

Regulatory Briefing

Capital Markets Day

17 October 2013



Agenda

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Renewables Obligation

Contracts for Difference

Levy Control Framework

Capacity Mechanism

Implications for Drax



Renewables Obligation (RO)

Drax announced conversion plans and financing predicated on three units under the RO scheme

Support mechanism for renewables since 2002

- Well established, functioning market

Closes to new projects in March 2017

- Replaced by CfDs⁽¹⁾

2014 to 2017 – new projects eligible to apply for either RO or CfD

For biomass conversions:

- Support deemed to start in 2007 – RO ends 2027
- Each unit conversion a separate project

For Drax:

- First converted unit will remain in the RO
- Support grandfathered at 1 ROC⁽³⁾ until 2027
- Subsequent conversions before 2017 may be RO or CfD
- Any units converting after 2017 will be CfD



“Conversion (...) to sustainable biomass offers a quick, cost-effective way to rapidly decarbonise electricity generation in the short to medium term, as well as contributing to security of supply”

EMR⁽²⁾ Delivery Plan (July 2013)

(1) Feed-in Tariff with Contracts for Difference
(2) Electricity Market Reform
(3) Renewables Obligation Certificate

RO – Economics

Strategic objective to contract biomass on long-term basis

Converted units have an inbuilt (imperfect) “ROC hedge” of fuel exposures

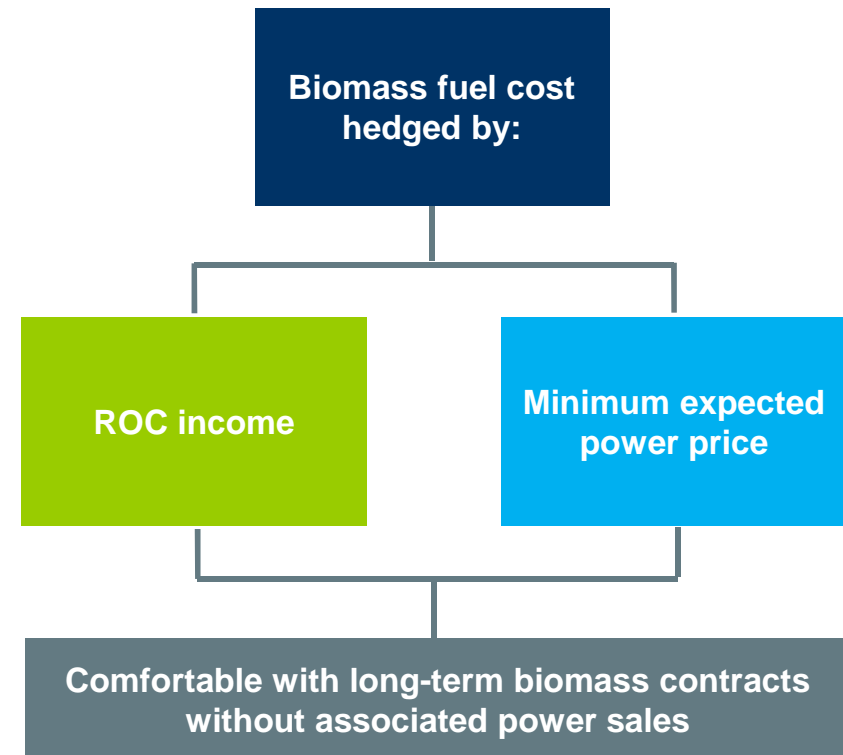
- Absent in coal-fired generation

Analysis of biomass generation at 1 ROC with power price range

- With minimum gas prices and a value of carbon – high confidence that prices will be >£30/MWh

Illustrative Spread Analysis

Margin Calculation	£55/MWh Power Price	£30/MWh Power Price
Income (per MWh)		
Power	55	30
1 ROC	45	45
1 LEC	5	5
Cost (per MWh)		
Biomass ⁽¹⁾	(80)	(80)
Bark Spread	25	nil



(1) Biomass cost based on £8/GJ and standard coal plant efficiency

RO – Pros and Cons

Advantages	Disadvantages
<ul style="list-style-type: none">✓ Well established and functioning market✓ Potential to benefit from positive power price movements (e.g. capacity squeeze)✓ ROC support levels for conversion now set and grandfathered until biomass support expires in 2027✓ Easy for suppliers (i.e. Haven) to manage on an annual basis and generates positive working capital for suppliers✓ ROC price indexed to RPI✓ Potential to benefit from higher recycling fees if there is a shortage of ROCs in any year	<ul style="list-style-type: none">✗ Exposure remains to power price falls, driven by gas prices or removal / re-profiling of the carbon price floor✗ Some political risk remains✗ Buying power rests with the major suppliers, who have a choice to purchase ROCs (at a discount) or pay the buy-out✗ Creates working capital issues for generators, as payments typically settled in August following the end of the compliance year

