

Summary of EMR Consultation on Proposals for Implementation

14 October 2013

This document is a summary of the DECC EMR consultation on proposals for implementation published on 10 October. It is not an Energy UK position paper in regard to these announcements. The full consultation and associated documents can be downloaded via this link: <https://www.gov.uk/government/consultations/proposals-for-implementation-of-electricity-market-reform>

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Chapter 1 – Aims of the consultation

- This chapter is self-explanatory and the table below from the consultation document helpfully sets out the proposals within scope of the consultation; detail previously published; and detail still to be published.

Table 1.1: Summary of consultation scope	
Proposals within the scope of this consultation	<ol style="list-style-type: none"> 1. Contracts for Difference: <ul style="list-style-type: none"> • CfD Allocation (including institutional arrangements) – the process by which CfDs will be allocated • CfD Supplier obligation proposals – the process for making payments against the CfD contracts • Investment Contracts – the transfer of early CfD contracts from the Secretary of State to the CfD counterparty • The transitional period between the Renewables Obligation and the CfD (2014-17) 2. Capacity Market: <ul style="list-style-type: none"> • Electricity Capacity Regulations • Electricity Capacity (Payment) Regulations • Capacity Market Rules (including a draft capacity agreement) • Consequential amendment to existing licences and codes 3. Proposals relating to the EMR System Operator and the EMR delivery plan: <ul style="list-style-type: none"> • Analysis required from the System Operator and what information will be required from CfD generators • Timing and content of EMR delivery plans • Governance of the System Operator
Detail previously published for views	<ol style="list-style-type: none"> 1. Draft CfD contract 2. Draft CfD strike prices for renewables (published as part of the draft EMR delivery plan²⁴) 3. CfD Supplier Obligation Call for Evidence (published alongside the EMR Overview Document in November 2012), and subsequent Government response in August 2013²⁵ 4. CfD cost exemption eligibility for Electricity Intensive Industries²⁶ 5. Capacity Market: The draft Reliability Standard (published as part of the draft EMR delivery plan)²⁷ 6. Consultation on National Grid (system operator) conflicts of interest²⁸ 7. Transition from Renewables Obligation to Contracts for Difference²⁹ 8. Electricity Demand Reduction: Options for reducing demand³⁰
Detail to be subsequently published	<ol style="list-style-type: none"> 1. Further CfD contract (alongside the EMR delivery plan) 2. CfD strike prices for Renewables (within the EMR delivery plan expected in December 2013) 3. CfD Supplier Obligation – Exemption for Electricity intensive industries 4. Supply Chain assessment process and detailed criteria – November 2013 5. CfD Allocation Technical Framework – draft to be published in early in 2014 6. Capacity Market: Updated Reliability Standard (to be published within the EMR delivery plan)
	<ol style="list-style-type: none"> 7. Route to Market: Consultation on policy proposals expected in early 2014 8. Emissions Performance Standard regulations – to be published during 2014, following Royal Assent of the Energy Bill

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/238867/Consultation_on_the_draft_Delivery_Plan_amended_.pdf

²⁵ <https://www.gov.uk/government/consultations/contracts-for-difference-cfd-supplier-obligation-call-for-evidence>

²⁶ <https://www.gov.uk/government/consultations/electricity-market-reform-contracts-for-difference-costs-exemption-eligibility>

²⁷ <https://www.gov.uk/government/speeches/statement-by-edward-davey-on-the-electricity-market-reform-draft-delivery-plan>

²⁸ <https://www.gov.uk/government/consultations/synergies-and-conflicts-of-interest-arising-from-the-system-operator-delivering-electricity-market-reform-emr>

²⁹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223489/ROtransitionconsultation17July2013.pdf

³⁰ <https://www.gov.uk/government/consultations/options-to-encourage-permanent-reductions-in-electricity-use-electricity-demand-reduction>

Chapter 2: Implementing EMR

The Energy Bill, which is currently making its passage through Parliament, sets out the objectives of EMR and provides the Secretary of State with powers to enact the necessary changes. Different types of secondary legislation will be needed to implement the main aspects of EMR – Contracts for Difference (CfDs) and the Capacity Market (CM).

The CfD will primarily be implemented by regulations supporting the CfD contract. The Capacity Market will be implemented via a mixture of regulations and rules. Illustrative drafts of the secondary legislation are provided alongside the consultation (links provided below). Both the CfD and Capacity Market will also require changes to industry licenses and codes. The legal framework required for CfDs and the Capacity Market is set out in detail below.

Legal Framework of Contracts for Difference

Energy Bill provisions

The Energy Bill enables the Secretary of State to implement the CfDs regime through a combination of regulations and a private law contract between generators and the counterparty. The CfD will define the level of support a generator will receive, which will be dependent on the technology of the plant.

The Government plans to make a further amendment to the Energy Bill to enable the Secretary of State to determine and publish the standard terms for CfDs in accordance with the criteria set out in the Bill and subsequently in implementing regulations.

Generators will be able to request minor and necessary modifications to these terms from the counterparty body before making an application to the delivery body for a CfD. If an applicant meets the eligibility criteria, National Grid will notify the counterparty body that A is eligible for a CfD.

The Secretary of State will also publish details of the budget and rules that the delivery body must follow in allocating support for generation technologies, in the proposed Allocation Technical Framework.

CfD Secondary Legislation

The secondary legislation comprises regulations and code and licence changes. The regulations will set out the kind of provision to be included in the standard CfD terms:

[The Contracts for Difference \(Allocation\) Regulations 2014](#) contains details on:

- ▶ Draft definitions of eligible generators
- ▶ Draft eligibility criteria
- ▶ Draft controls on budget
- ▶ Draft allocation processes
- ▶ Draft appeal provisions

[The Contract for Difference \(Supplier Obligation\) Regulations 2014](#) contains details on:

- ▶ General obligation of GB electricity suppliers to pay net costs of CfDs
- ▶ Obligation of suppliers to pay annual fixed rate levy
- ▶ Reconciliation of amounts
- ▶ Payments to suppliers of amounts received from CfD generators

- ▶ Obligation of suppliers to contribute to reserve fund
- ▶ Obligation of suppliers to provide collateral and insolvency reserve collateral
- ▶ Obligation of suppliers to contribute towards costs of CfD counterparty
- ▶ Disputes and enforcement
- ▶ Pro-rating of payments to CfD generators

The detail of the code and licence changes will be subject to separate consultation during early 2014.

