



Annual Supplier Event

Prospero House, 241 Borough High Street, London SE1 1GA

19 September 2018

Agenda		
09:45 - 09:55	Introduction	Ruth Herbert, LCCC
09:55 – 11:10	Highlights	Daniel Harry, LCCC Daniel Minifie, LCCC Andrew Miller, LCCC
11:10 – 11:30	COFFEE	
11:30 – 12:20	Session 1: Implementing Exemption Schemes Energy Intensive Industries (EII), Green Excluded Electricity (GEE) & Final Consumption Levies	Nathalie Welch, LCCC Will Campbell, BEIS Carmel Golden, Ofgem Ross Haigh, LCCC
12:20 – 13:15	LUNCH Lunchtime workshop: 12:45 – 13:15 Improving LCCC's Forecasting	LCCC and workshop registrants
13:15 – 14:00	Session 2: Panel debate on the importance of demand forecasting	Chair: Andrew Miller, LCCC Panel members: Jack Barber, Amira Technologies/ Oliwia Milek, National Grid Jason Blackmore, British Gas
14:00 – 15:00	 Session 3: Introducing the EMR 5-year Review Capacity Market (CM) Call for Evidence + Q&A Capacity Market (CM) Rules Review + Q&A Contract for Difference (CFD) + Q&A 	Julian Frost, BEIS Evangelos Karagiannis, Ofgem Oluseye Onabolu, BEIS
15:00 – 15:15	Summary and close	Ruth Herbert, LCCC
15:15 – 16:00	Refreshments & Networking	

Introduction

Speaker: Ruth Herbert, LCCC

Our Vision is to be at the heart of the delivery of the UK's goal for secure, affordable and sustainable electricity.



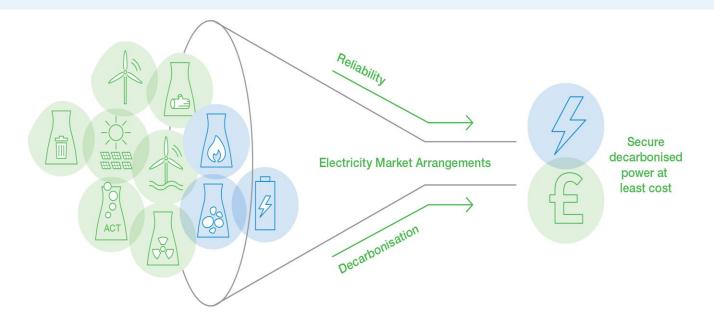
Our roles:

- 'CFD Counterparty' to Contracts for Difference for low carbon electricity generation
- 'Settlement Body' under the Capacity Market scheme to improve security of supply

Reliable, affordable and clean electricity

Both the **CFD and Capacity Market schemes became fully operational in 2016/17** in support of the electricity market objectives set by the government:

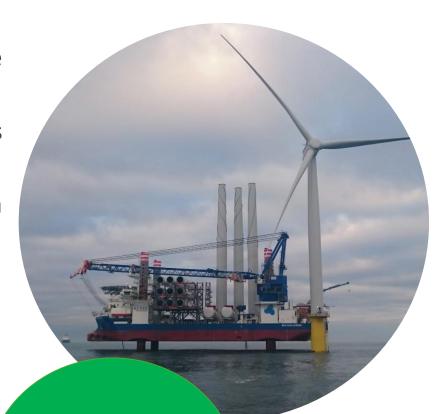
- reliable, affordable and clean
- attracting new sources of investment in the UK infrastructure
- making the market fairer.



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Contracts for Difference

- Private-law contracts providing price certainty to low carbon generators
- CFDs are awarded in the early stages of project development
- Aimed at enabling projects to secure a lower cost of capital
- Competitive allocation rounds run by the EMR Delivery Body deliver increased value for money for consumers



LCCC signs and manages CFDs with 15+ year duration

CFDs expected to power around 14 million homes by the mid-2020s

"CFD projects are moving from initial milestones to construction and operation — this is a fundamental shift in the maturity of our business and the portfolio."

James Rushton

Director of Scheme Delivery



Capacity Market



- Designed to ensure sufficient, reliable capacity in periods of system stress
- Enables the market to competitively set the price for capacity
- Gives eligible capacity providers a reliable revenue stream
- Capacity providers face penalties if they fail to deliver capacity when required
- Year-ahead and 4-year-ahead auctions are run by the EMR Delivery Body

financial transactions such as payments and penalties and provides meter assurance

Experts in scheme delivery

Our Mission:

is to implement and develop electricity market schemes, providing operational independence, expertise, insight and leadership.





Maximising added value to our stakeholders and consumers from our expertise and insights of scheme delivery

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Capacity Market Highlights

Daniel Harry, LCCC

The Capacity Market Scheme is aimed at ensuring security of electricity supply

- The CM auction sets a £/kw clearing price for all successful capacity, which determines the annual capacity payments that a capacity provider will receive.
- Capacity is grouped into Capacity Market Units (CMUs) for CM auctions and delivery
- Minimum size of 2MW for each CMU → can comprise of a number of smaller aggregated generators or demand side sites.
- **Suppliers fund capacity payments** via monthly payments based on forecasted market share during peak periods (16.00-19.00 on working days Nov-Feb).
- Once the actual data becomes available the payments are reconciled.

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Delivery partners: Roles and responsibilities



The below table describes the individual roles of each Delivery Partner:

National Grid (NG)	EMR Settlement Limited (EMRS) on behalf of Electricity Settlements Company (ESC)	
☐ Manage Pre-qualification for Auction	☐ Manage Credit Cover for prospective Capacity Providers and Suppliers	
☐ Manage Capacity Auctions	☐ Conducting Meter Tests and Meter Verification including site visits	
☐ Award and Manage Capacity Agreements	☐ Provides data for DSR Tests and SPDs	
☐ Conduct DSR tests and Satisfactory Performance Day Tests (SPDs)	□ Manages Settlements (receiving money from Suppliers to pay Capacity Providers) including service desk	
	☐ Receives meter data	
☐ Determines Terminations and Suspensions	☐ During a stress event – maintain capacity volume register, manage	
☐ Manages Obligation Trading	volume re-allocation, calculate penalty invoices	

BEIS sets the policy framework for the Capacity Market. Ofgem is responsible for maintaining the rules.

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Scheme overview

2017/18 FY			
Total CM payments	£220.7m		
Total available Capacity	54.7GW		
Total operational cost	£5.5m (£0.7m was refunded to suppliers)		
Since start of CM scheme (01/10/16 – 14/09/18)			
Total CM payments	£338.6m		
Total Credit Cover managed	£445m		

Year on year comparison

	2016/17	2017/18
No. of agreements	46	437
Capacity Auctions*	TA	TA + EA(T-1)
CM monthly payment (per capacity year)	£1.3m-£1.7m	£33m-£38m
Meters tested	109	172
Credit cover managed	£211m	£234.3m

^{*} Transitional Arrangement (TA)
Early Auction (EA)

Outcome of Delivery Years

2016/17 TA	Agreements	MW	Price (kw/h)	Total Value
Auction	57	803	27.50	22.1
Actual	46	620	27.50	17.1

2017/18 TA	Agreements	MW	Price (kw/h)	Total Value
Auction	32	312	45.00	14.0
Actual	28	296	45.00	13.3

