

Housekeeping













Welcome and Purpose of Today...

EMR Process for the three 2016 Auctions

- EMR CM Operational Plan
- EMR Delivery Body Systems National Grid IS
- EMR Regulations DECC Consultation Response
- EMR Rules Ofgem Open Consultation

Ensuring that everything is in place for the first delivery year

- DSR and Agreements Update EMR DB
- CM Warnings National Grid SO
- National Grid Charging Review National Grid SO
- Meter Data and Meter Test EMRS



Agenda

18 May 2016	Agenda	Presenter	
09:30 - 09:40	Welcome and purpose of today	Matthew Magill	
09:40 - 10:00	Operational Plan update		
10:00 – 10:20	IS update	Thomas Kingston & Mark Duffield	
10:20 – 10:40	DECC Regulation: Government response to the Spring 2016 Consultation	Charles Phillips	
10:40 – 10:55	Ofgem Rules: Overview of next steps and broad areas in the Rules consultation document	Emily Sam	
11:00 – 11:20 Break			
11:20 – 11:40	Charging Review: National Grid is currently scoping the drivers for a broad review of transmission charging arrangements. This is an update of stakeholder views received and the intended next steps	Andy Wainwright	
11:40 – 12:20	CM Warnings: System Operator Obligations within Capacity Mechanism	Dave Preston	
12:20 – 12:40	DSR and Agreement update: Progress on Metering Assessments and update on information required for DSR test and process	Tim Gregory	
12:40 – 13:00	EMRS update: Metering Overview	Iain Nicoll	
13:00 – 13:10	Key Messages and Close	Matthew Magill	
13:10 – 13:40 Networking Lunch followed by 121's and Drop In System Demo and Registration Refresher			

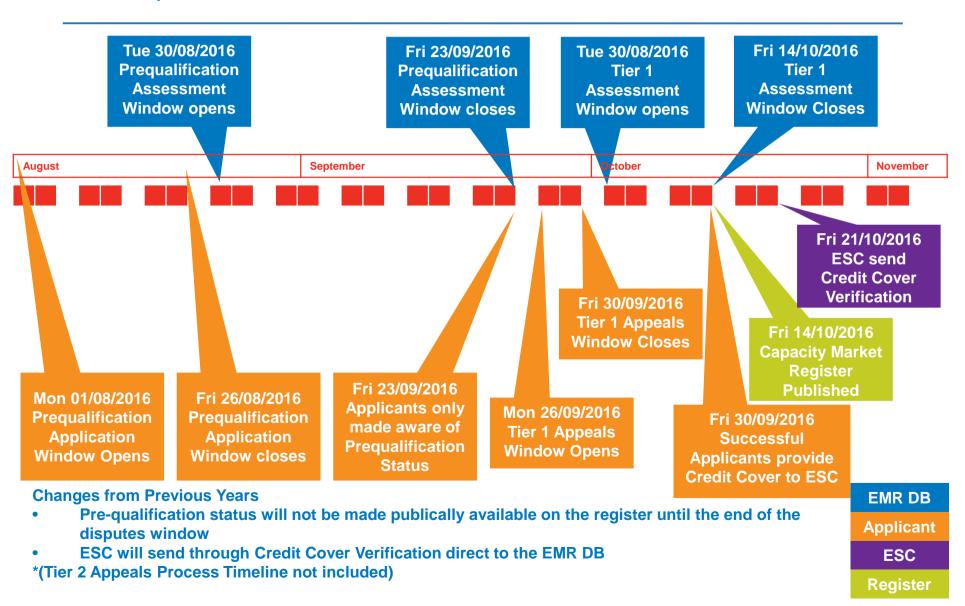


Operational Timetable

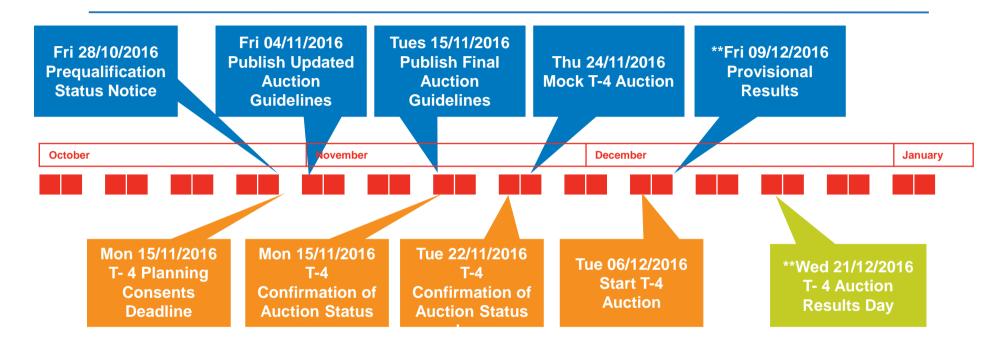
 National Grid, as the Delivery Body, have recently published the key dates for the 3 planned Capacity Market auctions (including prequalification and other key milestones) in the Operational Plan



Pre-Qualification



Pre-Auction and T-4 Auction



Changes from Previous Years

Planning Consents Deadline has changed

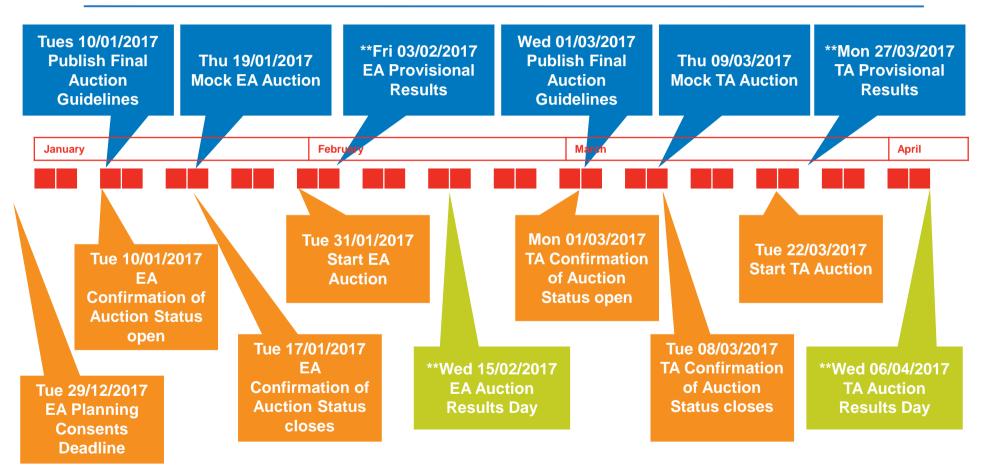
*Capacity Agreement Notices will be published by 23/01/2017