CfD Contract Terms

CfDs will be private law contracts between the counterparty and eligible generators. In August 2013 the Government published the CfD heads of terms in November 2012 and draft key contract terms, which will form a basis of the final CfD contract. The final contract will be published by the end of this year.

CfD Allocation Technical Framework

This document will set out details of the allocation process, i.e. how an eligible generator will be allocated a CfD. This document will also contain information about the budget available for each allocation round. Whilst it is hoped that the CfD budget will not need to be frequently amended, DECC deem it sensible to ensure that the budget assigned to the allocation of CfDs can be quickly amended, should this be required, for example, to maintain the integrity of the allocation process or ensure that value for money is being delivered to consumers.

Putting the budgetary detail in this document, and therefore outside of secondary legislation, will help to ensure that changes to the budget and other allocation rules can be made quickly where such a change is warranted. Subject to the necessary amendments being made to the Energy Bill, the Government intends to publish the draft Allocation Technical Framework (ATF) early in 2014, and the final ATF in late spring 2014. A table on page 37 of the consultation document sets out how the detail of the CfD allocation methodology will be split between the regulations, and the ATF.

Consequential amendments to existing licences and codes

As a consequence of the Energy Bill's provisions to implement CfDs, existing electricity licences, industry documents and related agreements may require consequential amendments. These modifications, if required, will be in addition to the regulations and rules. The proposed draft amendments will be published in early 2014 at which point views from interested parties will be sought.

Legal Framework of the Capacity Market

Energy Bill provisions

The Energy Bill includes the powers for the Secretary of State to introduce a Capacity Market by allowing a combination of regulations and Capacity Market rules to be used to bring it into effect.

[Electricity Capacity Regulations](#)

The draft Electricity Capacity Regulations include aspects covering:

- ▶ Determining amount of capacity to auction and other auction parameters
- ▶ Eligibility to participate in capacity auctions

- ▶ Transitional provisions for Demand Side response
- ▶ Information, enforcement and appeals
- ▶ Duty of National Grid to produce annual electricity capacity reports

The Secretary of State will retain responsibility for the regulations.

[Electricity Capacity Payment Regulations](#)

The draft regulations include the following:

- ▶ Payment Model regulations
- ▶ Compliance with settlement agent duties
- ▶ Annual Forecast Budgets
- ▶ Data Processing by the settlement agent
- ▶ Provision of data
- ▶ Capacity market calculations
- ▶ Determinations and invoicing
- ▶ Payment and non-Payment
- ▶ Credit notes
- ▶ Credit Cover in respect of non-payments
- ▶ Dispute resolution
- ▶ Reconciliation

[Capacity Market Rules](#)

The draft Capacity Market Rules will provide the detail for implementing much of the operating framework set out in the regulations. This means the rules provide much of the technical rules and procedures as to how the Capacity Market will operate and include aspects covering:

- ▶ The auction guidelines and de-rating information;
- ▶ Pre-qualification information;
- ▶ How eligibility is determined;
- ▶ The process of holding capacity auctions and issuing of capacity agreements; setting up and operating the capacity market register;
- ▶ System stress events;
- ▶ Secondary trading;
- ▶ DSR transitional arrangements; and
- ▶ Disputes and appeals.

The Capacity Market Rules will be made by the Secretary of State and once they come into force, it is proposed that Ofgem should subsequently be responsible for making any changes to them.

Capacity agreement

The regulations and rules make provision for capacity agreements which will be issued to those bidders successful in a capacity auction. A successful bidder will accrue rights and obligations in accordance with the regulations and rules. These include the obligation to provide capacity, the right to receive capacity payments and the liability to pay penalties. The capacity agreement will be issued to successful bidders and will also be entered onto the capacity market register. Neither the register nor the capacity agreement create a contractual relationship with the successful bidder, but instead are underpinned by the regulations and rules.

Consequential amendments to existing licences and codes

As a consequence of the Energy Bill's provisions to establish the Capacity Market, existing electricity licences, industry documents and related agreements may require consequential amendments. These modifications, if required, will be in addition to the regulations and rules. The proposed draft amendments will be published in early 2014 for consultation of views from interested parties will be sought.

Supporting measures

The CfD and Capacity Market implementation will be complemented by:

- ▶ Transitional arrangements for the early years of EMR (2014-17) – including regulations on the transition from the Renewables Obligation to the CfD and on Investment Contracts.
- ▶ Governance documents to implement the institutional arrangements for delivery of both the Contracts for Difference and the Capacity Market.
- ▶ Publication of the EMR delivery plan on a 5-yearly basis, starting with the first delivery plan 2014-18 in December 2013.
- ▶ Licence and code modifications to mitigate any potential conflicts of interest for the System Operator in performing its role for EMR

Further transitional and supporting mechanisms and the expected timescales are:

- ▶ **Electricity Demand Reduction** – the Government published its response to consultation findings in May 2013, and has committed to testing proposals via a pilot. Further detail will be published within the Energy Efficiency Strategy planned to be published by November 2013.
- ▶ **Route to market** - the Government expects to consult on policy proposals to improve the route to market for independent renewable generators later in 2013.
- ▶ **Wholesale market liquidity** – Ofgem is expected to take a final decision on its reforms in autumn 2013 with a view to full implementation taking place in the early part of 2014.
- ▶ **Emissions Performance Standard** - Government intends to consult on detailed arrangements for the EPS monitoring and enforcement regime applying in England once the Energy Bill has received Royal Assent. Therefore DECC intend to consult on proposals for these arrangements in 2014.