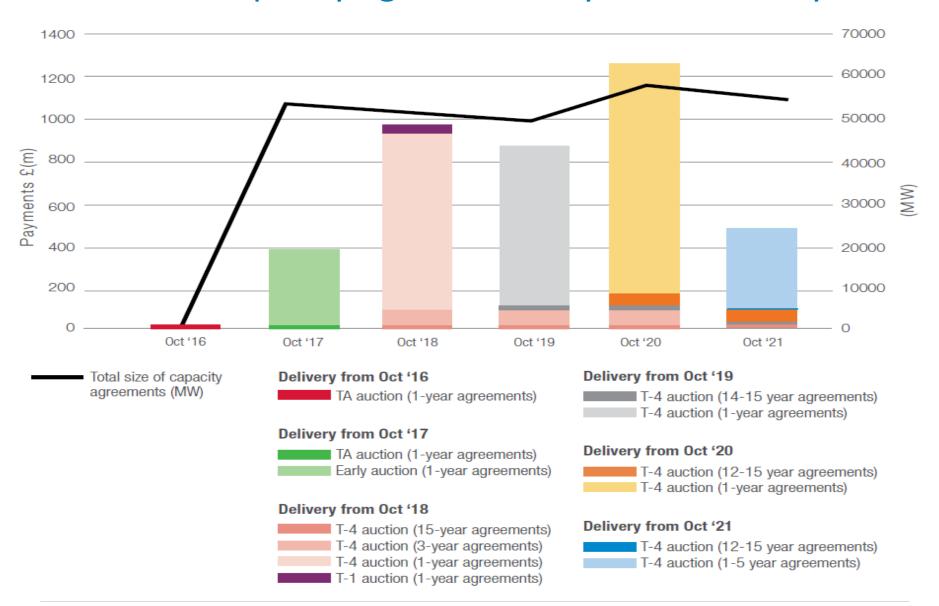
2017/18 EA	Agreements	MW	Price (kw/h)	Total Value
Auction	415	54,433	6.95	378.3
Actual	409	54,414	6.95	378.2



Capacity Market Auction Results

Delivery Year	Auction	GW	Price/KW	Total Value (£m)
2016-17	Transitional	0.6	27.50	17.1
2017-18	Transitional	0.3	45.00	14.0
2017-18	Early (T-1)	54.4	6.95	378.3
2018-19	T-4	47.5	19.40	922.1
2018-19	T-1	5.8	6.00	34.8
2019-20	T-4	46.4	18.00	834.4
2020-21	T-4	52.4	22.50	1,179.6
2021-22	T-4	50.4	8.40	423.5

Total cost of capacity agreements by auction and year



Recent operational developments

- Full Mock Stress Event carried out in May 2018. Lessons learned being progressed.
- 24 changes implemented to CM settlement operations including volume reallocation.

Forthcoming Changes

- Component re-allocation during the delivery year to be implemented for 2019/20.
- Automation of termination and capacity payment recovery for 2018/19.

LCCC / ESC Settlement System Release Pipeline

Theme: Prioritise Regulatory and Contract change

Snapshot: 19/09/2018

CFD Scheduled
CM Scoping ongoing

R12

October 2018

- Of13Storage in CapacityMarket
- •CM Recovery payments
- •Termination Fee Invoicing
- •Credit Cover changes
- Reference Price Feeds

R13January 2019

- Apportioned Metering
- P350 zonal transmission losses: Strike Price Adjustment
- •Ell User Interface
- •Final Consumption Levies¹

R14

February 201

- •P354 non-DTN impacts
- •P354 DTN impacts
- •P344 TERRE - I014 change

R15

•Of12 DSR

- •Of12 DSR Component Reallocation
- Aggregation Rule Automation (CP, CfD, Supplier)
- Relevant
 Balancing
 Services
 clarifications
 (CPs 279,
 289, 290)

Of12 design ongoing

R16

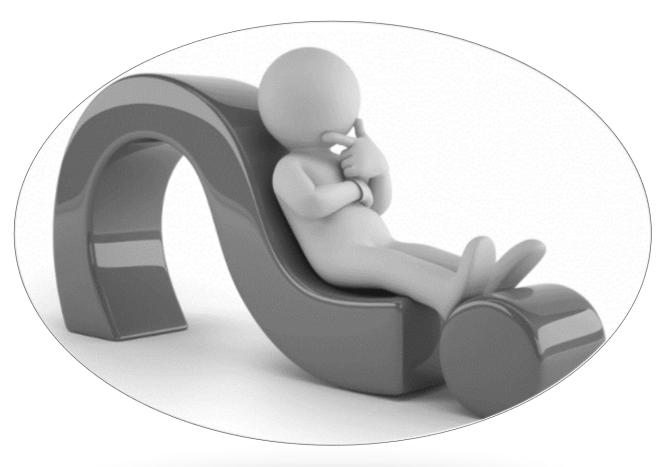
August 2019

- •P344 TERRRE – remainder²
 - P344 Rules impacts awaited

This information is intended as a guide only and is subject to change at the ultimate discretion of ESC/LCCC. It does not constitute legal or investment advice and should not be relied upon as such. This guide should not be viewed in any way as ESC/LCCC in any way restricting its ability to change the Settlement System Release Pipeline.

- 1 Subject to BEIS and Ofgem final approvals
- 2 Subject to Ofgem 2019 Statutory Rule change process

Questions?



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CFD Highlights

- scheme performance
- forecasting developments

Speakers:
Daniel Minifie, LCCC
Andrew Miller, LCCC

Delivery partners: Roles and responsibilities





The below table describes the individual roles of each Delivery Partner:

National Grid (NG) ☐ Administer CFD allocation Low Carbon Contracts Company (LCCC) ☐ Counterparty to CFDs ☐ Set Interim Levy Rate (ILR) and Total Reserve Amount (TRA)

EMR Settlement Limited (EMRS) on behalf of Low Carbon Contracts Company (LCCC)

Manage credit cover

Invoice and settle generator difference payments and supplier obligation levies

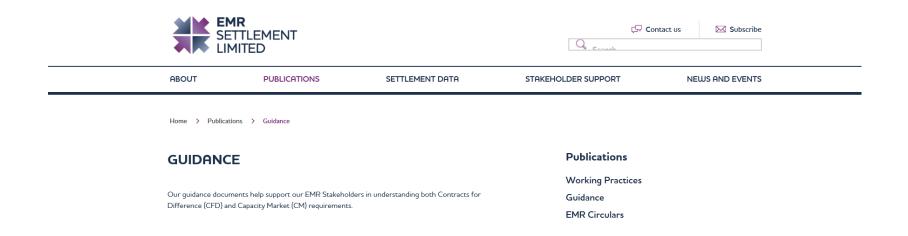
Receive metered data from the BSC

BEIS sets the policy framework for CFDs and decides on budgets and allocation rules. Ofgem is responsible for managing tier 2 application disputes.

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Understanding supplier charges

- CFD scheme based on Contracts for Difference (Electricity Supplier Obligations)
 Regulations 2014 as amended
- Supplier charges (daily) = ILR x supplier's eligible demand
- EMRS has produced a number of guidance documents: https://www.emrsettlement.co.uk/publications/guidance/



Demand definitions

- Gross demand term specifically created for CFD scheme will also now be applied to the CM Supplier Charge from 1 October 2018
 - Defined as total energy (MWh) supplied to GB, calculated at NBP
 - Includes all transmission connected generation and most small scale embedded generation, but excludes any microgeneration which does not have dedicated export meter (e.g. rooftop solar)
 - Guidance in 'G2 Calculation of Supplier Demand for EMR Charging' (12 July 2018)
- Eligible demand for CFD (only) = gross demand (EII + GEE)
 - GEE is reconciled quarterly approx. one year after the Quarterly Obligation Period when it was supplied, therefore it is not forecasted in ILR and TRA determinations
 - GEE is not exempt from Op Cost Levy payments
 - Now forecasting EII at 10.6 TWh pa (down from previous forecast of 11.7 TWh pa)