DECC now consulting on measures regarding the transition from RO to CfD

- RO setting may move to February each year from the previous September – more accurate RO setting
- Fixed price ROCs may be introduced from 2017

CfDs – Background

Future support regime for low carbon generation

CfD characteristics

- Private law contract
- Term of support limited to 2027 for converted units
- Designed to deliver stable revenue through difference payments to sales in power market

Draft strike prices published June 2013

- Set at a discount to RO to reflect lower risk
- Consultation underway

Payments under CfD funded through a levy on electricity suppliers

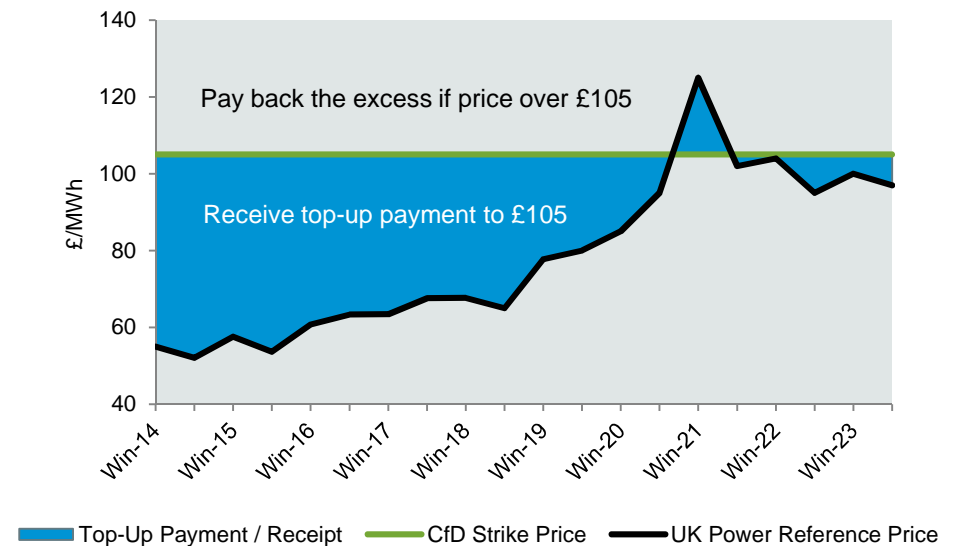
Contract terms under development by DECC in close consultation with industry

Draft CfD Strike Prices

£/MWh ⁽¹⁾	2014-15	2015-16	2016-17	2017-18	2018-19
Onshore Wind	100	100	100	95	95
Offshore Wind	155	155	150	140	135
Biomass Conversion	105	105	105	105	105

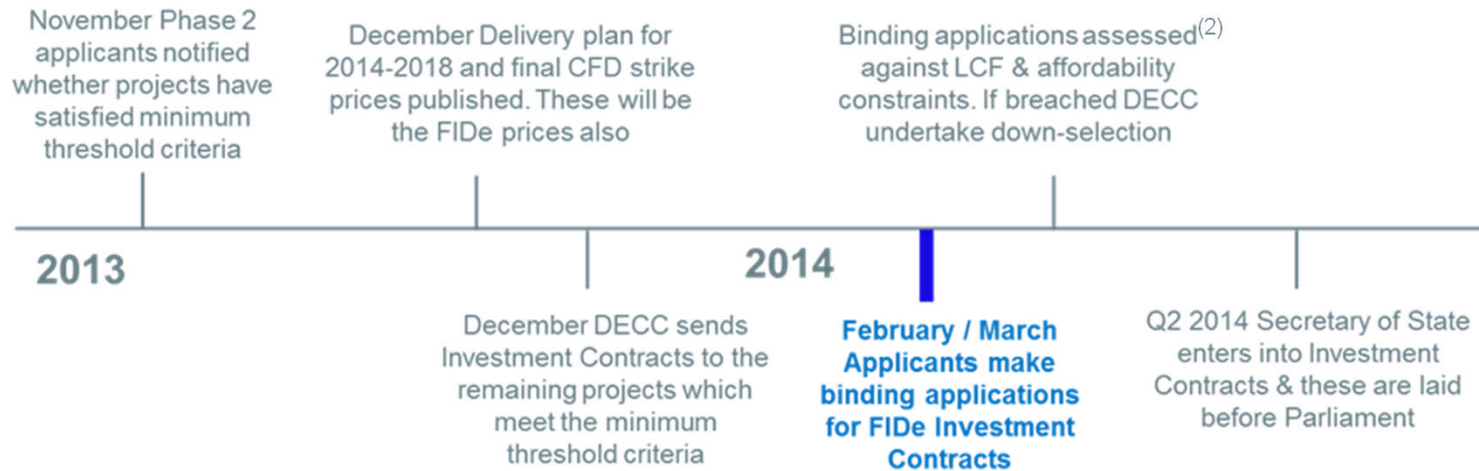
(1) In 2012 prices and subject to consultation