Chapter 3: Implementing Contracts for Difference

- ▶ This chapter sets out the design of CfDs and explains the lifecycle of a CfD, from setting the initial policy framework on the transition from the RO and for Investment Contracts, to the process by which generators can apply for a CfD, through to contract allocation and management of the CfD contract by the counterparty.
- ▶ As the draft CfD Contract and Allocation Methodology were published in August, the substantive new policy details published in this consultation are on proposals for generators with projects over 300MW to submit a Supply Chain Plan; further details on CfD budget governance process and the publication of an Allocation Technical Framework; and full details on the mechanics and operation of the payment model for the CfD, including the supplier obligation levy.

Transition from the Renewable Obligation (RO) to Contracts for Difference (CfD)

The arrangements for the transition from the Renewables Obligation (RO) to CfDs were consulted on by DECC over the summer. Energy UK's response is available [here](#). The Government will publish its final decision by the end of 2013.

Investment contracts

- ▶ Provisions in schedule 2 of the Energy Bill seek powers for the Secretary of State to fund Investment Contracts which will give investors the confidence to invest before CfDs are available in 2014.
- ▶ There will also be provisions for the Secretary of State to create an Investment Contract counterparty body to administer the scheme.
- ▶ The Secretary of State will have the power to transfer Investment Contracts to the enduring CfD scheme.

The CfD Allocation Budget

- ▶ The Government is developing a governance mechanism to monitor and manage the risk of over and underspend within the Levy Control Framework (LCF). Further details of how Government will manage the LCF will be published in the Delivery Plan scheduled for December 2013.
- ▶ Subject to the will of parliament, the Government will establish the ability to vary the generic CfD budget including doing so within an allocation round and establish the potential for optional use of maxima and minima within this budget.
- ▶ Government will have the ability to *increase* the CfD budget limit at any time, including during an Allocation Round. To provide investors with certainty that budget will not be removed just before they apply for a CfD, Government will not be able to *reduce* the budget for applicants *within* an allocation round
- ▶ The EMR delivery body will provide via a website, information on the available funds in the LCF for the First-Come First-Served (FCFS) allocation and in allocation rounds.

Strike Prices

- ▶ Initially, CfDs will be allocated with strike prices that are set administratively.

- ▶ The Government intends to move to competitive price discovery processes for all low-carbon technologies as soon as practicable.

Application and Allocation

Eligibility Criteria

The criteria that a project will have to meet are set out below:

- ▶ The criteria for a qualifying form of low carbon generation that a project will have to meet are set out in the table contained in [Annex D](#) published alongside the main consultation.
- ▶ In the case of technologies eligible for the small-scale Feed-In Tariff, the installed capacity is greater than 5MW;
- ▶ Planning permission or development consent has been given for the proposed generating station under the appropriate consenting regimes as set out in the detailed criteria in the Allocation Methodology in August;
- ▶ The applicant is validly incorporated under the laws of the jurisdiction in which it is incorporated;
- ▶ Where relevant a company's supply chain plan has been approved by Government;
- ▶ Information that enables the CfD to be drafted, including project details and location and information to enable the relationship between the Renewables Obligation (RO) and CfD to be properly structured, e.g. that a Fuel Measurement and Sampling Agreement will be concluded; evidence that the applicant is not applying for or in receipt of other Government support for the proposed generating capacity and the administrative strike price for the project's technology; and
- ▶ a Grid Connection Offer has been accepted.

Supply Chain Standard

- ▶ Large scale projects (> 300MW) will have to produce a letter from The Government certifying that they have an approved supply chain plan. The criteria for this includes: supporting the long term economic growth and viability of the global low carbon supply chain, foster innovation, encourage competition and support the development of skills.
- ▶ Working proposals are that Government will have a maximum of 90 days to approve or reject a plan, although it is unlikely that the full time will be required. The aim is to process all applications within 30 days assuming all information is received up front. Once a plan has been approved, this would be valid for 12 months.
- ▶ Full details will be announced in November when a consultation on this is released.

CfD Allocation

First Come First Served

- ▶ Allocation of Contracts will begin on a FCFS basis determined by date of application, moving to allocation rounds once at least 50% of the budget is used (unless the Secretary of State decides otherwise).

- ▶ As part of the CfD application process generators can provide sealed bids containing the strike price they would be prepared to accept if a constrained allocation round were triggered (if no sealed bid is included then the administered strike price is applied by default).
- ▶ Minima and maxima for technologies or groups of technologies would have allocation levels set under current proposals. If the maximum limit is reached then no further projects would be allocated contracts for that delivery year.

Unconstrained allocation rounds

- ▶ Once a trigger has been met (for example if a significant part, perhaps 50%) of the CfD budget within any delivery year has been used, the EMR delivery body will seek Government's approval to move to allocation rounds. The precise level for this trigger will be confirmed in the final delivery plan, planned for publication in December 2013.

Constrained allocation rounds

- ▶ The rules for constrained allocation will be set out within the CfD Allocation Technical Framework with a draft to be published in early in 2014.
- ▶ If there are any projects with a protected budget (minima allocation for a technology or group of technologies) than the eligible projects would be combined and if the total amount of capacity is below the minima threshold then all projects would be allocated contracts. If there is more capacity than available funds, then an auction is run with the winners receiving contracts and the losers joining the general auction process.
- ▶ In the general auction, all projects are ranked by strike price, starting with the cheapest strike prices being awarded contracts first. (If a technology or group of technologies reaches its maxima threshold then all other projects with this category will be rejected for that delivery year)
- ▶ Current preference is for a pay-as-clear for technology or technology groups, although it is noted that pay as bid is also an option.

Tie-Breaker Rules

- ▶ Under the constrained allocation process, if it is not possible to distinguish between two or more projects on price alone then the Tie-Breaker Rule will be applied.
- ▶ Preference will be given to the combination of projects that makes best use of the available budget. If this fails to provide a clear allocation of projects, the next rule will be to give preference to those projects submitting their application earliest.

Phased Projects

- ▶ Proposals are to allow each phase of a multi-year project to receive the strike price available for the delivery year of the first phase.
- ▶ Projects wishing to deliver in phases can be held to account against appropriately tailored Substantial Financial Commitment Milestones, Target Commissioning Dates, Longstop Dates and Termination Provisions.