Key CFD stats

April 2017 – March 2018			
Total CFD payments	£543.8m		
Total CFD generation	6.7 TWh		
Total operational cost	£13.2m		
Since start of CFD scheme (30/06/16 – 03/09/18)			
Total CFD payments	£965.5m		
Total CFD generation	12.2 TWh		

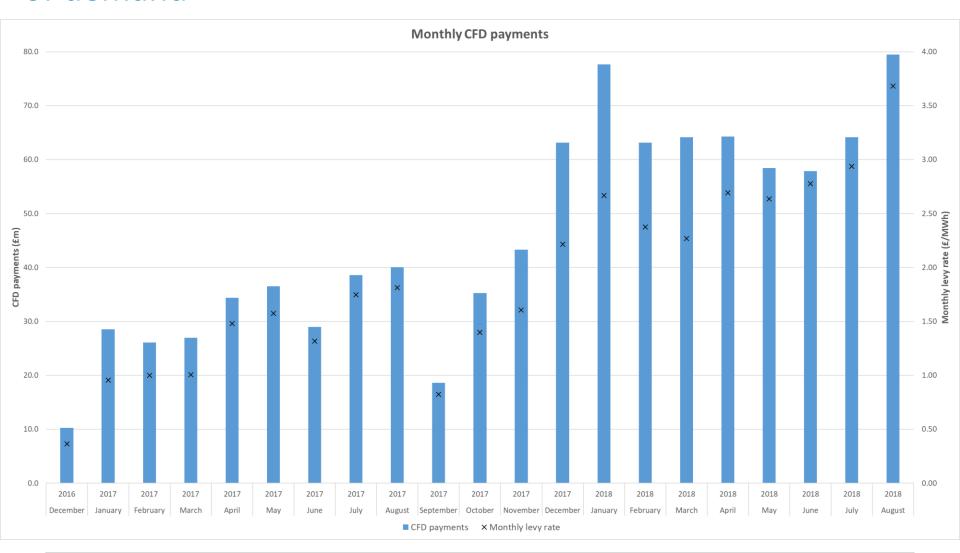
Active CFD plants

CFD plant	Technology	Capacity (MW)	CFD start date
Charity Farm	Solar	12	30 June 2016
Drax	Biomass conversion	645	21 December 2016
Burbo	Offshore wind	258	11 April 2017
Dudgeon Phase 1	Offshore wind	90	27 April 2017
Triangle Farm	Solar	11	18 July 2017
Dudgeon Phase 2	Offshore wind	210	2 August 2017
Dudgeon Phase 3	Offshore wind	102	1 October 2017
Walney Phase 1	Offshore wind	330	19 December 2017
Moor House	Onshore wind	12	3 April 2018
Walney Phase 2	Offshore wind	330	13 April 2018
Lynemouth	Biomass conversion	393	23 June 2018

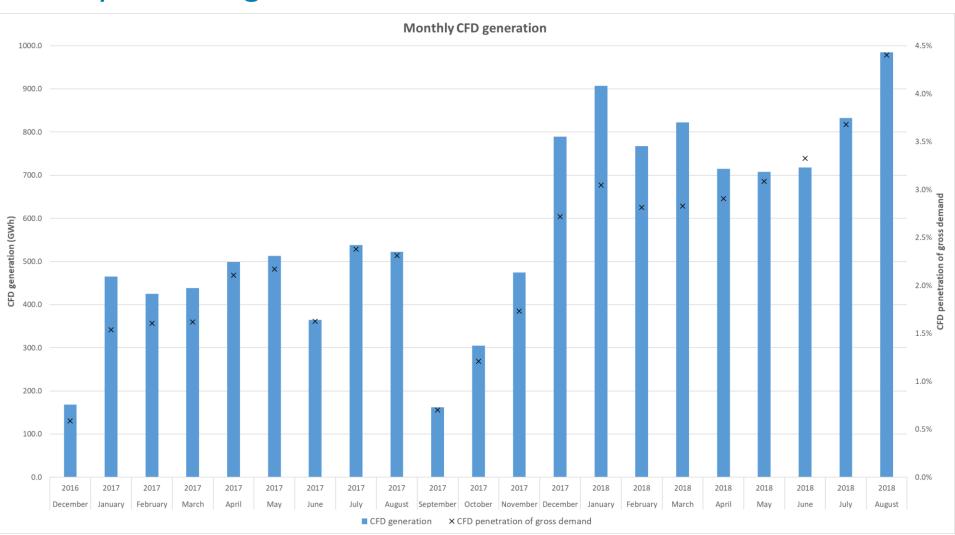
Active CFD plants (by technology)

Technology	No. of plants	Total capacity (MW)
Solar	2	23 (1.0%)
Biomass conversion	2	1038 (43.4%)
Offshore wind	6	1320 (55.2%)
Onshore wind	1	12 (0.5%)
All	11	2393

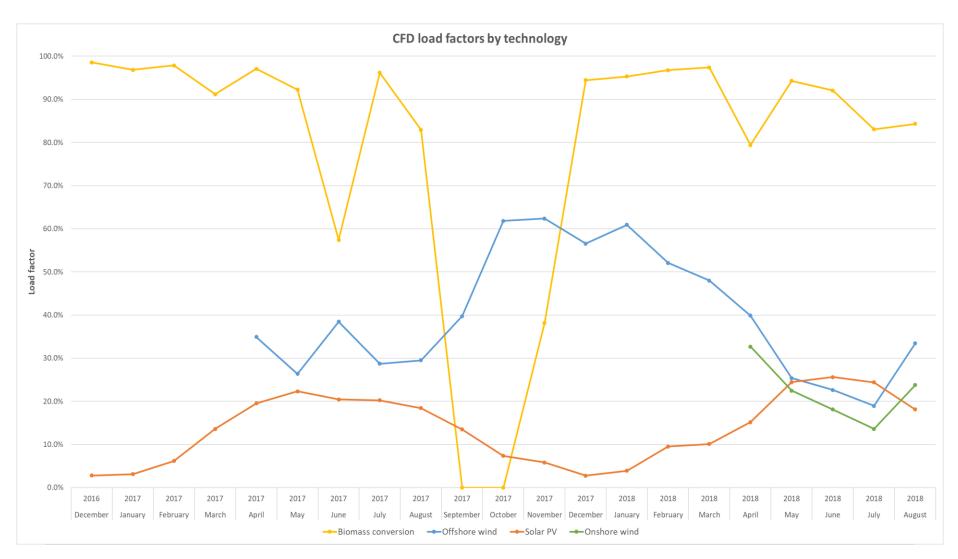
Monthly CFD payments approaching £80m and £3.70/MWh of demand