**Subject to timing of clearing round



Early Auction and Transitional Auction





Changes from Previous Years

Planning Consents Deadline has changed

*Capacity Agreement Notices will be published by

**Subject to timing of clearing round

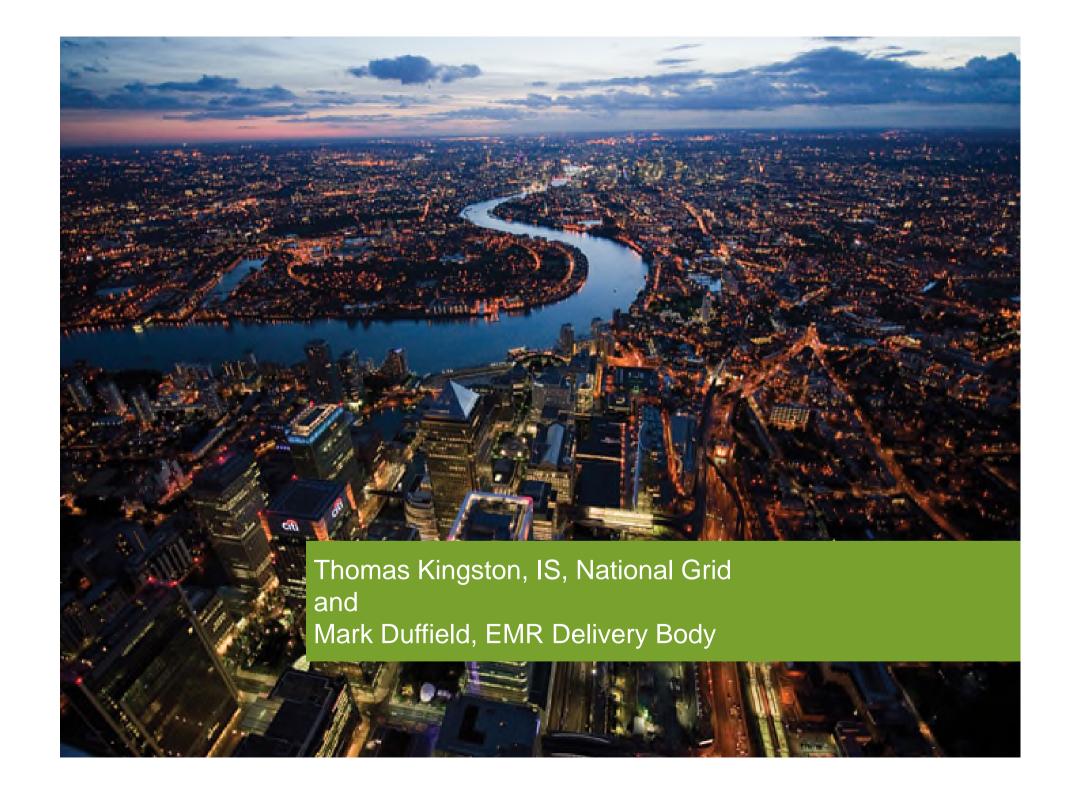
EMR DB
Applicant
ESC
Register

Key Dates

Date	Activity	
01/08/2016	Pre-qualification Submission Window Opens	
26/08/2016	Pre-qualification Submission Window Closes	
30/08/2016	Pre-qualification Assessment Window Opens	
23/09/2016	Pre-qualification Assessment Window Closes	
26/09/2016	Tier 1 Disputes Window Opens	
30/09/2016	Tier 1 Disputes Window Closes	
14/10/2016	Pre-qualification Results Register Update	
06/12/2016	T-4 Auction Starts	
31/01/2017	Early Auction Starts	
22/03/2017	Transitional Auction Starts	

What we've been doing...

- Expanding the size of the team for an additional auction is going well
- Interviewing for the enduring team
- Finalising the specifications for the System Operator Procedures for Stress Events
- Liaising with Stakeholders & Customers
- Developing and Testing Systems
- Talking to DECC about implementation from the consultations
- Responding to Ofgem's Rules consultation
- Running the ongoing Agreement Management activities including our first Webinar
- Complying Ensuring the EMR DB is compliant with all Licences
- Listening to your feedback in our Customer & Stakeholder research



System changes from 2015

Two key themes:

"Missing" Functionality

- Prequalification Results
- Disputes & Credit Cover
- Setting up auction bidding groups
- DSR tests, Transfer a CMU, Security Interest
- Elexon reports, some DECC / Ofgem changes

Defects in Functionality

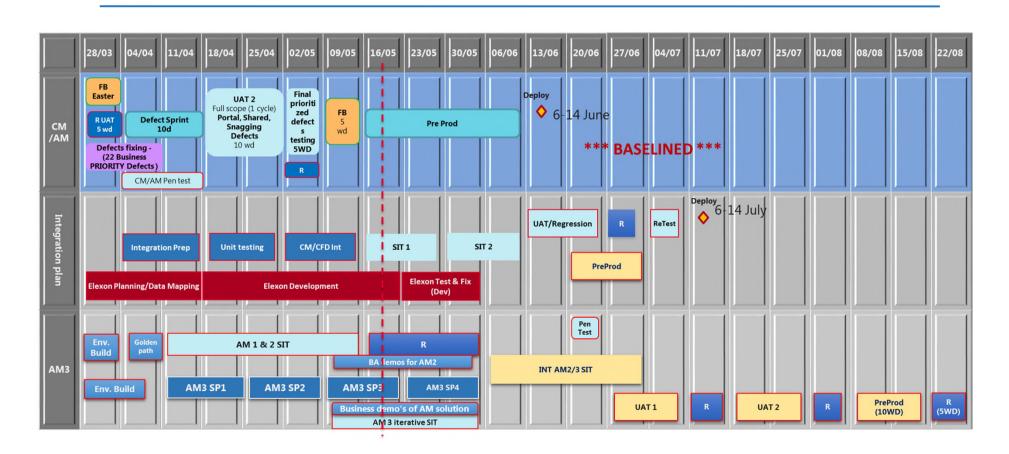
- Port issue that saw some firewalls block the site
- "Look and feel" defects
 - Buttons, clearer descriptions
- Huge number of lower priority functional defects

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

System changes from 2015

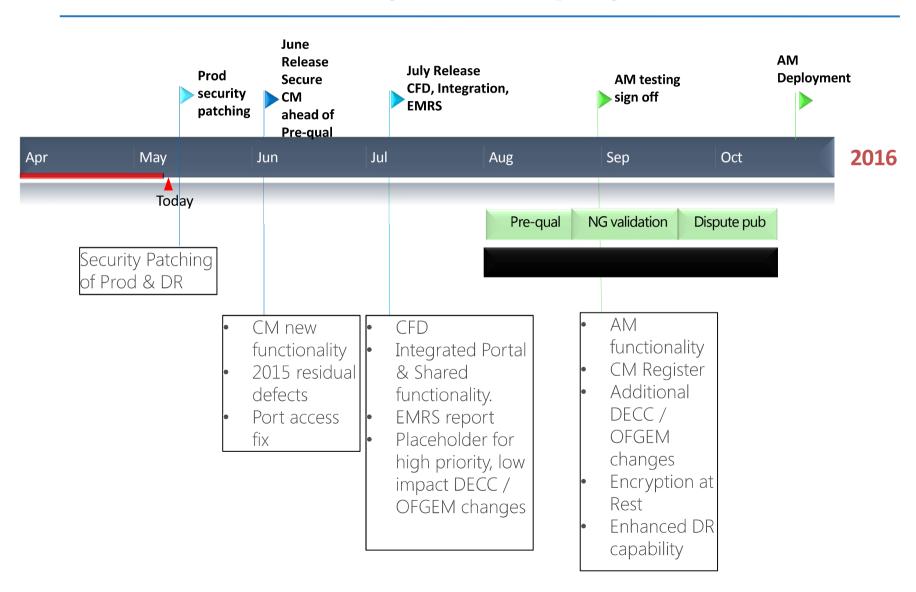
- Continuing to work on "Agreement Management" workstream:
 - Due for release in Q4 2016
 - Capacity Agreements and all facets of managing them
 - 6-monthly reporting, FCM, SCM
 - Provision of deferred items (connection agreements etc.)
 - Secondary Trading
 - Satisfactory Performance monitoring
 - Termination
 - Capacity Market Register