- ▶ The target commissioning date for the final phase of a project must be the earlier of the two following points:
 - two years after the target commissioning date of the first phase; and
 - 31 March 2021.

Appeals provisions

- ▶ Regulations will provide generators with a process for appealing EMR delivery body decisions on their eligibility for a CfD, where they feel they have reason to believe that the EMR delivery body incorrectly applied the rules.
 - First, the EMR delivery body will check and review their decision at the request of the unsuccessful applicant.
 - Second, if the applicant still believes that there is an error, they will be able to appeal to Ofgem to check the EMR delivery body's decision.

Allocation Process in Legislation

- ▶ The CfD Allocation Regulations and accompanying Allocation Technical Framework provided for under Chapter 2 Clause 10 of the Energy Bill will set out the enabling framework for the allocation process. Government is still considering the exact split between the regulations and ATF but the below table from the consultation document sets out the planned split between the contents of the two documents:

Proposed Content for Regulations	Proposed Content for Allocation Technical Framework
<ul style="list-style-type: none"> ▶ Definitions of eligible technologies. ▶ Eligibility criteria for generic CFDs, including requirements; an approved supply chain plan and project identifying information, e.g. location. 	<ul style="list-style-type: none"> ▶ Detailed description of evidence required from generators to demonstrate eligibility. ▶ Detailed description of other information required from applicants to complete CfD, e.g. fuel energy content for biomass and EfW.
<ul style="list-style-type: none"> ▶ Eligibility of phased CfDs for certain projects. ▶ Treatment of phased projects in constrained allocation. 	<ul style="list-style-type: none"> ▶ Additional information on stages and timetable for a phased CfD. ▶ Contract milestones for phased projects.
<ul style="list-style-type: none"> ▶ Definition of First Come First Served (FCFS) and Allocation Rounds. Description of the trigger for moving from one to the other. ▶ Frequency of Allocation Rounds. 	<ul style="list-style-type: none"> ▶ Precise trigger for moving from FCFS and detailed process for EMR delivery body to follow.
<ul style="list-style-type: none"> ▶ Power to vary generic CfD budget, including restrictions on doing so within an Allocation Round. ▶ Optional use of maxima and minima within this budget. 	<ul style="list-style-type: none"> ▶ Where and the format in which generic CfD budget information and current usage is published. ▶ Methodology for valuing CfDs.

<ul style="list-style-type: none"> ▶ The basis upon which to ration under constrained allocation (i.e. by price, subject to minima and maxima) 	<ul style="list-style-type: none"> ▶ Precise process for allocation. ▶ Auction method to be used in constrained allocation. ▶ Tiebreaker rules. ▶ Subsequent use of bid information.
<ul style="list-style-type: none"> ▶ Key elements of appeals process. ▶ Minimum time allowed for appeals at each stage. 	
<ul style="list-style-type: none"> ▶ Target Commissioning Windows and Longstop Dates for each technology. 	<ul style="list-style-type: none"> ▶ Rules on Substantial Financial Commitment and Capacity Adjustment given effect through the Contract.

Contract signature to commissioning

In Phase 2, the generator and the counterparty will sign a contract to provide payment according to the strike prices.

- ▶ The CfD contract will include details of when the generator must begin commissioning (Target Commissioning Window), and other clauses designed to incentivise timely delivery of generation and protect the scheme against under delivery by participants.
- ▶ There will be limited scope to vary the contract pre-signature, in cases where the generator requests minor and necessary modification to the standard terms of the contract. DECC is considering two options to enable the CfD contract to incorporate potential variations but is minded to go for option 2:
 - 1) Option 1: multiple pro forma CfDs to be produced, for example one for each major technology type and then for baseload and intermittent generation
 - 2) Option 2: Cover sheet coupled with standard CfD terms and conditions
- ▶ Government is proposing to table an amendment to the Energy Bill to have the power to set out and revise standard CfD terms, but will be duty bound to consult and changes will not apply to projects that have entered into a CfD allocation round before revisions were made.
- ▶ Generators may request 'minor' and 'necessary' changes to the standard terms before signing a CfD but will need to be agreed with counterparty in advance of application.
- ▶ Projects that have secured a CfD will be monitored and face incentives under the contract to deliver in a timely fashion.
- ▶ We propose to include in the contract the right to two 'cost-free' capacity adjustments in addition to other flexibility.

Payment Model and Supplier Obligation

Start of supplier obligation

- ▶ Initial discussions suggest that payments may flow to generators from April 2015.
- ▶ Suppliers will have at least three months' notice of the supplier obligation rate for any levy year, including the first year.

Type of levy

- ▶ The Government's preference remains for a unit fixed cost levy, whereby the counterparty forecasts the total CfD costs for the year (having forecasted generation output, knowing the strike price data and forecasting and fixing the expected reference price in advance), and set a pounds per MWh rate. Suppliers are charged that £/MWh rate for the actual amount they supply in any given period.
- ▶ The Supplier Obligation Impact Assessment shows annual average bill impacts, over the period 2016-2020, of £0.56-£0.89 for the unit cost fixed-rate option, £0.68-£1.05 for a variable rate, £0.67-£1.03 for generation fixed and £0.56-£0.87 for fully fixed. This includes the cost of financing the reserve fund, collateral and insolvency reserve fund, as well as the costs of suppliers applying a risk premium under the more variable options.

The levy formula and unit cost fixed rate payment

- ▶ Industry will be given the opportunity to input to the yearly forecasting process.
- ▶ The counterparty will share its methodology and forecast data (where not commercially sensitive) with suppliers and generators at the time the rate is announced.

Levy reconciliation

- ▶ The unit cost fixed rate (£/MWh) will be set for the levy year in question before the start of that year.
- ▶ During the year payments will be made by suppliers based on their supply for each billing period, according to preliminary data from the Balancing and Settlement Code (BSC).
- ▶ Following this, the counterparty will, as data becomes more accurate, reconcile and update (a) the amount individual suppliers should have paid at the unit fixed rate based on more accurate supply data as it becomes available and (b) overall levy that was due from suppliers for that day based on updated generation data (MWh) from the BSC.