Monthly CFD generation approaching 1 TWh and meeting nearly 4.5% of gross demand



Actual monthly CFD load factors by technology

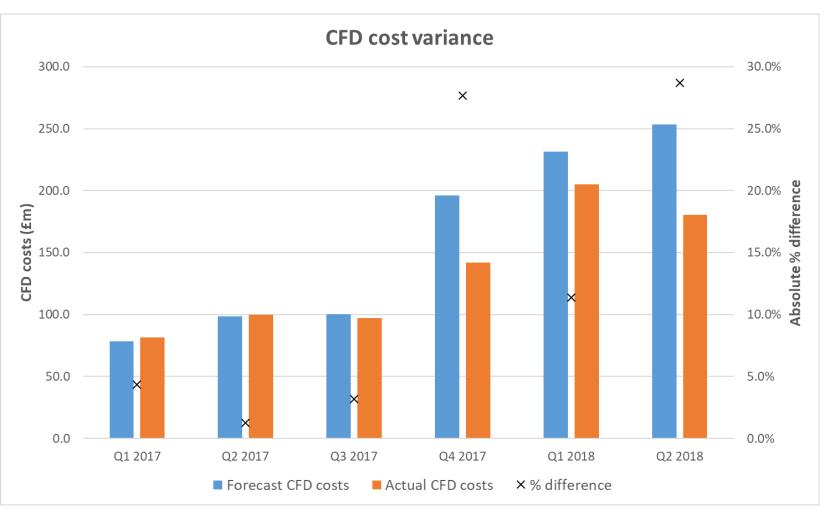


Actual monthly gross demand



Gross demand = eligible demand + EII + GEE

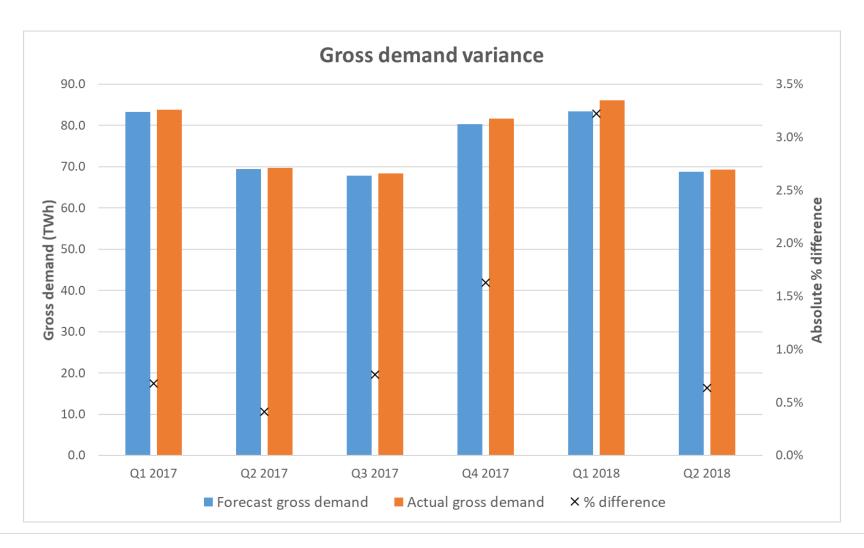
Quarterly CFD cost variance to forecast



Over-forecast of CFD costs in Q4 17 – Q2 18 related to:

- Generator start date delays
- Prolonged generator outages
- Low wind speeds
- Rising market prices

Quarterly gross demand variance to forecast

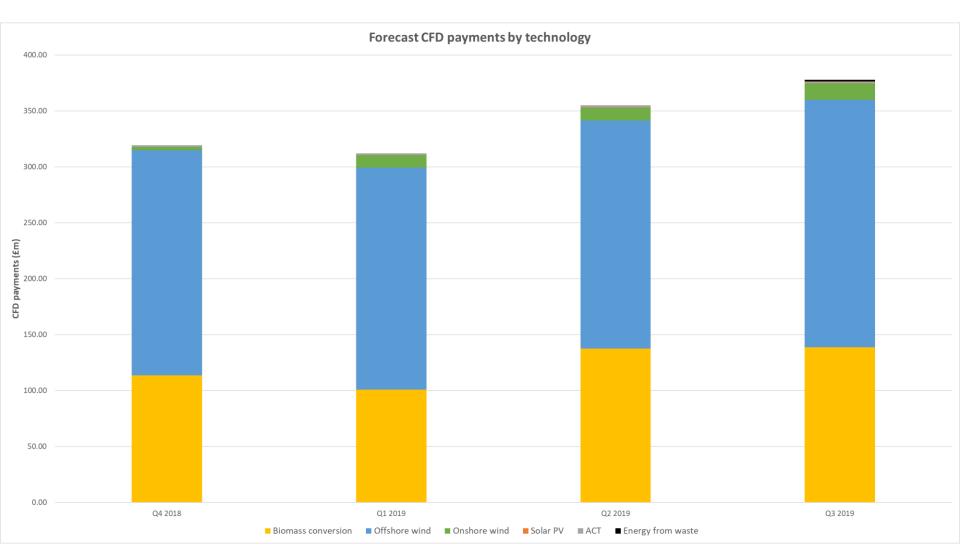


Expected CFD plants by 31 December 2019 (by technology)

Technology	No. of plants	Total capacity (MW)
Solar	2	23 (0.5%)
Biomass conversion	2	1038 (22.8%)
Offshore wind	11	2772 (60.8%)
Onshore wind	14	655 (14.4%)
Advanced Conversion Technology	1	25 (0.5%)
Energy from waste with CHP	1	45 (1.0%)
All	31	4558

An additional capacity of **2165 MW** is expected to come online by end of 2019 compared to current active portfolio (as of 18 Sept 2018)

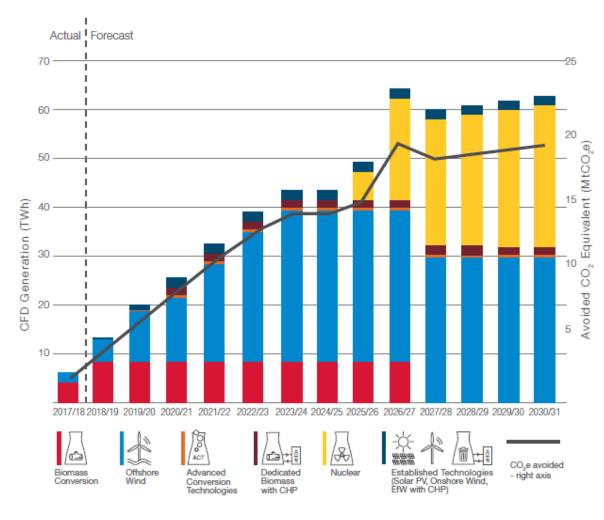
CFD costs over £1bn/year by December 2019



Taken from LCCC 15 month forecast (determined in June 2018) – see Transparency Tool

CFD costs set to double over next 12 months, driven mainly by offshore wind coming onstream

Projected CFD generation by technology



- Taken from LCCC 2017/18 Annual Report
- Estimated forecast of avoided GHG uses BEIS's published generation based long-run marginal emissions factor for electricity sector in 2017 of 0.301 kgCO₂e/kWh

Recent operational developments

- Efficiency and transparency improvements to the CFD Supplier Obligation Levy
- Application of the seasonal zonal transmission charging multiplier (BSC Mod P350)
- Energy Intensive Industries' exemption support for the CFD, RO and FIT schemes
- Negative pricing support for our CFD contracts
- System readiness for signed CFD Allocation Round 2 contracts
- Work potential solutions for implementing Final Consumption Levies exemptions

Future allocation rounds

- BEIS announced third CFD allocation would take place in May 2019 for Pot 2 technologies (less established technologies with up to £557m to be made available)
- Intention to hold further allocation rounds every 2 years

Who's in the forecasting team?



Andrew Miller



Andrea Marucci



Ulrich Arnheiter



Daniel Minifie



Sam Langston

Contents



Forecasting 2014-17



Highlights for 2017/18



What's next for forecasting?