Plan on a Page





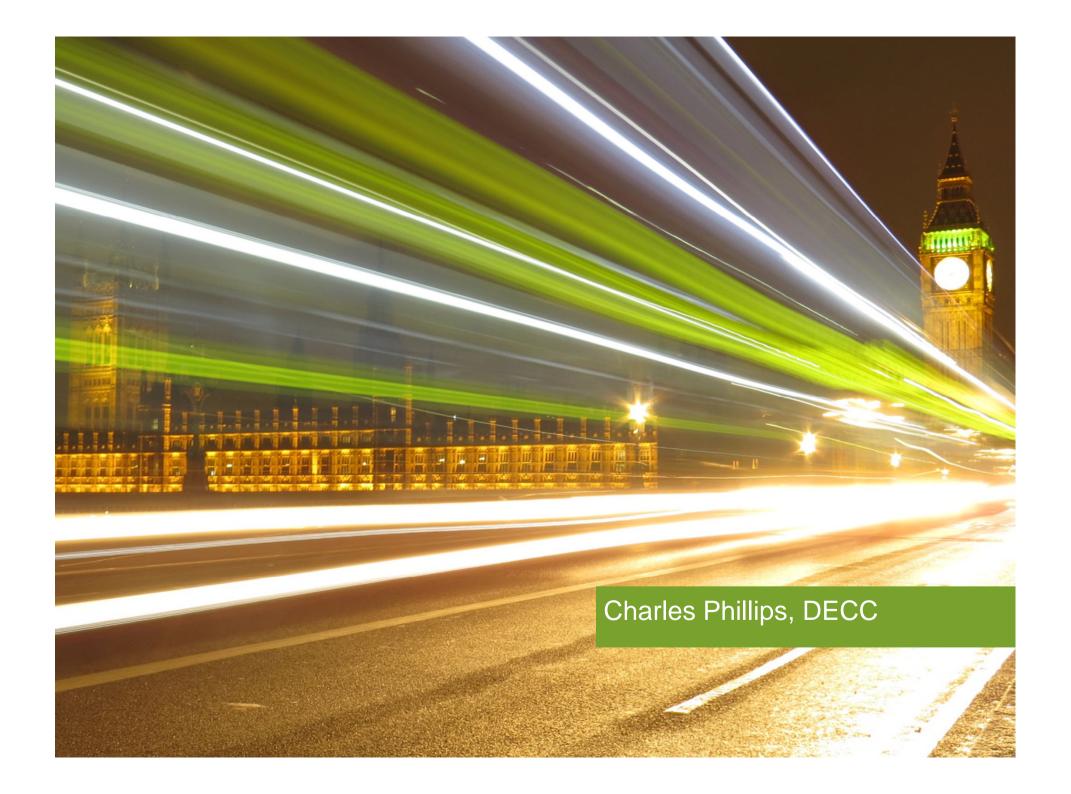
EMR Live Admin System Deployments



Deployments – What we'd like you to do

May	June	July
Security Patches	Most new functionality will	Majority of system changes
NO ACTION REQUIRED	not be visible immediately following deployment CMU transfers, Security Interest will be available for use if required ACTION REQUIRED 1. "Port Fix" – check that you can still log in and access the system 2. Navigate around the	will become visible once prequalification initiated for the 2016 auctions later in July ACTION REQUIRED: 1. Checks to log in, and review system working as expected
	system, check performing as expected	

We have a very significant testing cycle to ensure the deployments will work. More detailed Comms shortly before and after each deployment





CAPACITY MARKET UPDATE

Government Response to the Spring 2016 Consultation



WHAT WE PUBLISHED ON THE 6TH MAY 2016

- Government Response to the Spring 2016 Consultation
- Impact Assessment
- SoS letter to determine that three capacity auctions (T-4, the early auction and the TA auction) will be held

WHAT ELSE ON THE 12TH MAY

- Amendments to the Capacity Market Regulations were laid in the House of Commons and House of Lords
- (Approval expected in June/July 2016)



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

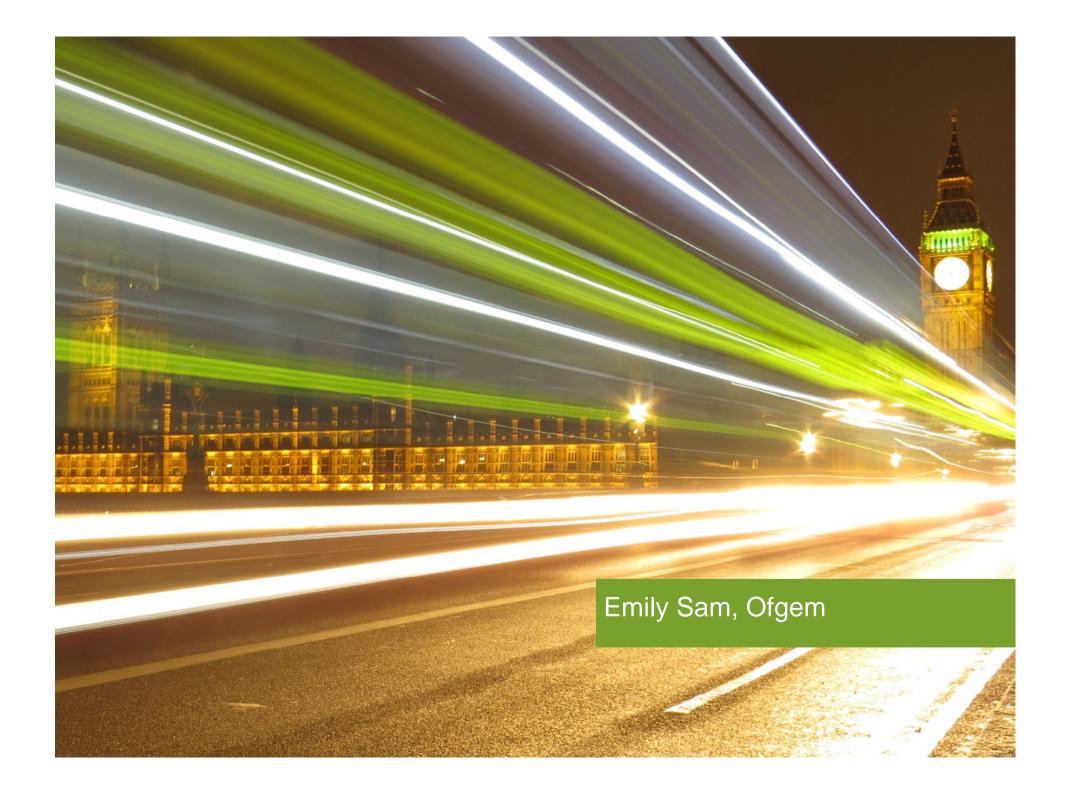


NEXT STEPS

We expect:

- the amendments to the Regulations to be approved in <u>June/July 2016</u>
- to consult again on a small number of issues including: cumulation of State Aid and; supplier levy arrangements in <u>Autumn 2016</u>
- further updates from Defra on emissions regulations
- further updates from Ofgem on their embedded benefits review







Ofgem update on the CM Rules





Process to date

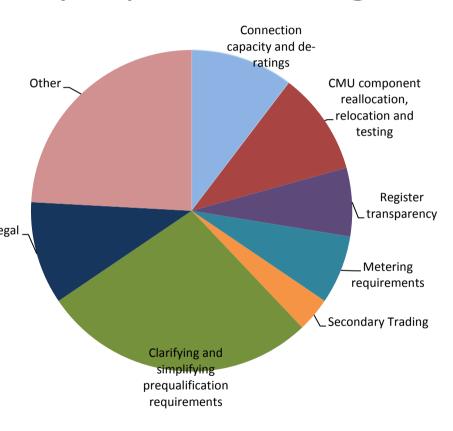
- Consultation on our proposed changes to CM Rules published
 29 April, closes 27 May
- Our proposed changes informed by:
 - Stakeholders' proposals
 - Responses to open letter on priorities for this year's changes:
 November 2015
 - Ofgem identified changes