Reserve fund

- ▶ The unit cost fixed rate levy will mean that payments collected from suppliers will not exactly match payments made to generators. A reserve fund is therefore required to manage the unpredictability, volatility and cash flow timing mismatches.
- ▶ The reserve fund will be sized using a conservative approach to risk.
- ▶ The size of the reserve fund will be based on the forecast CfD payments under more extreme scenarios such as low reference prices and a high level of CfD generation.

- ▶ The current impact assessment reflects the potential size of the reserve fund under the unit fixed rate levy option as an average range for 2016 to 2020 of between £30-260 million. The minimum figure quoted is based on a 'high wind' scenario and the maximum figure is based on a combination of this scenario with low fossil fuel prices.
- ▶ The reserve fund will be sourced from suppliers as a lump sum cash payment at the start of each funding year.

Collateral

- ▶ Suppliers will be required to post collateral to give confidence to generators that they will be paid in the event of a supplier default.
- ▶ The collateral requirement will cover a period of 21 days. This is based on what DECC believes to be the shortest practical settlement process.
- ▶ The proposal is to use past supplier obligation invoices as a proxy for a supplier's upcoming liabilities.
- ▶ Suppliers will be able to provide collateral either in cash or in the form of a Letter of Credit from a bank with a minimum credit rating of A- (Standard and Poor's) or A3 (Moody's).
- ▶ Parent company guarantees have not been included as an appropriate collateral instrument.
- ▶ Any cash collateral provided will be held in an interest bearing bank account within the Government Banking Service (GBS) at the GBS interest rate. Any interest will be distributed once per year to the suppliers who have provided the cash collateral.
- ▶ The current impact assessment reflects the average total collateral requirement from 2016 to 2020 as a range between £135 million and £200 million. The minimum figure is based on a reference price scenario and the maximum figure is based on a low fossil fuel scenario.
- ▶ The annual average cost to suppliers of financing collateral is estimated to be between £9 million and £14 million, while the cost to consumers is estimated to be between £0.11 and £0.17, both for the period 2016-2020.

Insolvency reserve fund

- ▶ If a supplier becomes insolvent, there may be a short-term funding gap between the exhaustion of collateral (following non-payment) and any enduring solution for the supplier's customers, such as Supplier of Last Resort (SoLR). An insolvency reserve fund will be created to enable the management of such a situation.
- ▶ The insolvency reserve fund will need to be fully funded, by way of a lump sum payment, when the scheme starts.
- ▶ It is currently proposed that the fund will be sized to cover payment default by the three largest small suppliers for 38 calendar days, based on the forecast CfD payments. Small suppliers are identified as suppliers with a current market share of less than 10%.
- ▶ The current impact assessment reflects the annual average size of the insolvency reserve fund from 2016 to 2020 as a range between £14 million and £21 million.

- ▶ Similarly, the annual average cost to suppliers of financing the fund is estimated to be £1 million, while the cost to consumers is estimated to be between £0.01 and £0.02 over the period 2016-2020.

Exemption from the costs of CfDs

- ▶ The Government will publish a response to the consultation on how eligibility for an exemption from the costs of CfDs should be determined before the end of the year, alongside draft regulations to implement the exemption and a full impact assessment.

Counterparty operational cost levy

- ▶ The operational cost levy will be collected daily along with the supplier obligation. It will use the same settlement systems, market share data and invoices as the main levy.
- ▶ Very preliminary estimates suggest that operational costs will amount to around £15m in 2015/16.
- ▶ Government will consult on the levy rate alongside the counterparty's proposed business plan for the year ahead.

Statutory framework for the CfD counterparty

- ▶ The CfD counterparty will have, under the legislation, certain tax-raising and settlement functions for the purposes of implementing the CfD regime. The CfD Counterparty will not be able to raise funds for any purposes other than paying the supplier obligation and meeting its own operational costs.
- ▶ It is currently anticipated the Board will comprise eight members, half of whom will be independent non-executive directors.
- ▶ The Secretary of State will appoint a minority of the Board, likely to include the Chair, Senior Independent Director (SID) and a government shareholder representative. There will be a nominations sub-committee of the Board which will appoint the remaining Board members, including the CEO.
- ▶ The counterparty will be governed by a Framework Document in line with HM Treasury's Managing Public Money guidance in relation to arms' lengths bodies.

Chapter 4: Capacity Market

DECC is consulting on all aspects of the proposed Capacity Market design, which is broken down by stages within this chapter.

Stages of Capacity Market Operation

1) Amount of capacity

- ▶ The enduring **reliability standard** will be established in December 2013 in the first EMR delivery plan.
- ▶ A **capacity demand curve** will be determined annually by the Government, in advance of capacity auctions. The demand curve for the four year auction will be published around four and half years ahead of the delivery year, and the demand curve of each year-ahead auction will be published around one and a half years ahead of the delivery year. The demand curve will:
 - ▶ set a target level of capacity to auction;
 - ▶ enable the trade-off between cost and reliability to be automatically determined at auction; and
 - ▶ Set a cap on the maximum price that can be set at auction.
- ▶ Two options are proposed for the **auction price cap** based on a net-Cost of New Entry (CONE) assumption of £29/kW per year in 2013 prices:
 - ▶ Option 1 is to use a multiple of 150% of net-CONE providing a cap level of £44/kW year.
 - ▶ Option 2 is to have an administratively set price cap of £75/kW year to allow for the auction to clear up to 25% higher than the estimated bid of a new CCGT.
- ▶ Net-Cone will be revised according to the information obtained from the first auction.
- ▶ **Indexation of payments:** participants will hold inflation risk between the auction and the delivery year. However, auction parameters will be adjusted to reflect anticipated inflation rise over that period.
- ▶ **The demand slope** will be constructed so that for the main four year ahead auctions, capacity agreements totalling a level of de-rated capacity within 1.5GW of the target will be auctioned so no single plant can significantly influence the clearing price. For the year ahead auctions a 5% tolerance level above or below the target volume of capacity will be set.
- ▶ From 2014 **electricity capacity assessments** will be produced directly to the Government by National Grid instead of Ofgem.