Recap on forecasting: Road to the future



- Supplier Obligation Regulations require statistical forecasting;
- SOFM commissioned to meet regulations, and transparency tool developed;
- modelling and transparency expert groups drawn from industry
- Forecasting team formed;
- SOFM delivered to LCCC;
- 15 month forecasting capability added
- Analysis work for DECC on impact of supplier obligation regulations
- First CFD generation;
- Enhancement to transparency tool to provide weekly tracking;
- Own demand forecasting tool Nostradamus delivered
- First phase changes to supplier obligation regulations (paid to accrued)
- Second phase changes to supplier obligation regulations (reserve reduction)
- First wind CFD generation;
- First adjustment issued to reduce the TRA prior to invoice;
- First annual supplier conference

Highlights for 2017/18:

Demand forecasting is easier than cost forecasting



Demand forecasting variance

Quarter	Percentage %
Q2 17	0.4
Q3 17	0.8
Q4 17	1.6
Q1 18	3.2
Q2 18	0.6

CFD Cost variance

Quarter	Percentage%
Q2 17	1.3
Q3 17	3.2
Q4 17	27.7
Q1 18	11.4
Q2 18	28.7

Mostly driven by factors we expected to be non-recurring

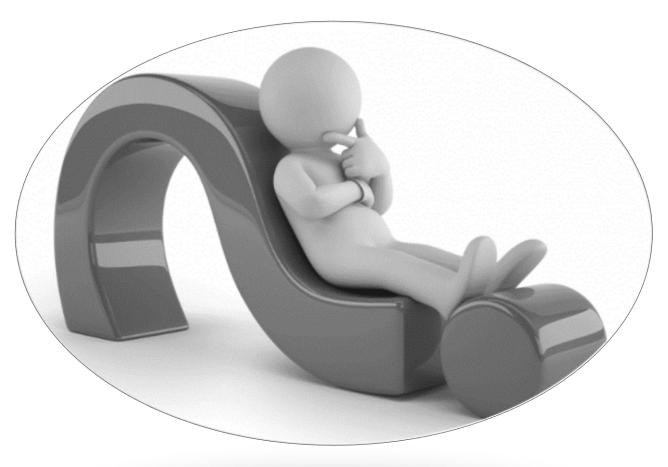
- We also performed several adjustments, both before and during the quarters
- Aimed at reducing the amount of suppliers cash we hold to the minimum needed

What's the forecasting roadmap?

- 1. Expansion of gross demand forecasting to Capacity Market (peak demand of 12.168 TWh for 18/19)
- 2. Use of CFD cost forecasts (plus peak demand forecast) by OFGEM for Standard Variable Tariff cap
- 3. Next steps following review of SOFM: lunchtime workshop explores findings
- 4. Forecasting tools architecture updated in line with LCCC data strategy



Questions?



Session 1: Implementing Exemption Schemes

- Energy Intensive Industries (EII)
- Green Excluded Electricity (GEE)
- Final Consumption Levies (FCL)

Energy Intensive (EII) Industries

Nathalie Welch, LCCC

Contents

- 1. What is the EII exemption?
- 2. Relevant Arrangements
- 3. Central Meter Registration Service (CMRS)
- 4. Supplier Meter Registration Service (SMRS)
- 5. Roles and Responsibilities
- 6. Changes to Exemptions
- 7. Guidance



What is the Ell exemption?

- The Contracts for Difference (CFD) scheme includes a mechanisms to **lessen the** burden of the Supplier Obligation for **high energy users**.
- An Electricity Intensive Industry (EII) consumer, who uses electricity for a "specified activity" may apply for an EII certificate with BEIS.
- The EII itself is responsible for notifying its Supplier that it possesses a certificate.
- The responsibility of the **Supplier is to ensure the relevant arrangements are in place**.
- The EII exemption is calculated as a percentage of the Supplier's gross daily demand with a maximum of 85%.
- Then the net metered value is used to calculate the Supplier's daily Interim Levy Rate contribution on the daily Supplier invoice.

Relevant Arrangements

- This is to ensure the data flows are being received to EMRS so the exemption can be applied.
- Depends on which of the following registration systems has been used to register the meter to which the EII certificate relates.
 - Central Meter Registration Service (CMRS)
 - Supplier Meter Registration Service (SMRS)
- The EII exemption is live from when the relevant arrangements are in place.

Central Meter Registration Services (CMRS)

- Typically used for transmission-connected sites where EMRS will receive the relevant metered data via the BSC.
- Suppliers with EII customers must **provide their customer with the relevant details** for its EII application.
- Suppliers are required to **register BM Units** and allocate the relevant meters to those BM Units to allow metered volumes associated with its customers to be accurately captured.
- Suppliers may be required to update its EMR Aggregation Rules for CFD and any Metered Volume Reallocation Notifications (MVRN) that are in place as meters with an EII certificate must be captured separately.
- Suppliers with meters registered in CMRS do not need to notify LCCC or EMRS that they have a customer with an EII certificate, although they may be contacted by EMRS to confirm and discuss the metering set-up and Aggregation Rules.
- The exemption is applied from the date the relevant BM Unit is compliant with the BSC, or the day the EII certificate came into force, whichever is the later.

Supplier Meter Registration Services (SMRS)

- Typically used for distribution-connected sites where EMRS will receive the relevant metered data via Half-Hourly Data Aggregators (HHDA).
- Suppliers with EII customers must **provide their customer with the relevant details** for its EII application.
- When notified by the EII customer that it holds a valid EII certificate, the Supplier must instruct its HHDA to send half hourly metered data to EMRS.
- The same applies if the EII customer is lost, suppliers must notify their HHDA.
- Once the HHDA has confirmed it will submit the metered data (equivalent to D0355 data items) to EMRS, the Supplier must notify EMRS of the confirmation details from the HHDA.
- The **exemption** is applied from the Effective from Settlement Date within the D0355 (reference J1869), or the day the EII certificate came into force, whichever is the later.

Roles and responsibilities

The below table describes the individual roles of each Delivery Partner:

Low Carbon Contracts Company (LCCC)

- ☐ Responsible for managing the EII scheme
- Overseeing and ensuring regulations are followed

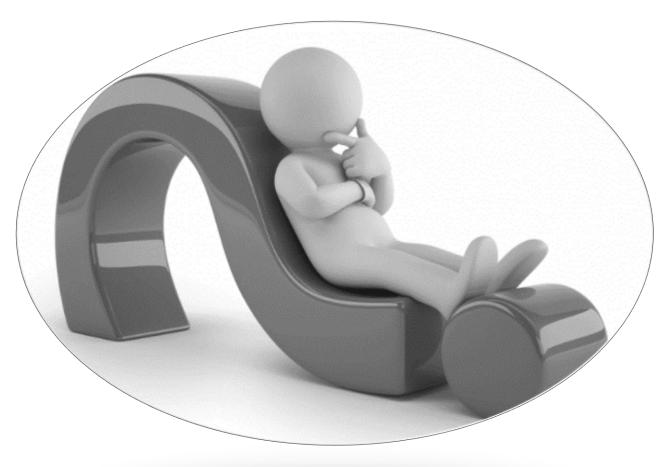
Department for Business, Energy & Industrial Strategy (BEIS)

- ☐ Issues Ell certificates to customers
- ☐ Pass on information to LCCC and EMRS
- ☐ Govern changes to Ell scheme

EMR Settlement Limited (EMRS)

- ☐ Validate Ell meter against Ell certificate issued from BEIS
- ☐ Apply exemption to Suppliers CFD Aggregation Rules
- ☐ Support processes for Change of Supplier, Expiry of EII Certificate, EII proportion change and Revocation of EII Certificate and update Aggregation Rules as a result.

Questions?



Changes to Ell Exemptions

William Taylor, BEIS

Widening Eligibility

Current arrangement

Eligible EIIs are exempt from up to 85% of the indirect costs of RO and CfD schemes and compensated for up to 85% indirect costs of Feed-In Tariffs (FITs) scheme.

Eligibility for the three schemes is based on a company being in an eligible sector and having an electricity intensity at 20% or more of its Gross Value Added (GVA)

Why are we consulting?

To establish whether there is evidence of competitive distortions resulting from the current eligibility

criterion.

What are the proposed changes?

