

Electricity Market Reform

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27 September 2012

Our objectives for the electricity market mirror those of the wider energy system

Climate change:

- •Electricity has a big role in carbon budgets and long term climate goals
- •Similarly, a large part to play in delivering 15% renewable energy by 2020

Security of supply:

- Keeping the lights on (short and long term)
 - Diversity of supply
 - Resilience
- •Electricity demand may double by 2050

Affordability:

- Costs to taxpayer (short and long term)
- Keeping bills down in short and long term



Recap: our electricity market faces big challenges

Fifth of plants closing by 2020 and new security risks

Long run electricity demand could double

Weak signals in the market for low carbon generation

Current volatile market suits gas generation, but hard to build low carbon plant

Huge investment needed £110B in generation and grid assets

Business as usual is not an option

Every generation technology carries its own risks – therefore the key to ensuring protection for consumers and security of supply is to <u>build a diverse mix</u>





Without reform:

- higher risk of blackouts
- over-reliant on gas imports
- paying more for our electricity than we need to
- higher risk of not meeting our climate targets







Our aim is to transition to a world where low carbon technologies compete on cost

Long term vision

"An electricity market where low carbon technologies compete on cost and the cheapest win the biggest market share"

Currently we are a long way from this

Significant intervention in current arrangements

Technologies at very different stages of development

Big carbon and security challenges

The complete market reform framework

Government Sets overall policy direction and sets out key parameters **System operator (National Grid)** Provides analysis to allow Ministers to set key policy parameters (e.g. CfD strike prices and capacity market auction volumes) Contracts to develop low carbon **Market wide capacity contracts: generation** – Contracts for open to all forms of capacity Difference **Existing wholesale market (plus small scale FiTs)** Investment in low-carbon generation also supported by Carbon Price Floor & Emissions Performance Standard

The long term EMR transition

Stage 1 (to 2017)

"Administrative price setting"

Running of new and existing scheme together

Possible capacity auction

Stage 2 (2017 –20s)

"Technology specific auctions"

Long term contracts

Possible capacity auction

Stage 3 (mid 2020s)

"Technology neutral auctions"

Long term contracts

Possible capacity auction

Stage 4 (late 2020s)

"Wholesale market, and carbon price"

Possible capacity auction



For CfDs, alongside the bill we will set out final details

Advantages of CfDs

Long term revenue certainty

Political sustainability

Clear transition from the RO

Process for early stage projects

Further detail in draft:

The "Operational Framework"

Details set out in draft – key issues:

CfD terms in detail

- Payment model
 - Allocation
 - •PPAs



Payment model: we have heard concerns about the 'multiparty contract' and are looking at a single counterparty model

Existing model "multi party arrangements"

CfD =

Instrument created by statute

Between generator and all licensed suppliers

A settlement agent settles CfD payments

Alternative "single counterparty"

CfD a bilateral contract between a generator and a central 'counterparty'

Counterparty – via revenue raising powers – collects payments from suppliers to fund payments to generators (and vice versa)

Settlement likely to be similar to existing model



Key terms – set out in the draft operational framework (1)

Renewables: 15 years (minded) Contract length CCS/ Nuclear determined through ongoing process (from commissioning) Minded to link strike price to CPI (possibly partial Indexation link) Intermittent: Hourly day ahead price (PX auctions) Reference price Baseload: Year ahead, source to be confirmed

Key terms – set out in the draft operational framework (2)

Collateral requirement Minded to place collateral requirement based on estimate of settlement amounts due in a given billing period

Change of law

Minded that CFD should contain change in law provision, form and scope to be determined

Allocation: we have set out three possible ways to transparently manage budgets under the new scheme

We do need to manage budgets transparently – options below

Control by price setting, with exceptions for particular renewable technologies.

Specific volume caps for each renewable technology.

One volume cap for all renewables.

