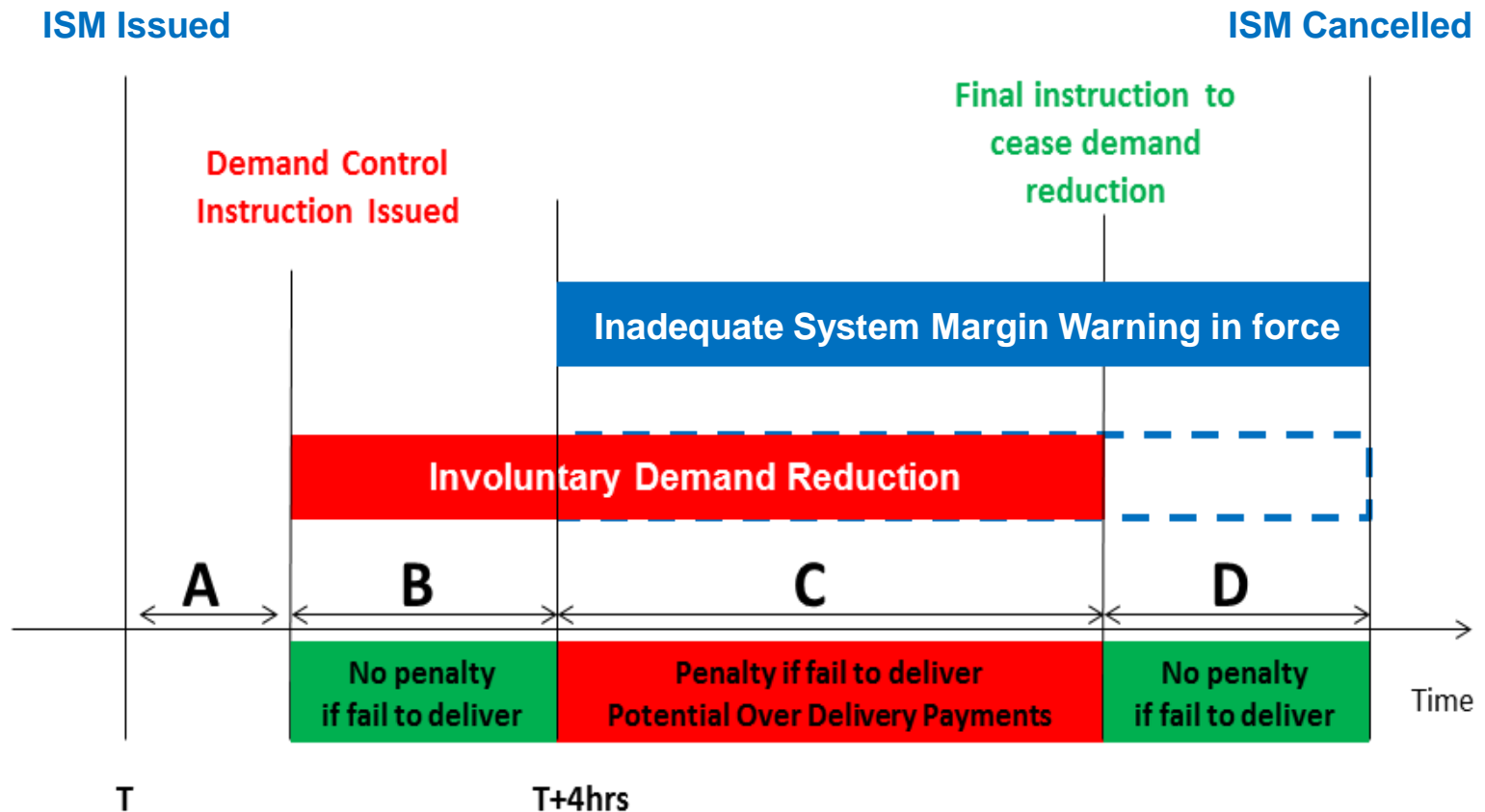
# Scenario 1

The System Stress Event was “foreseen” in advance with a Inadequate System Margin Warning issued in advance



## Scenario 2

The System Stress Event was not “foreseen” until much closer to the Demand Reduction Instruction



## Delivery against Capacity Obligation

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**Q: So what does a CMU need to deliver during a System Stress Event to avoid Penalties?**

**A: Its Adjusted Load Following Capacity Obligation**

- The Adjusted Load Following Capacity Obligation is designed to achieve a number of things including:
  - Prevent every MW of capacity with agreements from being incentivised to deliver at times of lower demand
    - Protects capacity providers with units on outages during lower demand periods
  - Protects those with balancing services agreements told not to generate during a stress event

## Delivery against Capacity Obligation

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### Q: How do you calculate the Adjusted Load Following Capacity Obligation?

The formula in the CM Rules is complex, but in essence it does the following:

- Firstly it scales the Capacity Obligation from the auction to the actual national demand during the stress event
  - This ensures that a “load-following” obligation is generated
- Secondly it makes allowances for the provision of certain balancing services
  - Key services for DSR and non-CMRS CMUs: STOR, FFR, FCDDM



## Delivery against Capacity Obligation

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### Q: How are the adjustments for Balancing Services made?