Summary of proposed changes

- Received 70 rule change proposals
- Consulting on taking forward
 35 changes, incl 9 Ofgem
 changes

 Consents and legal_rights
- Minded to reject proposals which overlap with DECC's changes or where we received lack of substantive reasons for change



Where we're proposing to accept changes



Priority areas

Issue	Our proposed response
Simplifying prequalification	 Number of changes incl: Complete metering assessment and provide metering related info after the Auction, not for prequal Removing requirement to submit de-rating factors Remove requirement for directors' statement confirming they can sign a Certificate of Conduct
DSR components	 Allow DSR aggregators to add new components Testing of DSR CMU portfolios on aggregate basis Remove barrier to transferring entire DSR capacity obligation to another CMU
Connection capacity	 Our preferred approach is for generators to have a free choice of connection capacity which they're then tested up to Needs further analysis of associated changes Keen to have your detailed views on how this would work Not proposing to amend the Rules for this prequal



Next steps

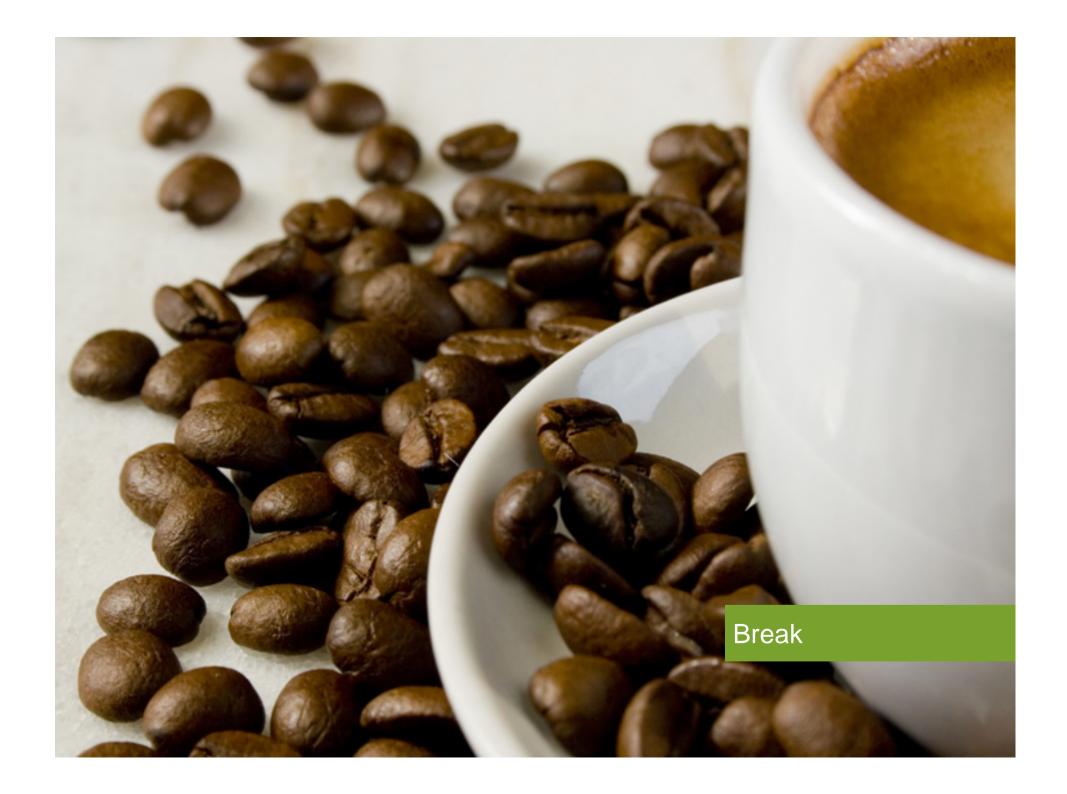
- Consultation closes on 27 May
 - Responses on individual decisions we've set out
 - More detailed issue specific questions (annex D)
- We will review responses and amend Rules drafting
- Publish informal version of our amends end of June
- We will be reviewing the CM Rules change process and considering risks/benefits of moving away from an annual cycle



Ofgem is the Office of Gas and Electricity Markets.

Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.

We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.



Review of Commercial Arrangements for Transmission Charging





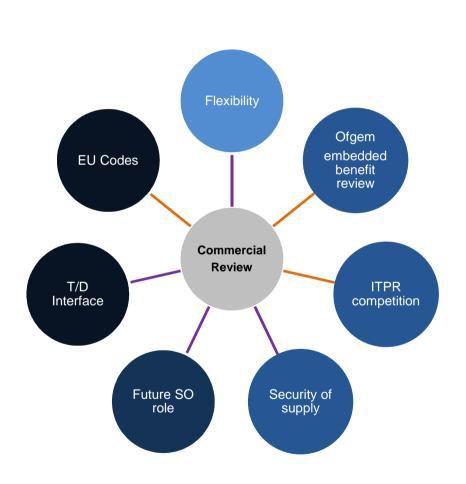


Andy Wainwright, Charging Review Lead, National Grid

Context

- There are a number of significant industry changes challenging whether the current commercial arrangements in electricity transmission charging will remain "fit for purpose"
 - Decarbonisation
 - Decentralisation
 - New technologies
- A review of commercial arrangements is being undertaken to:
 - Examine the impacts of significant industry changes; and
 - Manage the impact on consumer bills and facilitate fair and equitable charging for all parties.
 - LC5 obliges National Grid to keep the charging methodology under review
- These slides suggest the key issues which a review would need to address, including co-ordination with other industry work, and a plan for the early part of the project

Structural Industry Change



- The review will need to consider a number of significant structural industry changes
- Charging impacts on the competitiveness of DSR, storage and distributed generation – review will therefore need to consider these areas
- Charging framework impacts on the competitiveness of transmission connected plants, thereby impacting on security of supply
- Any review will also need to take account of future SO and DSO models

Charging Review – Our approach

Initial external Engagement; engagement Listening Mode Stakeholder • Bi-laterals Forums & seminars Data firmly routed in the FES Scenarios What does "do nothing" / status Initial Analysis quo methodology look like out to Consumer Power Gone Green Issues / case for 2035? **Embedded Benefits** change G/D Split Average Tariffs Slow Progression Impact on Consumers

The emerging themes











Market developments

There is not a level playing field between market participants in GB, Europe and interconnectors

Distributed generation

There are different regimes for charging transmission and distribution connected generators and a perception that these may result in an unfair situation

Smart & HH metering implications

Current transmission charges were not designed for domestic users with time of use tariffs