2) Eligibility and pre-qualification

Eligibility

The following forms of capacity will be eligible to participate in the Capacity Market:

- ▶ New and existing generation capacity (including combined heat and power (CHP)).
- ▶ Demand Side Response (DSR), including embedded generation.
- ▶ Electricity storage.

- ▶ Permanent reductions in electricity demand (EDR) could also be able to participate in future. The Government has amended the Energy Bill to enable this and is planning to pilot the approach before final decisions on EDR are made.
- ▶ The following forms of capacity will **not** be eligible to participate in the Capacity Market:
 - ▶ Capacity receiving support through the Renewables Obligation (RO), Contracts for Difference (CfDs), small scale Feed in Tariffs (FIT), renewable heat incentive (RHI), new entrants reserve 300 (NER300), or UK carbon capture and storage commercialisation programme.
 - ▶ Interconnected non-GB capacity and the interconnectors themselves (though the Government is continuing work to explore potential solutions that might enable the participation of interconnected capacity at the earliest in time to compete in the 2015 auction). A high level proposal for allowing participation of interconnected capacity is provided in the consultation.
- ▶ Electricity Demand Reduction will have its own two year pilot programme starting in summer 2014 and will not be eligible to participate in the 2014 capacity auction.
- ▶ Capacity below a 2 megawatt (MW) *de-minimis* threshold will only be able to participate when combined with other capacity through an aggregation service.
- ▶ All eligible capacity will be free to participate in both the Capacity Market and Balancing Services markets.

Pre-qualification

- ▶ Though participation in capacity auctions will be voluntary, licenced generators must for each of their eligible plants either apply to pre-qualify or, if they do not wish to bid in the capacity auction, submit an opt-out notification. The opt-out notification must state whether the generator intends to run the plant during the delivery year and, if not, whether it is retiring the plant or closing it temporarily. The pre-qualification stage is also mandatory for other applicants who intend to bid (e.g. DSR providers). This stage is to confirm the eligibility and bidding status of potential capacity providers.
- ▶ The amount of capacity each participant can bid into the auction will be determined by National Grid (subject to rules on the de-rating factor to be applied).
- ▶ There will be a dispute process for participants unhappy with National Grid's assessment of their pre-qualification eligibility.
- ▶ Specific rules will apply for pre-qualifying, de-rating, metering and baselining DSR capacity.

3) Auction frequency, format and contract lengths

Auction frequency

- ▶ For each delivery year, an auction will be held four years ahead of delivery, supplemented by a further auction one year ahead of delivery to enable the participation of DSR and provide an opportunity to refine the level of capacity for which capacity agreements are issued.

- ▶ National Grid will have the capability to run zonal auctions if necessary to manage constraints but no such zones will be created unless approved by Ofgem.

Auction format

- ▶ The auction will be 'pay as clear' – that is, all participants will receive the clearing price set by the marginal bidder. It will follow a descending clock format, in which the price offered is gradually reduced until the minimum price is reached at which the supply of capacity offered by bidders is equal to the volume of capacity required.
- ▶ If the volume of capacity participating in the four year ahead auction is less than 1.5GW above the target volume, the auction will be postponed or cancelled.
- ▶ Each auction participant will have to sign a 'Certificate of Ethical Conduct'.

Price Maker threshold

- ▶ To mitigate market power, bidders will be classified as either 'price takers' (who cannot bid above a relatively low threshold) or 'price makers' (who can). We expect most bidders will default to being price takers. New entrants and DSR resources will be classified as price makers, and will be free to bid up to the overall auction price cap (set at a multiple of the cost of new entry).
- ▶ The Price Maker threshold will be the lesser of 70% of the last auction clearing price set by a new entrant or half of net-CONE (i.e. £14.50/kW). If any existing plant wishes to bid above the threshold they would have to provide a statement approved by their board providing justification that is required to remain operational in the delivery year. Ofgem will have the right to investigate in certain circumstances.

Capacity agreement duration and expenditure thresholds

- ▶ Existing plants will default to one year capacity agreements unless they require major refurbishment, in which case they may be eligible to access a capacity agreement with a term of up to three years in each round of the auction.
- ▶ New entrants, which include plant that began/begin construction between May 2012 and the first capacity auction, will have access to a longer term agreement for a term they nominate up to a maximum term limit.
- ▶ However, the Government is seeking views on the most appropriate agreement lengths. More detail will be published in the CM Impact Assessment, due to be published later in October.
- ▶ The Government proposes to initially set the thresholds for accessing longer term agreements at around £125/KW for three year agreements and £250/KW for new entrants' longer term agreements (in 2013 prices). These capital expenditure thresholds will be published prior to each auction.
- ▶ DECC states that longer term agreements for existing plant will only be available if the capital they are spending is as much as it would cost to build an entirely new plant.
- ▶ Government proposes requiring a capacity provider with a capacity agreement for units awarded a three-year or ten-year agreement to demonstrate that they have incurred at least 50% of the capital expenditure scheduled for at that point, as per their refurbishment /construction plan, within a year of being awarded the capacity agreement. Any unit with

a three-year agreement failing to demonstrate 50% capex spend would have its capacity agreement term reduced to one year. Plant receiving a ten-year agreement not able to demonstrate 50% capex spend would have its capacity agreement terminated and have to pay a termination fee which will be posted as collateral as part of pre-qualification.

4) Secondary market

- ▶ Providers can physically trade their obligations from a year ahead of the start of the delivery year and throughout the delivery year where there is additional unencumbered pre-qualified capacity that can take their place.
- ▶ Capacity is unencumbered if it has spare capacity as defined in the prequalification process and if the plant had not opted out in the previous prequalification process.
- ▶ National Grid will maintain a register of capacity obligations. A system of checks will be put in place by National Grid before physical trades are made to verify that the party taking on additional obligations is eligible to do so.
- ▶ Providers can also manage their penalty risk at any point through private financial hedging.
- ▶ Government will leave it to Capacity Market participants to determine the products and trading platforms for financial trading but Government will monitor developments in case a secondary market is not forthcoming and help may be needed to promote one.