Strike prices: over the course of next year we will set the strike prices for CfDs



Route to market: we will look at ways to facilitate a credible route to market for all investors

Independent
developers
(particularly
renewables) have
highlighted concerns
with PPA availability
and their route to
market

Call for evidence:

- 1. Sets out potential issues and seeks evidence on the nature and scale of current/ future problems
- 2. Sets out options to address these concerns

Government has not yet decided what, if any intervention is necessary, but will ensure that there is scope in the Energy Bill to act if necessary

Equally we will set out details of the capacity market in the bill with development over the next year

High level design set out already

- Central auction across all capacity
- Providers commit to provide capacity and pay penalties if they are not available when needed
 - Initial signals new plant

Further detail by end of this year

For example

- Auction design
- Contract lengths
 - Penalties
- •Timing of introduction (NB, we will be ready for first auction by 2014 if necessary)

 Details on capacity market will be published at similar time to gas strategy

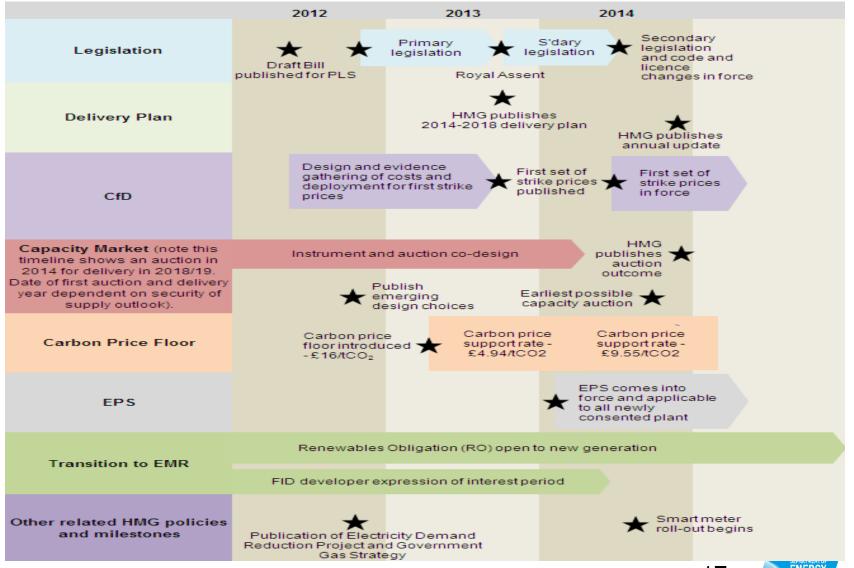
Early projects: we are encouraging projects that need early certainty to approach us to discuss transition arrangements

- Some investors need early certainty on CfDs for example
 - Nuclear projects
 - Large offshore wind with early FID, but commissioning after 2017

• The December Technical Update sets out criteria for these projects – we welcome approaches from, <u>any</u> developer that may meet these criteria

The Bill will allow us to provide transitional arrangements tailored to each project

The EMR plan – the next few years and beyond



Annex: Major Milestones for Electricity Networks

- Oct 2012 Transmission Constraints Licence Condition comes into force
- Dec 2012 Ofgem publishes Final Proposals on NGET's business plan for transmission price control 2013-21 (RIIO-T1)
- Early 2013 Updated offshore transmission tender regulations come into effect following Ofgem's autumn 2012 consultation
- Early 2013 Ofgem announces decision on the detailed changes to the transmission charging regime following Project TransmiT
- Feb 2013 Ofgem publishes Strategy Decision on next distribution price control (RIIO-ED1) following its Sept 2012 consultation
- Apr 2013 Ofgem's new transmission price control (RIIO-T1) commences

Annex: Key issues affecting investment in new gas generation

- Gas generation has a vital role in UK energy mix provided around 40% of electricity supplied in 2011.
- Gas plant is quick to build and has relatively low capital costs has a critical role
 in providing a reliable and flexible electricity system that meets demand.
- However, it faces challenges over the coming decades as the proportion of low carbon generation increases.
- Current overcapacity of generation in the market and low spark spreads means investment case for new gas plant is weak.
- Government therefore issued in May call for evidence on the challenges to inform
 Gas Generation Strategy due to be published in the Autumn.