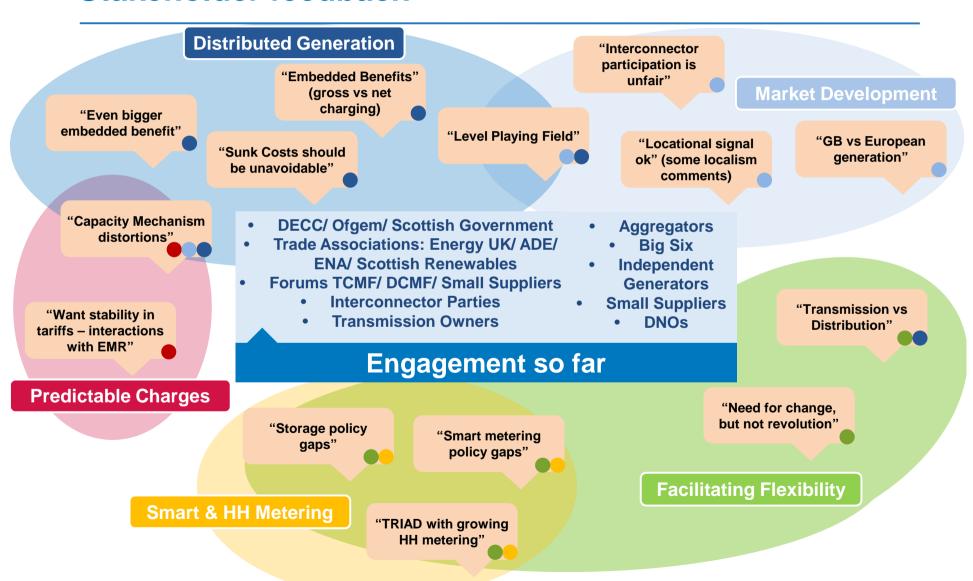
Facilitating Flexibility Fairly

Current commercial arrangements do not facilitate new technologies e.g.Storage

Predictable Charges

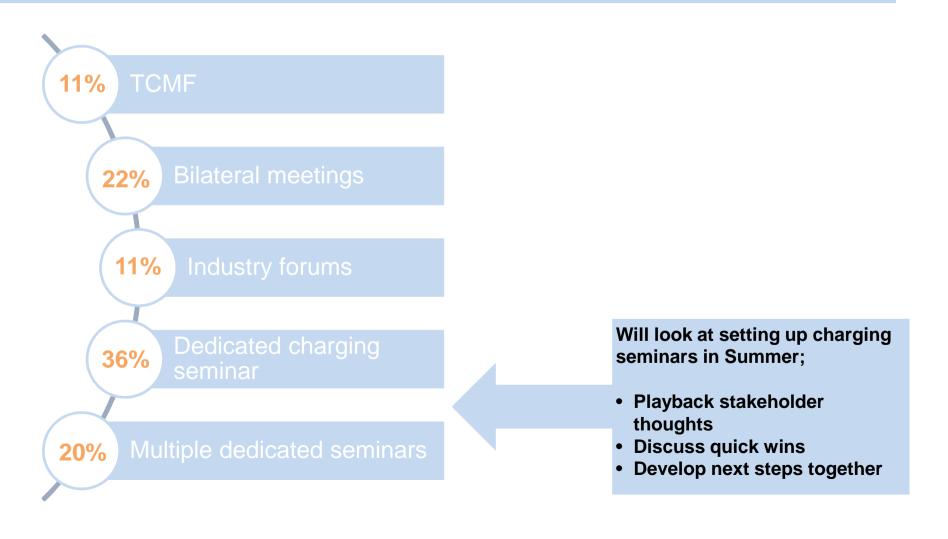
Customers desire predictability in their charges

Stakeholder feedback



How Stakeholders want to be engaged going forwards

We asked stakeholder at our customer seminar how they would want to be engaged going forwards



Next steps

- Analysis and stakeholder engagement complete by end of May
- Ensuring co-ordination with Ofgem's work on embedded benefits and flexibility
- Want to consider interaction between the distribution and transmission networks holistically where possible
- Expected feedback to industry this summer

SO Obligations within Capacity Mechanism







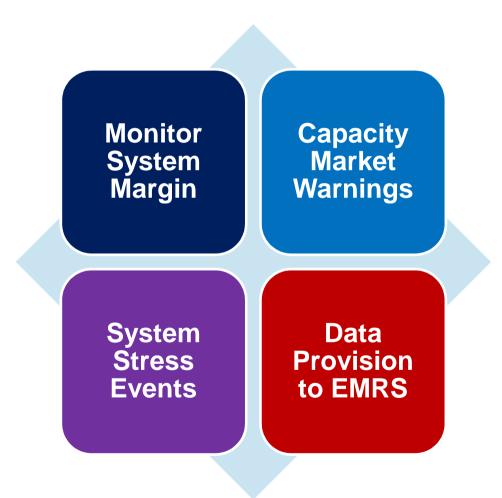
David Preston – Business Lead, Strategic Projects



Content

System Operator role in Capacity Mechanism Capacity Market Warnings (CMWs) How are CMWs calculated? What is a System Stress Event? CMW / System Stress Event Communications **CMW Scenarios Next Steps**

System Operator role in Capacity Mechanism





Capacity Market Warnings (CMWs)

Warning to market 4 hours ahead of real time (System Margin calc)

Given where expectation of a Stress Event is higher than a threshold

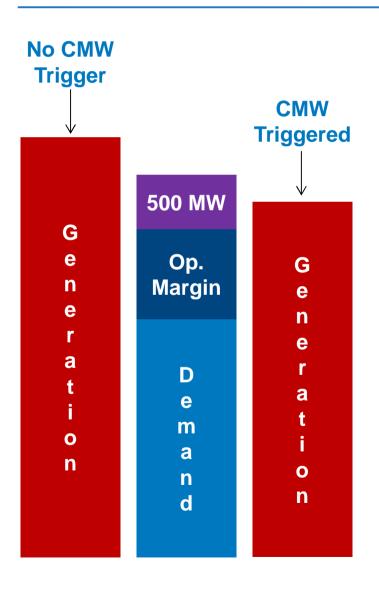
Settlement tool; not an operational dispatch signal.

Observe BMRS for traditional warnings and Demand Control Events

CMW	VS	NISM
Automated	Trigger	Manual
500MW above Margin requirement	Threshold	500-700MW below Margin requirement
Not included	Constraints	Included
4 hours out (for initial alert)	Lead time	Flexible



How are CMWs calculated?



Generation

- Conventional Generation MELs
- Wind Forecast
- NBM STOR

Demand

- National Demand Forecast
- Station Load
- Interconnector Flow (+'ive or -'ive)

Operating Margin

- Regulating Reserve
- Reserve for Response
- Contingency Reserve
- STOR Requirement



What is a System Stress Event?

SO issued **Demand Control Instruction** or **LF relay** operated to curtail demand in accordance with Grid Code

Demand Control Instruction is for a period **greater than 15 minutes**

Volume of Demand Control instructed is **greater than volume of generation curtailed** by SO in same SP

Demand Control Instruction **not resultant from fault(s)** on the transmission system or distribution network

Known close to Real Time

Known Post Event

CMW / System Stress Events communications

Discrete Website

- New website in development
- Subscribable alerts available for e-mail and SMS
- Alerts will direct recipient to webpage for content