- 1. Do nothing
- Lower GVA to 17%
- 3. Lower to 15%
- 4. Lower to 10%

We have also proposed varying aid intensity (AI) with electricity intensity (EI)

2a: Al falls to 50% for businesses with El at or above 17 but below 20%

3a: All intensity falls to 50% for businesses with El at or above 15 but below 20%

4a: Al falls to 50% for businesses with El at or above 15 but below 20%. Al to 35% for businesses with El at or above 10 but below 15%

Off Sen



Administrative Changes

Opening a new meter

- The exemption proportion should be based on the period of at least 3 months prior to the application throughout which the meter was in use;
- the exemption proportion should be reviewed on receipt of each quarterly report until it is based on a total of at least 12 months of available data.

Changes to meter-sharing:

- Where a business starts to share a meter or stops sharing a meter, the exemption proportion should be based on the period of at least 3 months since the change in meter-sharing arrangements;
- Where a business starts or stops making an ineligible product using electricity from a meter, the
 exemption proportion should be based on the period of at least 3 months since the change in meter
 use.

Expiry date for certificates

For existing businesses, certificates should expire at the end of June or, where this would result in the
certificate expiring after 6 months or less, the end of the following June.

Timing of quarterly reports

 Businesses must report to BEIS before the last working day in the months of March, June, Sept and December on whether they still carry out the 'specified activity' (i.e. make the eligible product) to which the certificate relates.

> Department for Business, Energy & Industrial Strates



Ell Guidance

LCCC Guidance

• For the Energy Intensive Industry Guidance, please click here.

EMRS Guidance – WP25

• For the WP25 Guidance, please click here.

BEIS Guidance

• For the BEIS Guidance, please click here.

Green Excluded Electricity (GEE)

Natalie Welch

Contents

- 1. What is the GEE exemption?
- Quarterly and Annual Mechanisms
- 3. Roles and Responsibilities
- 4. Determinations by Ofgem
- 5. Guidance



What is the GEE exemption?

- The Contracts for Difference (CFD) scheme includes a mechanism to not disadvantage green energy generation in other European Union countries (i.e. imported renewable energy) and has been live since April 2015.
- Recognised EU Guarantees of Origin (GoO) are used to identify the GEE exemption.
- The exemption will be implemented by adjusting electricity suppliers market shares in the quarterly reconciliation process through the CFD Interim Levy Rate contributions.
- **Application deadline is 6 months** following each quarter e.g. a submission for GEE electricity supplied between January March has to be submitted by 30 September.
- Each Supplier applies for their own GEE exemption amount, and this value is then
 adjusted in proportion to the total GEE amounts for all Suppliers, then capped in line
 with an overall total GEE maximum.
- GEE is a daily metered value, but is only be applied retrospectively when the quarter is reconciled and appears on the quarterly Supplier reconciliation invoice.

Quarterly & Annual Mechanism

Quarterly Reconciliations

 Reconciliations will take place 3 months after the month in which the determination is made

e.g. electricity supplied between April – June 2017 is submitted by December 2017 and the rec takes place on April 2018.

Annual Reconciliation

- Any GoO requests that are being presented to Ofgem must be validated by an auditor.
- The output of the audit, i.e. the audit report, will be used by Ofgem to determine whether there is adequate assurance for the EU GoOs to be used by LCCC in its determinations of GEE.

Roles and responsibilities

The below table describes the individual roles of each Delivery Partner:

Low Carbon Contracts Company (LCCC)

- ☐ Responsible for managing the GEE scheme
- Overseeing and ensuring regulations are followed

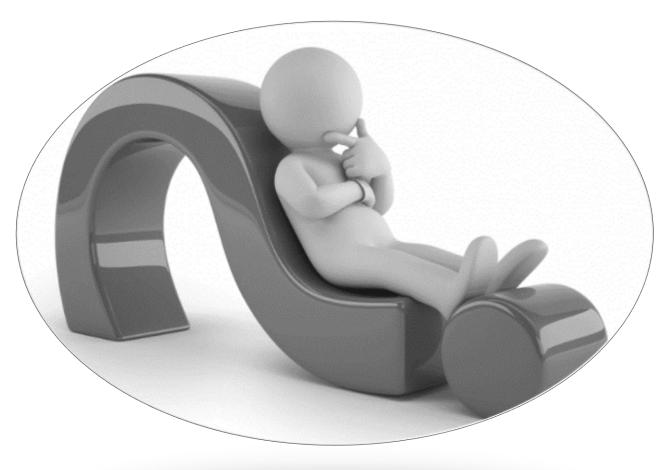
OFGEM

- ☐ Ensure that the source and consumption of identified electricity are suitable to consider as GEE volumes
- ☐ Responsible for providing annual audited figures to EMRS

EMR Settlement Limited (EMRS)

- **☐** Validate Suppliers GEE applications
- ☐ Check that total validated submissions for the quarter do not breach the GEE cap
- ☐ Undertake quarterly reconciliation process, excluding effective GEE volumes
- ☐ Apply redetermination of GEE as per Ofgem instructions

Questions?





Ofgem's Annual GoO Recognition Process

Carmel Golden, Ofgem



Ofgem's Role

- All EU member states are required to maintain a renewable energy GoO scheme
- Ofgem administers the REGO scheme in GB on behalf of BEIS
- Ofgem are required to recognise other EU member states GoOs if they meet certain criteria

Use of GoOs

- Primary use of REGOs/GoOs in GB is for Fuel Mix Disclosure (FMD).
- Ofgem "recognises" given quantities of electricity as "renewable", for use in suppliers' annual FMD, underpinned by SLC 21
- In practice: 'snapshot' on 1 July of suppliers' GB REGOs and EU GoOs issued in the previous financial year (April March)
- The FMD regulations requires that there be "evidence of supply in Great Britain of the electricity referred to in the guarantee of origin"
- Ofgem recognises EU GoOs using a set process as we have to assess proof of supply and aren't connected to AIB



- By midday on 1 July suppliers must submit the GoO recognition request in respect of the previous disclosure period (April – March).
- This must include:
 - GoO request with the appropriate declarations
 - GoO Spreadsheet template available <u>here</u>
 - Independent audit report prepared to ISAE 3000 or equivalent
- Onus is on <u>electricity suppliers</u> to:
 - liaise with the organisations they obtain EU GoOs from to ensure that information is collated and submitted to Ofgem correctly
 - Satisfy themselves that they have appropriate proof of supply evidence for each GoO
- GoO cancellation statements and proof of supply evidence do not have to be submitted but must be available for sample checks by auditor
- The evidence referred to in the GoO request must be held for six years from the date that it is presented to Ofgem.



- Ofgem review the GoO request and audit reports and completes ad hoc checks on the spreadsheet and supporting evidence
- We retain the right to request further information or do our own checks on the GoO cancellation statements or proof of supply evidence
- Ofgem will confirm how many GOOs have been recognised for the purposes of FMD
- Ofgem will also confirm the number of GoOs that meet the criteria for the FIT exempt supply – due to the cap this may not be the final exempt supply volume for the purposes of FIT levelisation.
- The audit report and recognised GoOs may also be used to identify green electricity which may be excluded from supply volumes in the Contracts for Difference (CFD) scheme. The Low Carbon Contracts Company (LCCC) is responsible for managing the CFD scheme.
- Ofgem send information to EMRS for this purpose.

W33.5 million GoOs were recognised by Ofgem in 2017-18. More than 8 million eligible for GEE.