5) Delivery

Capacity Market Warnings

- ▶ National Grid will issue a 'Capacity Market warning' four hours in advance of any anticipated stress event, with such a warning acting as the dispatch signal for DSR capacity. Government will consider reviewing the use of a warning once participants and investors are more comfortable with the mechanism.
- ▶ The warning will be based on a pre-determined methodology so National Grid will not have discretion over whether to publish the warning. It will remain in force until midnight of the publication day, if not used.

Level of obligation in system stress events

- ▶ Capacity agreements oblige participants to deliver a specified quantity of electricity in system stress periods. The quantity will vary subject to when stress events occur in relation to the publication of a Capacity Market warning:
- ▶ Providers' obligations in periods of stress up to four hours after any Capacity Market warning will be based on their scheduled output.
- ▶ Providers' obligations after four hours will be 'load following' (i.e. if a stress event occurs when total demand is at 70% of anticipated peak, they are only required to deliver 70% of their obligation).
- ▶ Providers' obligations will only be suspended in limited Force Majeure circumstances replicating the Balancing and Settlement Code's treatment of contingencies.

Penalties

- ▶ Once a warning has been issued, providers that do not deliver sufficient energy at the relevant time/s of stress to meet their obligation will be required to pay a financial penalty. No penalties will be applicable for stress periods where no advance warning was provided by National Grid.
- ▶ Penalties will be based on the following calculation - penalty scaling factor * (£17,000/MWh value of lost load) minus the system buy price (cashout). A penalty scaling factor will be used to adjust the VoLL element of the penalty formula so that the overall penalty is between £1,000 and £3,000/MWh, assuming that Ofgem's EBSCR sets a single cashout price maximum of £6,000/MWh by 2018.
- ▶ Providers' total penalty exposure in a delivery year will be capped at a percentage of the relevant auction's clearing price multiplied by their MW of capacity agreements held. Rules to create a 'soft cap' will ensure providers always have an incentive to deliver in times of system stress. Government is minded to set this percentage within a range of 101%-150% of the unit's annual capacity revenue.
- ▶ An additional cap will apply at the portfolio level (A definition of portfolio is included on page 184 of the consultation document), set at the same percentage level as the unit level caps. The penalty obligation on the portfolio holder (or delegated affiliate) will be the difference between the sum of the liabilities of the constituent units within their portfolio and the resultant penalty exposure if it had been calculated directly at a portfolio level (i.e. only to the extent that the individual units within the portfolio had capped out and there is unused or surplus cap in the portfolio).

Over delivery

- ▶ Providers that deliver more than their obligation at times of stress will be paid for their excess delivery at the inverse of the penalty rate. Payments for over delivery will be made in stress events from the moment the warning is issued. However, over delivery payments will only be able to match penalties incurred so there is not a material shortfall.

Spot testing

- ▶ National Grid will have the ability to spot test providers where they have failed to demonstrate their ability to deliver the level of capacity specified in their capacity agreement. Capacity payments will be forfeited by any plant which fails a spot test until the plant passes a subsequent test.

6) Payment

- ▶ Payment flows between electricity suppliers and capacity providers will be the responsibility of a Government-owned settlement body with a number of functions carried out by a settlement agent.
- ▶ The costs of the Capacity Market will be recovered from electricity suppliers according to their share of peak demand. The CM supplier charge is first calculated annually and published as an amendment to the payment regulations.
- ▶ Government is considering whether the contribution of any DSR CMUs to reducing a supplier's demand should be removed from the calculation of each supplier's market

share. However, the Government recognises that this could be a complex process to administer and so invites comments from consultation respondents

- ▶ Residual monies from penalties from capacity providers, less any over delivery payments to capacity providers, will be returned to electricity suppliers according to their share of peak demand.

DSR participation

Auctions

- ▶ National Grid will hold year ahead auctions using the same format as the main Capacity Market. There will be two auctions each year, the first for the load following obligation, the second for the time banded products.

Cost recovery

- ▶ As with the main Capacity Mechanism, costs are recovered via a levy on suppliers.

Prequalification

DSR providers will need to prove ability through one of there will be two pre-qualification options:

- ▶ Existing DSR: Resources must demonstrate their existing capability, either by undergoing testing or by submitting evidence of previous performance.
- ▶ Prospective DSR: Resources must demonstrate their potential capacity by providing a defined list of meter point administration numbers or a business plan, supported by a bid bond. Prospective DSR providers will be required to provide a bid bond set at £4,420 per MW to ensure accurate and realistic information on capability is provided.

De-rating

- ▶ DSR will be de-rated by National Grid during pre-qualification. For prospective resources, National Grid will apply a standard DSR de-rating factor rather than an individual de-rating factor being calculated for each prospective Customer Response CMU.

Metering

DECC set out four options on how DSR could be metered:

- 1) Notify a data collector appointed by the supplier to pass the half hourly, non-aggregated BSC metered data for the relevant CMU component (and related meters on the same site if appropriate) to the settlement agent.
 - 2) Install metering to measure delivery and provide the data to the settlement agent.
 - 3) arrange through the relevant supplier to register an additional BM Unit (BMU) and assign only the metering systems associated with that CMU to the additional
 - 4) Use the existing STOR metering.
- ▶ The DSR capacity provider must declare during pre-qualification how metering will be carried out and it will also be the responsibility of providers to ensure the metering of their units provides the settlement agent with the necessary data to assess their delivery. Where data is not provided when required, the unit will be deemed to have failed to deliver during the event or test.

Baseline

- ▶ Consumption of electricity during a system stress event will be compared to consumption at other, similar times to determine whether a DSR provider has delivered its obligation. This involves measuring performance during similar periods and then comparing these.

Other balancing services

- ▶ DSR capacity providers will be able to take on other balancing services obligations (e.g. STOR) as well as capacity obligations, but not the Demand Side Balancing Reserve, currently proposed by National Grid (if introduced). To avoid penalising units for participation in both the capacity and balancing services markets, baselines and delivery will be adjusted by the settlement agent where delivery of a balancing service would have affected delivery of the unit's Capacity Market obligation. Responding to signals in the market (e.g. TRIAD avoidance or high prices) is considered to be 'business as usual' and will not reduce a Capacity Market obligation.