CMWs

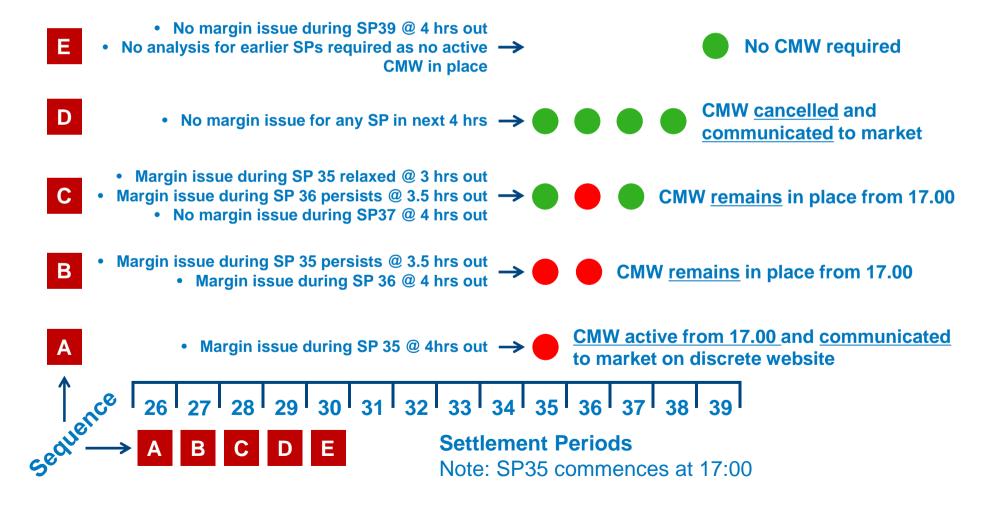
- Initial automated alert communicated 4 hours out and will include:-
 - Commencement time
 - Information about circumstances triggering warning
- For information CMWs will also include details about:-
 - Demand
 - Aggregate capacity from BMUs
 - Any additional capacity that the SO expects to be delivered
- Can be cancelled closer to real time

System Stress Events

- Analysis conducted by National Grid following a Demand Control Instruction
- Manually triggered alert communicated post event detailing the times covered by any System Stress Event

CMW Scenarios

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





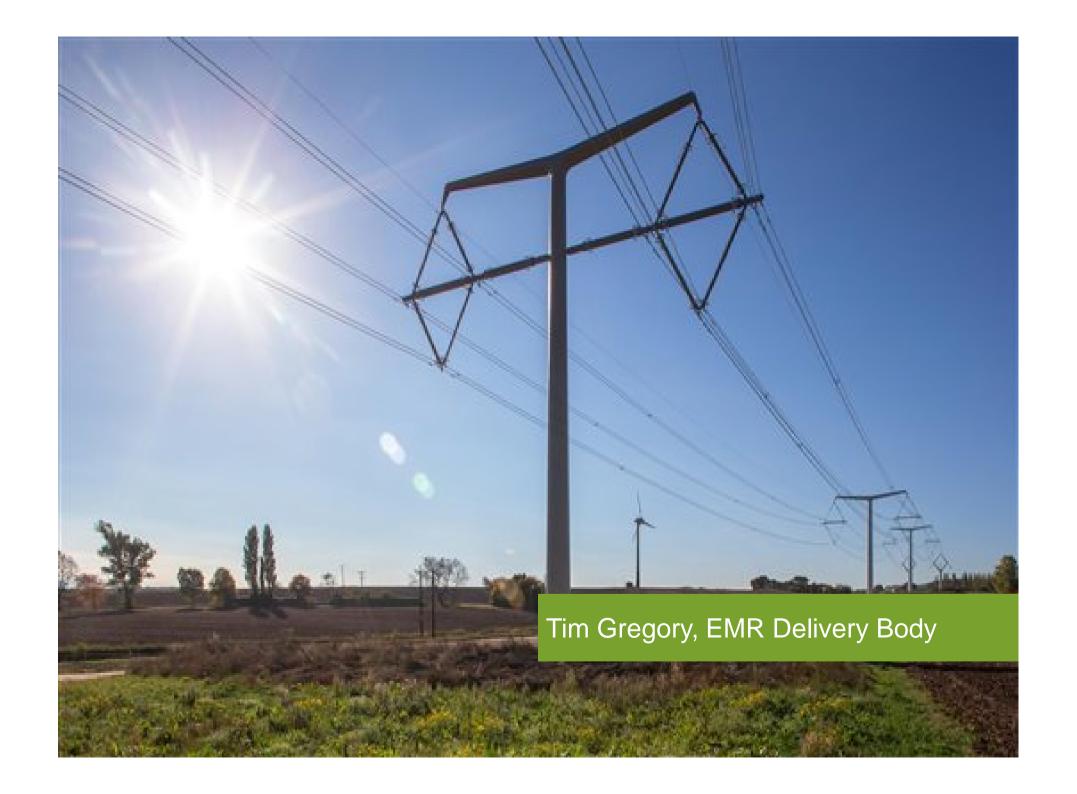
Next steps

Systems development ongoing within National Grid

Website architecture and content in development

Further updates in subsequent CM events

Go live on 1st October 2016



DSR and Agreement Management update

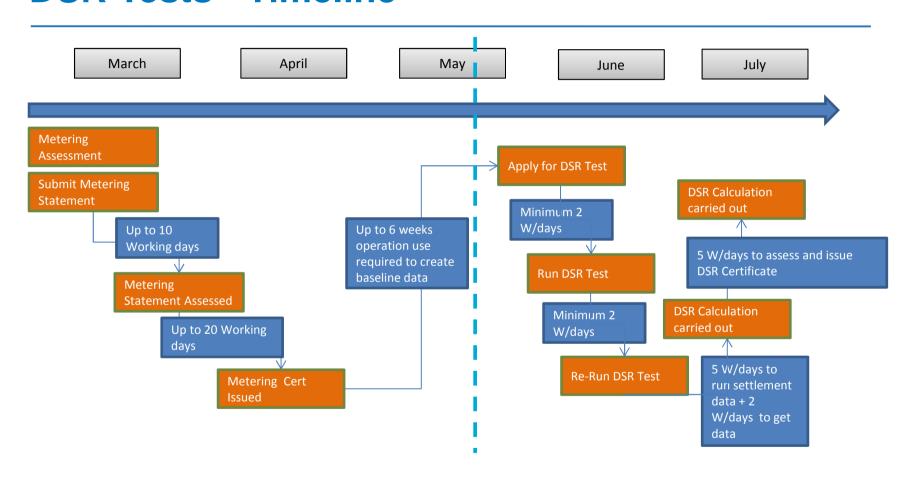
- TA Delivery Year 2016/2017
- DSR tests Timeline
 - First DSR Test
- Rule Change TA Payments
- Agreement Management Milestones (recap)

TA Delivery year 2016/17

- 57 CMUs providing 802.71MW
- 36 Unproven DSR
- 26/36 Metering Assessments complete
- 52/52 Metering Statements received
- 2/36 DSR tests requested
 - 1/36 DSR tests completed



DSR Tests - Timeline



If not already, please submit your metering assessments and request DSR tests

DSR test progress

- First test has been completed
- Information we need for the DSR test:
 - 1. Details of the Balancing services component?
 - 2. Your contact details
 - 3. Time of Test
 - 4. MPAN
- Meter Operators & Data Collectors
 - Open letter signed by National Grid and ESC

TA Payments – DECC letter

- Letter sent 6 May 2016
- Capacity provider could have triggered a termination event but still received payments at the start of the delivery year
- Proposal to make the capacity payments repayable in these circumstances