- For each relevant balancing service the System Operator will notify the Settlement Body if a CMU (or part of it) is providing a balancing service during a stress event
  - The System Operator will also provide the volume under contract and the volume that should have been delivered under any utilisation of that balancing service
- The adjustments are designed to ensure that if an obligation is contracted during a stress event and the CMU delivers against that contract it faces no CM penalties

# Penalties – Other Information

## Penalties

### Over-Delivery Payments

If a CMU over-delivers against its Adjusted Load Following Capacity Obligation it may share in the redistribution of penalty payments in the form of an over-delivery payment

### Settlement

All financial settlement activities are managed by the Capacity Market Settlement Body

### Penalty Rate

The penalty rate per settlement is equal to a maximum of 1/24 of the auction clearing price (expressed in MWh – so £19.40/kW = £808.33/MWh)

### Penalty Caps – Monthly Penalty Cap

No more than 200% of a monthly capacity payment can be forfeit in any single month through penalty payments

### Penalty Caps – Annual Penalty Cap

No more than 100% of annual capacity payments can be forfeit in total through penalties



Public

# Capacity Market

**EMRS Settlement – Metered Data - DSR Transitional Auction**

Tuesday 2 June 2015

Hannah Pargeter

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## What we'll cover?

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- 
- How do you provide metered data to EMRS?

- 
- What further information will be provided?

- 
- More information and contact details?

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# What does our role involve?

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Our role includes:

- **Receive metered data**
- Calculate payments and charges
- Invoice and collect payments due
- Manage settlement and reconciliations of payments
- Manage credit cover

# How do you provide metered data to EMRS?

- Metering configurations have associated metering pathways through which metered data is sent to EMRS. For the DSR Transitional Auction we'll focus on the following:

Responsible for data submission	Metering Configuration Solutions	Metering Pathways	Data Collection and Submission	Submission Method	File Format
Capacity Provider	Existing Balancing Services or Bespoke Solution	Self-Submission Metering Pathway* or Data Collector Metering Pathway	Capacity provider or their appointed data collector	Submits metered data to EMRS in the defined file format	A CSV file piped delimiters format

- (\*) This metering pathway is an option if a Capacity Provider has existing Balancing Services Metering
- To submit file, upload file via a Secure File Transfer Protocol (SFTP) to EMRS

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## What further information will be provided?

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- **Guidance** document to provide supporting information on the CSV file format submission
- **Working Practice** document will detail the steps how to submit the CSV file to EMRS
- We'll be publishing these shortly on the EMRS website:  
<https://emrsettlement.co.uk/>
- We will be covering other aspects of our role at future events:
  - Calculate payments and charges
  - Invoice and collect payments due
  - Manage settlement and reconciliations of payments



# More information and contact details?

## ■ EMR Settlement Website

- <https://emrsettlement.co.uk/>
- EMR Circular
- Calendar
- Working Practice
- Guidance documentation

## ■ All queries

- [contact@emrsettlement.co.uk](mailto:contact@emrsettlement.co.uk)
- 020 7380 4025

The screenshot shows the EMR Settlement Limited website. At the top right, there are links for LCCC, ESC, and ELEXON. The main header features the EMR Settlement Limited logo and a 'Subscribe here' button. Below the header is a navigation menu with links for HOME, ABOUT, PUBLICATIONS, CHANGE, STAKEHOLDER SUPPORT, NEWS, CALENDAR, WHO WE ARE, and CONTACT US. The main content area has a purple background with white text stating: 'We are the EMR Settlement Services Provider and will deliver settlement for the Contract for Difference (CFD) and the Capacity Market (CM). We have been appointed by DECC, and are acting on behalf of the Low Carbon Contracts Company (the CFD Counterparty) and the Electricity Settlements Company (the CM Settlement Body)'. Below this is a search bar with the text 'Google™ Custom Search' and a 'SEARCH' button. On the left side, there is a 'News' section with a link to 'Invoicing the CFD Operational Costs Levy to Suppliers'. The text below the link reads: 'We have issued EMR Circular 42 which informs Suppliers that due to delays experienced during User Acceptance Testing of the EMR settlement system, there is a high probability that EMR Settlement Ltd will not be in a position to go live with the settlement system in time for automated invoicing of the CFD Operational Costs Levy 2015/16 to Suppliers from 29 April 2015. We may therefore have to invoke manual invoicing contingency arrangements in order to issue invoices'. On the right side, there is a calendar for the month of April, showing dates from 1 to 19.





**EMR**  
SETTLEMENT  
LIMITED

- 
- DECC Stakeholder Bulletins
    - contact Corrine Jenkinson [corrine.jenkinson@decc.gsi.gov.uk](mailto:corrine.jenkinson@decc.gsi.gov.uk)
  
  - National Grid
    - Portal <https://www.emrdeliverybody.com>
    - Mail list [emr@nationalgrid.com](mailto:emr@nationalgrid.com)
    - Helpline 01926 655300
  
  - Date of Next Event – 17 June 2015 at the Charing Cross Hotel