Penalties

- ▶ Penalties in the transitional arrangements will be lower than those in the enduring Capacity Market.
- ▶ The amount a provider can lose in the transitional arrangements will be capped at 100% of its annual capacity payment i.e. a provider cannot lose more than its annual payments.
- ▶ During stress events, National Grid will despatch DSR four hours in advance and monitor providers' performance. Where stress events do not occur, providers will be tested. There will be up to five tests a year. E.g. if there are no scarcity events, there will be five tests. If there are three scarcity events there will be two tests.
- ▶ Requirements to deliver and penalties for failing to respond will be the same whether DSR is despatched for a stress event or for testing.
- ▶ Under tests DSR providers will not be despatched simultaneously. These tests are separate to the test undertaken as part of pre-qualification.
- ▶ National Grid will not begin issuing Capacity Market warnings until the first delivery year for the main Capacity Market commences in October 2018. Until then, National Grid will use alternative despatch methods.

Government review of the Capacity Market

- ▶ Government envisages that the Capacity Market will be in place for at least ten years. However, there will be a review of the need for a Capacity Market every five years. A two-stage review process is proposed, which will result in a pair of documents first published alongside the DECC delivery plan in late 2018. Ofgem will carry out the first review of those areas of the Capacity Market design that are covered in the rules and looking at effectiveness of arrangements. The other review will be undertaken by Government and will take a holistic view of whether the Capacity Market is still needed.

Definition of a Capacity Market Unit (CMU)

There will be three types of generating CMUs and one for customer demand response:

- ▶ **CMRS transmission CMU:** A generating unit connected to the transmission system and which participates in the balancing mechanism. This type of CMU includes (traditional) conventional large scale generating units, storage and CHP.
- ▶ **CMRS distribution ('embedded') CMU:** A generating unit connected to the distribution system which participates in the balancing mechanism. This type of CMU would generally be of a smaller scale and it could also include smaller scale CHP and storage.
- ▶ **Non-CMRS distribution CMU:** A distribution-connected generating unit that does not participate in the balancing mechanism. This type of CMU would be of a smaller scale (possibly non-licenced) and could also include smaller scale CHP and storage.
- ▶ **Customer demand response (CDR)** will be separate and will take the form of customer response in the form of reduction of demand or an increase in on-site generation which will be visible in the supplier metering account and measured by the 'X of Y' baseline methodology.

Chapter 5: Ensuring effective and transparent delivery of EMR

Transparency and cost calculations

- ▶ The Secretary of State has committed to publishing a number of different reports to ensure there is transparency to the EMR process and the change it will undertake
 - EMR Delivery Plan every five years
 - Annual updates to the delivery plan
 - Annual reporting duty by the Secretary of State to Parliament on how EMR functions have been carried out.
- ▶ In order to ensure that the Government obtains the advice and analysis it needs to inform its decisions for a Delivery Plan or an Annual Update, the Government intends to impose an obligation on the System Operator requiring it to provide analysis and to report on progress in delivering that analysis.
- ▶ If the Government is to be confident in the decisions it is taking on EMR, for example, in setting 'bankable' and affordable CfD strike prices for renewable technologies or the volume of capacity to procure through a capacity auction, it needs to be confident that the Delivery Plan process, including the System Operator's evidence base, is as robust as possible.
- ▶ The Government therefore considers it appropriate to create, using the powers in clause 13 (Information and advice) of the Energy Bill, an obligation on CfD generators ("a generator who is party to a CfD") to provide the System Operator with certain information, including build, capital and operational costs of CfD plant.

Liability Shield for the EMR delivery body

- ▶ To help manage the risks which may arise, the Government has agreed to consider the extent to which National Grid should be "shielded" from liability in damages for anything done or omitted whilst exercising its EMR Delivery Body functions. However, the application of a liability shield to some or all of National Grid's EMR functions will not protect it from complaints, nor deny people other forms of redress against its decisions.
- ▶ The Government is looking at two options:

- (1) the Secretary of State could take the view that the shield should be applied to all of National Grid's EMR Delivery Body functions given the existing regulatory framework that will govern the performance of such functions or;
- (2) The Secretary of State could take the view that the power to apply a shield should be exercised on the basis of a set of guiding principles which may result in some or all of the Delivery Body functions being protected from a claim for damages.

Modifications to National Grid's license to implement mitigation measures to manage Conflicts of Interest

- ▶ This section on pages 270-275 set out the mitigation measures which will be undertaken to prevent conflicts of interest arising and the draft license "EMR modifications" have been published alongside this consultation.

Chapter 6: EMR in the Devolved Administrations

Northern Ireland

- ▶ The Northern Ireland Executive does not plan to open its market to CfDs for projects commissioning before 2016 at the earliest because of reforms to the Single Electricity Market in Northern Ireland.
- ▶ The first payments under EMR for generators in Northern Ireland will flow from April 2016 with the first contracts for Northern Ireland being capable of being signed from late 2015. The supplier obligation will not be levied in Northern Ireland until 2016.
- ▶ The UK Government and Northern Ireland Executive have also agreed that as Northern Ireland is part of the Irish Single Electricity Market the Capacity Market will only apply across Great Britain with any associated costs being borne by GB customers.

Scotland and Wales

- ▶ All of the policies in EMR extend to Scotland and Wales so DECC is liaising with devolved administrations on implementation.

Chapter 7: Next Steps

- ▶ By the end of 2013, subject to Royal Assent to Energy Bill, the Government intends to publish the final EMR delivery plan with confirmed strike prices for CfDs for renewable technologies and the Capacity Market reliability standard. DECC expect to publish updated CfD contract terms as part of Renewables Investment Contracts at the same time and will also consider whether a further update of CfD contract terms is required to support the Parliamentary process in the first half of 2014.
- ▶ The Government aims to publish its response to this consultation and to lay the final regulations in Parliament in late Spring 2014, and for the regulations to enter into force in July 2014.
- ▶ The Government is planning to publish a detailed Operational model and implementation plan for EMR when the collaborative development working groups have been completed. These documents will be published by the end of 2013.