Issues

- Mismatch between summary table and the spreadsheet
- Total number of GoOs not confirmed in the audit report
- Sample not covering all countries and/or technologies
- Proof of supply evidence not categorised correctly in spreadsheet ie 'log of trades' for explicit trades

Queries

- **Import Limit** Following consultation we decided to allow unconstrained implicit trading for GoOs from the 2016-17 scheme year onwards. A constrained (capped) option was considered but not taken forward.
- 1 GoO used in multiple scheme As set out in the guidance document a GoO can be used for FMD, FIT and for green excluded electricity under the CFD scheme, if they meet the legislative requirements of each of the schemes
- Swedish GoOs 'For use in GB FMD' and county of consumption on CESAR

GEE Guidance

LCCC Guidance

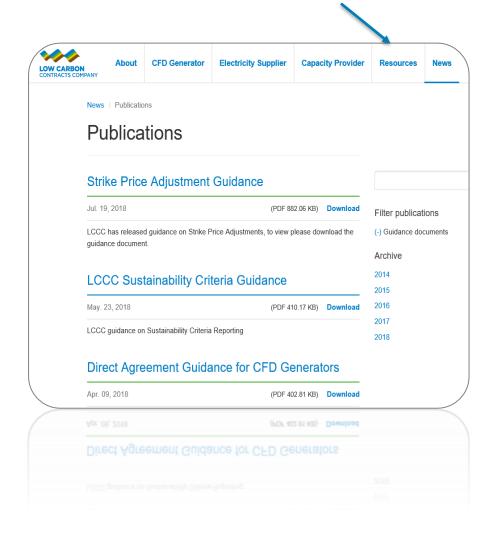
For the <u>Green Excluded Electricity</u>
 <u>Guidance</u>, visit LCCC Guidance's
 Page

EMRS Guidance -WP7

 For the WP7 Guidance, please <u>click</u> here.

Ofgem Guidance

 For the Ofgem Guidance, please click here.



Guidance available here

Questions?



Final Consumption Levies (FCL)

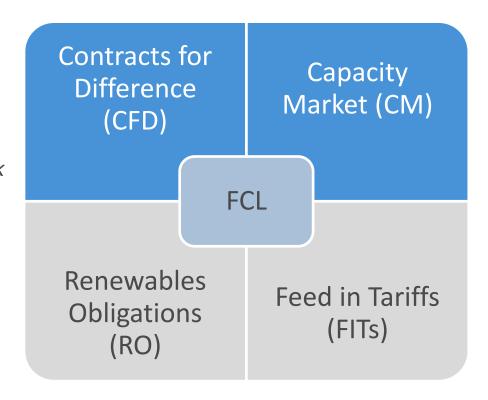
Ross Haigh, LCCC

<u>www.lowcarboncontracts.uk</u> 71

Final Consumption Levies (FCL)

What are Final Consumption Levies?

- 1. Current Publications:
 - a) Smart Systems and Flexibility Plan 2017 (BEIS & Ofgem)
 - b) Clarifying the regulatory framework for electricity storage: licensing (Ofgem)
- 2. Future publications:
 - a) Updated Ofgem guidance
 - b) Updated Storage Licence (BEIS)

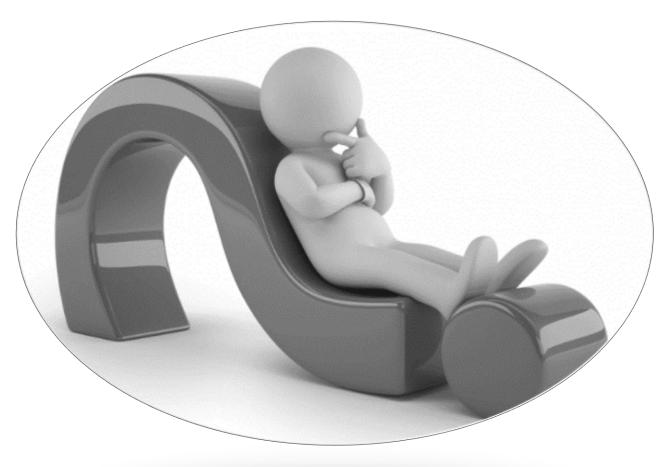


Final Consumption Levies (FCL)

Current Status

- 1. Metered volumes supplied to Generation site for purposes of generation are currently not available to LCCC/ESC.
- 2. LCCC is obligated under the regulations to use BSC data.
- 3. LCCC/ESC is in discussions with ELEXON and EMRS on potential interim solutions and enduring solutions:
 - a) The preferred **interim solution** provides a mechanism for LCCC/ESC to identify eligible meters which could be used for measuring the volumes of FCL exemptions.
 - b) The interim solution is scheduled to be available in Q1 2019 **BUT** is subject to Ofgem consultation decision and guidance publications as well as BEIS amendment of CFD regulations.
- 4. ELEXON FCL Consultation planned in September 2018 to kick off work on the enduring solution.

Questions?



Session 2: Panel debate on the importance of demand forecasting

Panel: the importance of demand forecasting

Chair:

☐ Andrew Miller, LCCC

Panel members:

- Oliwia Milek, National Grid
- ☐ Jack Barber, Amira Technologies
- ☐ Jason Blackmore, British Gas

Session 3: Introducing the EMR 5-year Reviews

Introducing the EMR 5-year Reviews

Chair:

☐ Omer Ahmad, LCCC

Speakers:

- ☐ Julian Frost, BEIS
- Evangelos Karagiannis, Ofgem
- ☐ Oluseye Onabolu, BEIS

Capacity Market (CM) Call for Evidence

Julian Frost, BEIS

Capacity Market five year review

Department for Business, Energy and Industrial Strategy

Julian Frost





The Capacity Market and where we're at

The Capacity Market was introduced in 2014, and annual auctions have been run securing capacity up until 2021/22.

Over the past decade the market landscape has been continually evolving. We've seen:

- growth in decentralised, often small scale, innovative sources of capacity, including renewables;
- growing importance and value of flexibility; and
- greater interconnection with other European countries.

We are aware of some stakeholder concerns relating to aspects of the CM's design. These include:

- Participation of renewables in the CM.
- Interconnector de-rating factors Recent studies note diminishing returns for new interconnection, and correlated stress events in interconnected markets.
- Penalties are the current arrangements with heavy termination fees, but light nonperformance penalties effective?
- Fraud and error reduction and identification
- A level playing field ensuring all technologies, and small vs large, can compete.



The five year review

We're reviewing the Capacity Market (CM) as it is five years since the legislation introducing the CM was passed. This review will assess whether:

- the CM is still needed in future;
- the CM is meeting its objectives of ensuring security of supply, cost effectiveness, and avoiding unintended consequences;
- these objectives remain appropriate; and can they be achieved in a way that imposes less regulation.

Key elements of the review will include:

- Call for evidence seeking evidence on how well the CM has been working and views on any issues.
- **Consultation** Published on 8th August. Closes 1st October. Consulting on changes to address immediate issues ahead of the July 2019 pre-qualification. Other issues will be taken forward to a later timetable.
- Final report a final report to Parliament in Summer 2019.





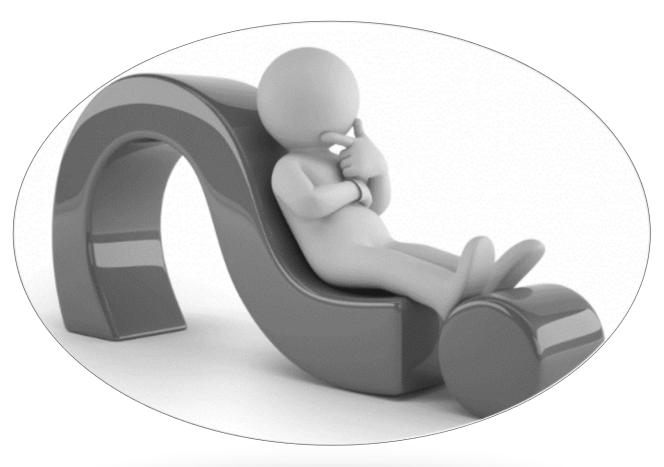
How can you get involved?

- We are seeking your views through a call for evidence.
- Consider what the key issues are which need to be looked at to ensure the CM remains fit for the future.
- Reply to the call for evidence via the online link or email energy.security@beis.gov.uk





Questions?