If you have any comments to kruti.patel@decc.gsi.gov.uk by 31 May 2016

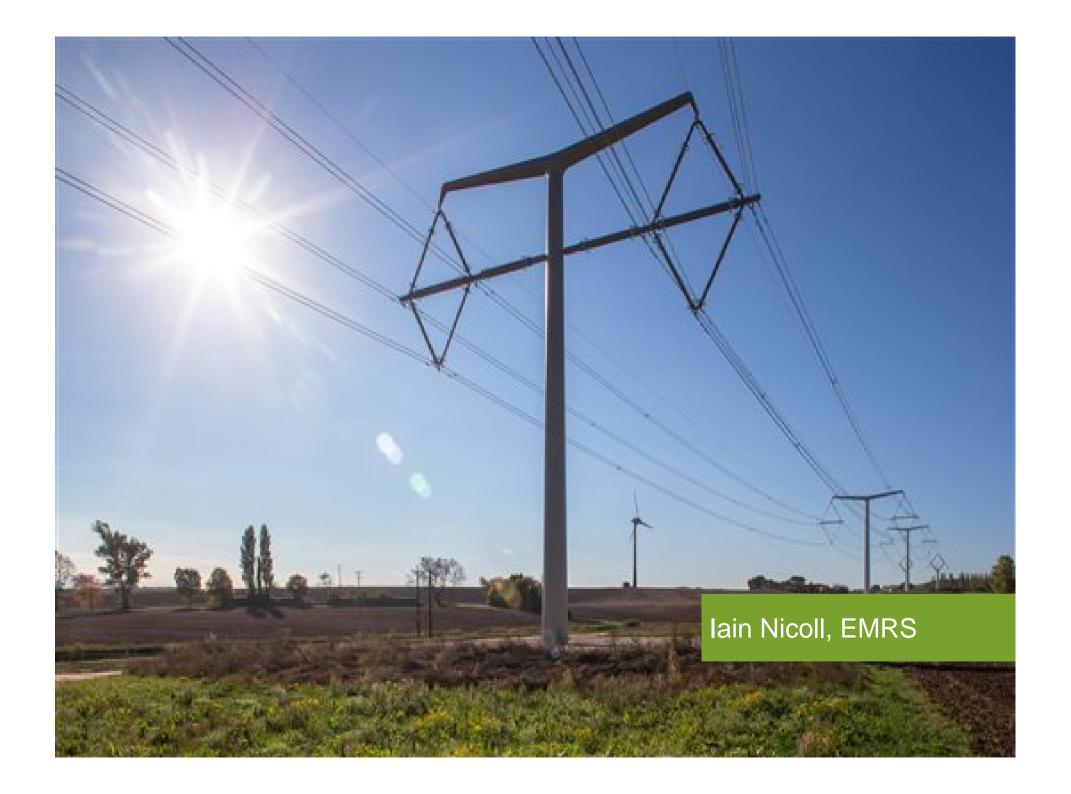


Financial Commitment Milestone - Rule 6.6

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	Assessment by Independent Technical Expert as per the Required Technical Standard stating – 10% Capital Expenditure of the Total Project Spend has been met OR Sufficient financial resources to meet Total Project Spend
2015 T-4	New Build & Refurbishing	22/06/2017	 Capacity Provider has entered into a major contract Along with - Directors resolution to complete project on or before start of Delivery Year Directors Certificate confirming sufficient financial resources and validity of the contract entered into

6 Monthly Progress Update Reports – Rule 12.2

	months from Auction date till Substantial Completion Milestone is achieved)	
New Build & Refurbishing 3rd report	18/06/2016	 Progress Report Schedule of Construction Milestone dates and material changes
New Build & Refurbishing 1st report	10/06/2016	 Material changes to works described in the Construction Plan Assessment from ITE
New Build	27/07/2016	 Directors Certificate
	Refurbishing 3 rd report New Build & Refurbishing 1 st report	Substantial Completion Milestone is achieved) New Build & Refurbishing 3rd report New Build & Refurbishing 10/06/2016 1st report New Build 27/07/2016





Public

Metering Test and Data Requirements

EMR Capacity Market

18 May 2016

Iain Nicoll

Agenda

- How do I know if I need a Metering Test?
- How do I request a Metering Test?
- What is the desk based Metering Test process?
- When do I have to complete my Metering Test?
- How long is the Metering Test Certificate valid?
- What other metering information do I have to provide?
- How do I submit data to EMRS?



How do I know if I need a Metering Test?

- Once you have completed a Metering Assessment the Delivery Body will notify you if the CMU needs to undergo a Metering Test
- Updated in the Capacity Market Register

		Metering Assessment Questions							Metering Assessment Outcome							
Unique CMU Identifier	Туре	Metering Assessment Deferred	Multiple Connections	Metering	Proposed Metering Option	Generating Units with Associated Load	Meter Used for other Purposes	Please Specify Why Meter is Used For Other Purpose	Metering Dispensation	Please Specify Metering Dispensation Info	System	Metering System is	Metering System Accuracy	Meters Current Voltage Transformer Calibrated	Please Specify Why Transformer is Calibrated	Metering Test Required
ABCD001	TR	No	No	Yes	Metering Option (a)	No			No							No



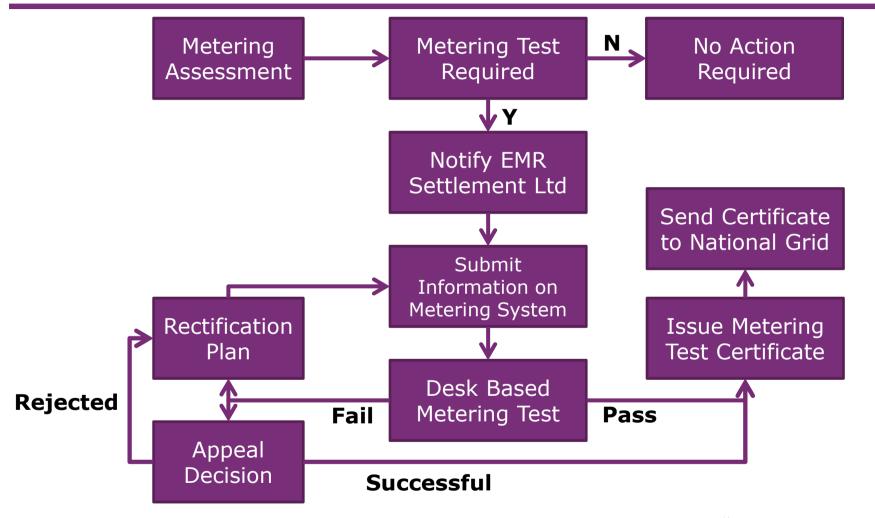
How do I request my Metering Test?

- Submit a Metering Test request and a Metering Statement¹ to EMRS at <u>contact@emrsettlement.co.uk</u> (by 1 June 2016 for TA)
 - Only for Components that have triggered a Metering Test
 - Must include details on all Components and Metering
 Configuration Solutions used (and what Balancing Services
 Agreement e.g. STOR)

Component ID	Metering Configuration Solution	Metering System Identifiers	Metering Test Required
Component 1	Supplier Settlement	All MPANs	No
Component 2	Supplier Settlement	All MPANs	No
Component 3	Supplier Settlement	All MPANs	No
Component 4	Balancing Services	All Metered Entity IDs	Yes
Component 5	Bespoke	All Metered Entity IDs	Yes

¹ As specified in Schedule 6 of the CM Rules 2015

Desk Based Test Process





When do I have to complete my Metering Test?

Depends on Type of CMU and Auction

Auction	CMU Type	Deadline
T-4	Existing CMU or Proven DSR	18 months prior to start of 1st Delivery Year
T-1 (TA)	Existing CMU or Proven DSR	1 month prior to start of 1st Delivery Year
Any	Unproven DSR	1 month prior to start of relevant Delivery Year
Any	Prospective CMU	By the Long Stop Date ¹

¹ The Long Stop Date is different depending on whether the CMU is New Build or Refurbishing. In the case of a Refurbishing CMU it is the date falling at the start of the Delivery Year and for a New Build CMU it is the date falling 12 months after the start of the first scheduled Delivery Year



How long is the Metering Test Certificate valid?