CfD Mechanism Illustration



CfDs – Investment Contracts and Enduring

DECC FID⁽¹⁾ CfD Timeline



Early CfDs – run under the FID process

- Known as 'Investment Contracts'
- Drax second and third unit conversion being considered by DECC for investment contracts
- DECC to publish final strike prices December 2013
- Award dependent on specific selection criteria, if total eligible projects exceed budget capacity
- Effectiveness conditional on approval by Parliament of Energy Bill and EU approval under state aid provisions

'Standard' CfDs – the enduring CfD process

- Targeted for applications in H2 2014
- Drax units not operating under RO or contracted under FID CfD – eligible to apply
- Initially, CfDs will be allocated with strike prices that are set administratively by Government
- Competitive process to be instituted if strong investor interest relative to budgets

CfDs – Pros and Cons

Advantages

- ✓ Bilateral contract with a Government owned counterparty
- ✓ Reduced political risk
- ✓ Provides revenue certainty and therefore protection against downside power price scenarios – positive ratings impact
- ✓ Working capital benefits – difference payments payable shortly after generation

Disadvantages

- ✗ Caps upside from high power prices
- ✗ Still exposed to fuel price volatility, including foreign exchange movements

Clarity on regulatory position likely to happen in stages

CfDs could be an attractive option for Drax

- Reduce political risk
- Provide more earnings / cash certainty

But subject to outcome of:

- Price and contractual consultations
- Competitive process

Other key issues still to be resolved

- Payment mechanics
- Change in law provisions
- Pass through of industry charges
- Consistency with RO on sustainability issues
- Termination and suspension rights
- Allocation process and triggers for auctioning
- State aid approval

Levy Control Framework (LCF)

Covers RO, CfDs, FiT⁽¹⁾ but not capacity payments

Sets a cap on the impact of renewable support schemes on consumer bills

Flexibility provisions

- 20% headroom to total cap allowed on annual basis

Biomass projections within cap

- Priority on low cost projects
- Under National Grid scenarios, deployment of 2.6-4GW of biomass conversions consistent with LCF assumptions and meeting 2020 targets

Worst case – LCF under pressure and DECC implement constraint management

- Limit number of FID CfD awards?
- Force enduring CfD into competitive auction?
- RO banding review to reduce “ungrandfathered” support?

LCF- Upper Limits on Spend (2011/12 Prices)

£bn	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Renewable Support	3.3	4.3	4.9	5.6	6.5	7.0	7.6

Capacity Mechanism

Capacity mechanism being developed under EMR

Ensure security of supply in the face of falling reserve margins

Proposed process now published

- Two auction processes to be held – four years ahead and one year ahead of delivery year
- All generators mandated to go through pre-qualification process, but are not required to bid
- New capacity providers bid volume into an auction – four years ahead of the delivery year
 - e.g. 2014 auction for delivery in Winter 2018/19
- RO or CfD-accredited plant not eligible to participate
- Existing capacity providers able to bid for one year contracts

Proposals moving in the right direction, but economics not currently compelling

- High penalty regime means risk / reward balance currently unattractive for Drax coal units
- Caps on auction bids unlikely to attract the new build capacity envisioned by DECC, particularly CCGTs

We will continue to review proposals but work to do to create value for Drax

Implications for Drax

Capacity Mechanism

RO and CfD-accredited units excluded from capacity mechanism

Work to do to create value for Drax

RO

Plans for conversion developed and financed under the RO

Investment case remains strong

CfDs

Potential upside from CfDs if risk / return balance attractive vs. RO





Appendix: RO Mechanics

Obligation on suppliers – set annually by DECC

- Includes fixed 10% headroom

Suppliers present ROCs to demonstrate compliance

- Where insufficient ROCs presented, suppliers pay a penalty – the buy-out price
- Buy-out fund is recycled to suppliers who presented ROCs

Buy-out Price and Recycle Values

Obligation Period	Buy-out price per ROC	Recycle value per ROC
2010-11	£37	£14
2011-12	£39	£3
2012 -13	£41	£4
2013 -14	£42	TBC – Aug 14