Capacity Market (CM) Rules Review

Evangelos Karagiannis, Ofgem



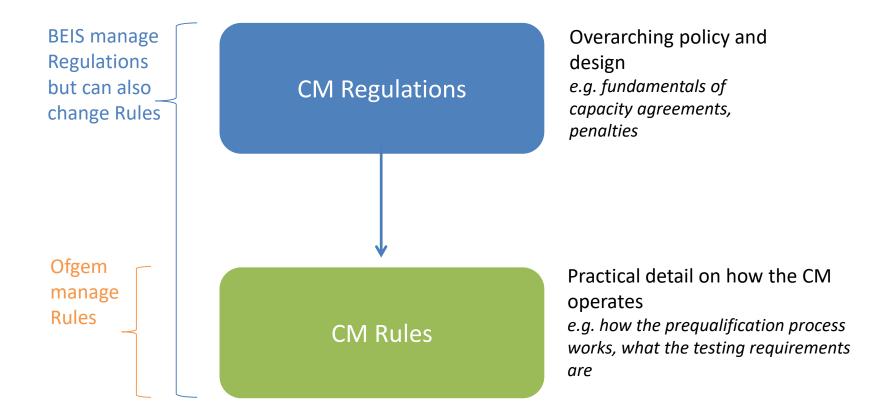
Capacity Market Rules Five Year Review

2018/19 Process and Future Work





What are the CM Rules?





CM Rules Five Year Review

- Regulation 82 of the Electricity Capacity Regulations and Rule 15.2 of the CM Rules require us to carry out a review of the Rules by 1 August 2019.
- This review is intended to assess whether the Rules continue to meet their objectives, whether the objectives remain appropriate, and whether those objectives could be met with less burden.
- Our review is in parallel with and complementary to BEIS' Five Year Review which will take into account the conclusions of our review.





- Our annual Rules change process
 - a more efficient way to assess and implement changes to the Rules
 - give industry greater responsibility in assessing the value of amendments
- Achieve the objectives of the Rules with less burden on participants
 - simplification of the Rules
 - reduction of regulatory burden from requirements in the Rules





- Secondary Trading arrangements
 - right incentives and opportunities to engage in the secondary trading market
 - intention to do this in conjunction with industry associations
- NGET's incentives in the Capacity Market
 - ensure that they remain fit for purpose
 - review incentives on dispute resolution, DSR prequalification, demand forecasting, and customer and stakeholder satisfaction



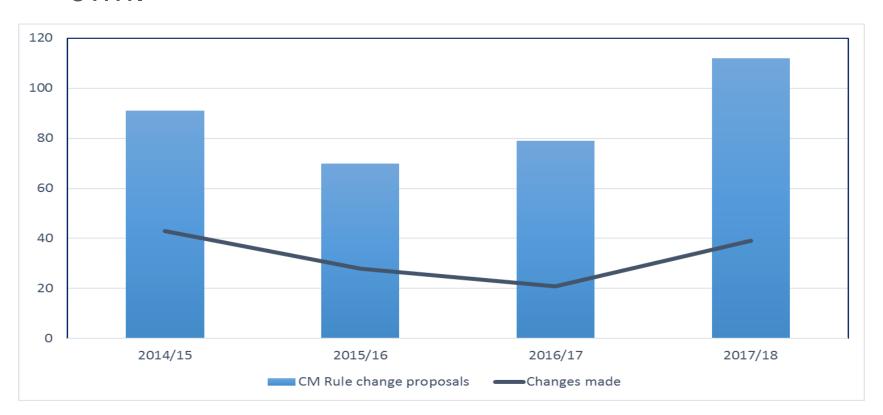
The CM Rules Five Year Review Process





CM Rules Change Proposals

 Since 2014, we have received 353 CM Rules change proposals and raised 16 proposals of our own.





CM Rules Change Process during the Five Year Review

- As BEIS' Review may consider significant changes to the Capacity Market framework and to policy, it is not appropriate for us to make substantial changes to the Rules during this process.
- As a result, we will limit the process to previously delayed proposals and urgent new proposals, and they will be assessed as part of the Review.



CM Rules Change Process during the Five Year Review

- We will implement proposals taken forward in previous Rule change processes, consider proposals that we postponed until the Review, and any urgent change proposals.
- Main focus on the implementation of DSR Component Reallocation (Of12) and amendments to the ALFCO formula (CP279, CP289, CP290).
- We will also review our process for making changes to the Rules.



Q&A

Views and evidence on the CM Rules Five Year Review can be submitted until the 9th of October – responses to EMR CMRules@ofgem.gov.uk.

Please register for our stakeholder workshop event on EventBrite by the 1st of November.



Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where practical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.

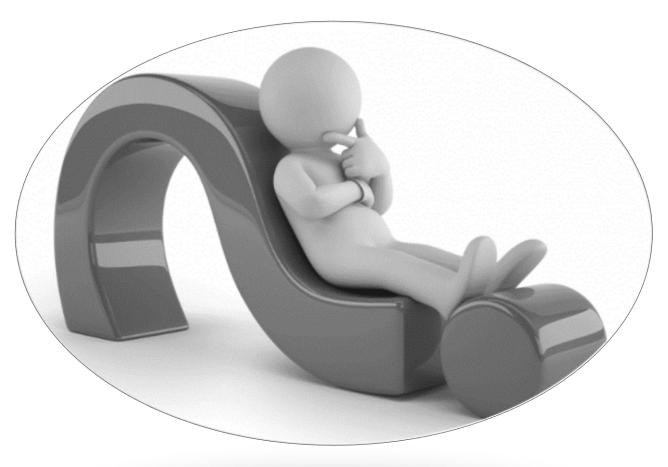
We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.



Contract for Difference (CFD)

Oluseye Onabolu, BEIS

Questions?





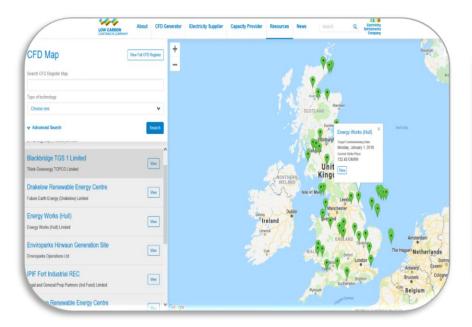
Online CFD scheme resources

www.lowcarboncontracts.uk

Resources available here



CFD Register Map



Transparency Tool



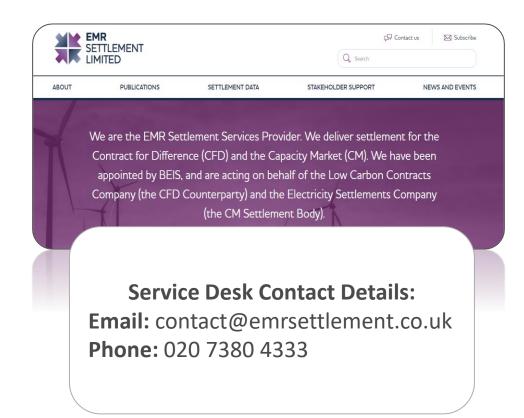
Further settlement information



EMRS Website -

https://www.emrsettlement.co.uk/

- Working Practice
- Guidance
- Settlement Data
- EMRS Circulate



Upcoming Events:

Intro to EMR Arrangements for Suppliers – 10 October 2018
 https://www.emrsettlement.co.uk/calendar-event/introduction-emr-arrangements-event-suppliers-3/

Tell us what you thought of today...

Fill in our online event survey:

http://surveys.comres.co.uk/wix/p1868396258.aspx



Refreshments & Networking 15:15 – 16:00

Room: Connect Lounge