- A Metering Test Certificate will be valid in subsequent Capacity Auctions
- As long as the Metering Configuration Solution for the CMU hasn't changed (e.g. from Bespoke Solution to BSC SMRS Solution)
- Prior to any change the Capacity Provider must inform National Grid and the Electricity Settlements Company
- If the Metering Configuration Solution has changed a new Metering Test Certificate is required
- A Metering Test may be required following a Site Audit where a noncompliance has been identified



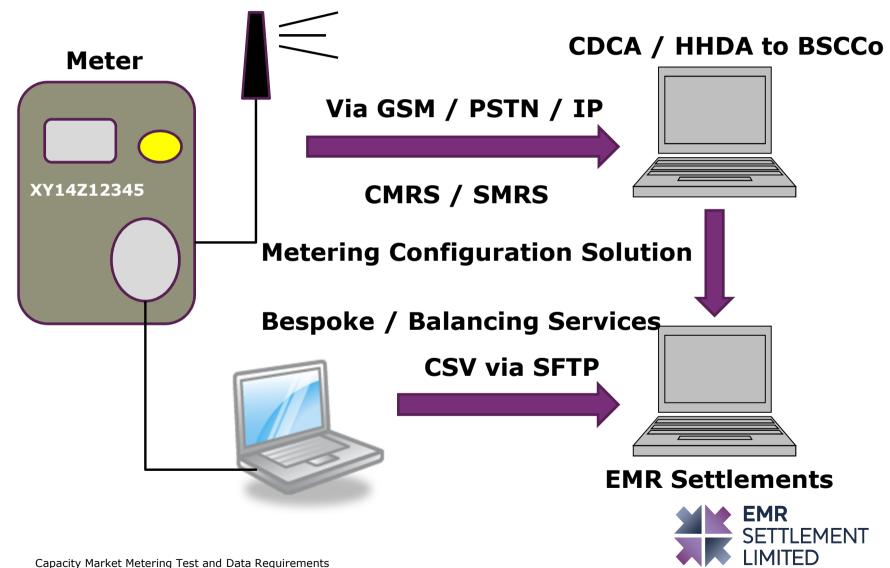
Metering Information for Aggregation Rule

- For settlement of Metered Volumes in the Capacity Market EMRS needs information on the Metering System
- Capacity Providers need to complete a form on their CMU Components
 - -By 1 June 2016 for TA

Row No.	CMU ID	Component ID	Effective Date	Metered Entity Type	Metered Entity Id	Multiplier	Distributor ID	LLFC ID	Boundary Point MPAN / MSID	Balancing Services ID
1	ABCD	Unit1	01/10/2018	MPAN	1200087654321	1.00				
2	ABCD	Unit1	01/10/2018	MPAN	1200012345678	1.00				
3	ABCD	Unit2	01/10/2018	MPAN	1200043218765	1.00				
4	ABCD	Unit2	01/10/2018	MPAN	1200056781234	1.00				
5	EFGH001		01/10/2018	MSID_NON_BSC	EFGH001NET	1.00	LOND	123	120005555555	ABCD1234

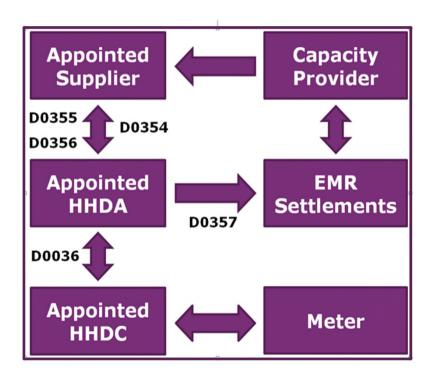


How is data submitted to EMRS?



Metered Volumes (BSC MPAN process)

- If a Capacity Provider needs to submit data using a BSC process (i.e. for Supplier Settlement Metering Configuration Solutions)
 - -Use a defined industry processes to submit data flows





Metered Volumes (Non-BSC process)

- If a Capacity Provider needs to submit data using a non-BSC process (i.e. for Balancing Services or Bespoke Metering Configuration Solutions)
 - Use a defined CSV format and submit over SFTP

HDR|STEP001|ABCD1234|20141211121500

MID|MSID|XY14Z12345NET00000|20141210

VAL|1|A|-26.4

VAL|2|A|-25.9

.

.

VAL|47|A|410.8

VAL|48|A|427.5

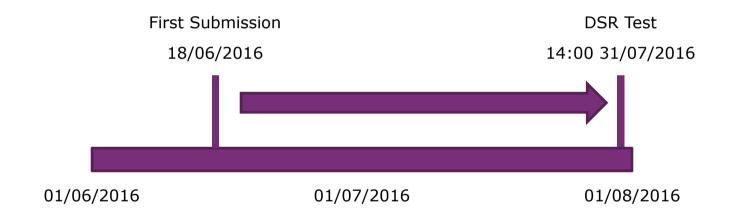
END|51

Where,

- –HDR File header (one record per file)
- –MID Meter Identifier (one record per day and one meter identifier)
- –VAL Half hour values (48 per day)
- END End file record with number of lines included
- Meter Identifier Type MSID
- -Metered Entity Identifier Up to 18 characters

How much data do I need to submit?

- For a DSR Test:
 - -6 weeks' worth of half hourly data
 - -To be able to determine the baseline

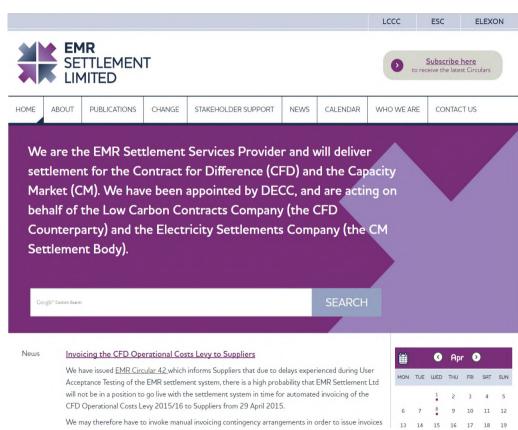




How will we communicate this?

EMR Settlement Website

- http://emrsettlement.co.uk/
- News
- EMR Circular
- Calendar
- Events
- Working Practice
- Guidance documentation





Any questions?

- Request a Metering Test
 - -contact@emrsettlement.co.uk
 - -020 7380 4333

- Metering Test Queries
 - -<u>iain.nicoll@elexon.co.uk</u>
 - -020 7380 4162









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 3 planned Capacity Market auctions (including prequalification and other key milestones) in the Operational Plan
- Amendments to the Regulations to be approved in June/July 2016
- Ofgem consultation closes on 27 May and plans to publish informal version of the amends end of June
- Charging Review analysis and stakeholder engagement complete by end of May and expected feedback to industry this summer
- Understand the Capacity Market warnings
- If not already please:
 - submit your Metering Assessments and request DSR tests
 - submit a Metering Test request and a Metering Statement1 to EMRS

Hold the Dates...

- **28 June 2016 -** De Vere Hotel, London
- 13 July 2016 Amba Hotel, Charing Cross, London

We are here to support you and understand there is a lot of uncertainty however we can build on all of our lessons learnt

After Lunch...

- 121's as per your arrangements
- *Drop In* System Demo and Registration Refresher

Contact us

	emr@nationalgrid.com
S has necessary transfer	https://www.emrdeliverybody.com/cm/home.aspx
The base and contribution	https://twitter.com/EMRDeliveryBody
S trang annual chapter	01926 655300

