



Department
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Climate Change

Electricity Market Reform – Contract for Difference: Contract and Allocation Overview

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1. Preface

- 1.1. Electricity Market Reform (EMR) will deliver the greener energy and reliable supplies that the country needs, at the lowest possible cost. It will transform the UK electricity sector to one where low-carbon generation can compete with conventional, fossil-fuel generation – ensuring we build the right mix of generation for the long-term.
- 1.2. Up to a fifth of generation capacity will close by 2020, whilst UK electricity demand could double by 2050 as our economy grows and heat and transport systems are increasingly electrified. Our latest EMR modelling predicts up to an additional £110 billion of investment is required by 2020 to meet our low carbon objectives and to put us on the right path to 2050¹, whilst maintaining secure energy supplies. To achieve this investment we need to attract new sources of capital, and do so whilst keeping costs to consumers as low as possible.
- 1.3. EMR is the Government’s response to this challenge and sets out the biggest reform to the electricity sector since its privatisation. EMR has three goals: to decarbonise electricity generation; to keep the lights on; and to minimise the cost to consumers.
- 1.4. EMR includes four main elements:
 - Long-term contracts to encourage investment in new, low-carbon generation (**Contracts for Difference**’ or **CfDs**’);
 - A mechanism to establish a minimum carbon price for UK electricity generation (the **Carbon Price Floor**), which provides an early and credible signal for investment in low-carbon electricity generation;
 - The **Emissions Performance Standard** (EPS) which will provide a regulatory backstop on the amount of emissions that new fossil fuel power stations can emit; and
 - A **Capacity Market**, which will support investment in generation and demand-side response capacity, delivering secure electricity supplies.
- 1.5. This document sets out more information on how Contracts for Difference (CfDs) will work under EMR. Information about the other elements of EMR can be found on the GOV.UK website².

¹ The Climate Change Act 2008 establishes a legally binding target to reduce the UK’s greenhouse gas emissions by at least 80% below base year by 2050.

² <https://www.gov.uk/government/policies/maintaining-uk-energy-security--2>

Lowering the cost of investing in Low Carbon Generation

- 1.6. CfDs are designed to give investors the confidence and certainty they need to invest in low carbon electricity generation, helping the UK electricity sector to attract greater investment in low-carbon generation, and subsequently reducing the UK's carbon emissions. CfDs work by stabilising the prices received by low carbon generation, reducing the risks they face, and ensuring that eligible technology receives a price for its power that supports investment. CfDs also reduce costs to consumers by capping the price that consumers pay for low carbon electricity, requiring generators to pay money back to consumers when electricity prices are high.
- 1.7. They do this by paying the generator the difference between a measure of the cost of investing in a particular low-carbon technology (the 'strike price') and a measure of the average market price for electricity (the 'reference price'). The generator participates in the electricity market, including selling its power, in the normal way.
- 1.8. CfDs will be available to a wide range of low-carbon technologies, supporting investment in established and emerging technologies, and encouraging competition between these technologies as we make the transition to a low-carbon generation mix. This investment will make a valuable contribution to the UK economy: providing jobs; developing skills and supporting the development of local supply chains.

Reducing costs to consumers

- 1.9. CfDs will provide efficient and long term support for low carbon generation – including nuclear, renewables and carbon capture and storage – by increasing revenue stability and by reducing risks faced by generators.
- 1.10. In particular, CfDs lower the costs to developers of financing a project, by reducing exposure to volatile wholesale prices and reducing project risks. This greater degree of price certainty means that hurdle rates can be reduced. Moreover, investors are able to secure support through a CfD at an earlier stage in development than under the Renewables Obligation, further reducing development risk. Finally, the structure of the CfD as a private law contract means that developers have greater certainty over their rights and obligations than in a scheme governed solely by regulations.
- 1.11. As the risks faced by developers are reduced, the amount of support required to incentivise investment also reduces. Developers benefit from a more favourable investment climate and consumers benefit from lower strike prices. Consumers' interests are further protected by the two-way nature of the contract, which sees generators required to make payments back when the reference price rises above the strike price. This avoids paying unnecessary support to projects at times of high wholesale prices, and reduces overall costs to consumers.

Enabling a diverse energy mix

- 1.12. The Government is committed to delivering against its decarbonisation objectives and maintaining security of electricity supplies, and to do so at least cost to the consumer. For CfDs, this means supporting a diverse range of technologies, whilst progressively introducing more competition into the allocation and price-setting processes.
- 1.13. The CfD will offer broadly standardised terms, with support given to a wide range of eligible technologies. This will support the transition to competitive price discovery. We will also retain the flexibility to negotiate with projects that are particularly large or atypical. These projects might present specific technical issues that require a variation in terms, or might mean that the standard terms might not provide for value-for money.
- 1.14. Initially, most CfDs will be allocated with strike prices that are set administratively (i.e. set by Government), at levels that support investment in a range of different low-carbon technologies – both established and emerging – and that keep the costs of supporting each technology down to a reasonable level.
- 1.15. During this phase, administrative pricing still allows for a degree of (implicit) competition both within technologies (in that strike prices are set to allow only the more efficient projects to proceed) and between technologies (in that Secretary of State has control over Strike Prices of different technologies relative to each other).
- 1.16. The Government has clearly stated its intention to move to a competitive price discovery process for all low-carbon technologies as soon as practicable, and the allocation processes described in this document are designed to support a move to competitive price discovery as soon as this is appropriate.

Promoting Growth

- 1.17. Upgrading our energy infrastructure will support growth in the wider economy. Energy projects make up over half the total infrastructure pipeline in the UK and EMR is projected to support up to 250,000 jobs in the energy sector. Investment will stimulate the UK energy sector and its supply chains, while industry and businesses will benefit from the diversification of generation and the reduced reliance on fossil fuels.
- 1.18. In publishing further details of the CfD today the energy sector and investment community will gain further certainty and visibility as to how we intend to implement CfDs.

2. Introduction

- 2.1. In November 2012 we set out the key design features and our high level policy positions for CfDs in “Feed in Tariff with Contract for Difference: Operational Framework” and the Heads of Terms for a Contract for Difference³. We followed this in June 2013 setting out our final positions on outstanding policy positions in “Electricity Market Reform: Delivering UK investment”⁴.
- 2.2. Today we are publishing further detail on the CfD contract terms and on the process by which CfDs will be allocated in Great Britain. We are moving towards a system where the CfD will be available across the UK. However, as a first step, the CfD will be introduced in Great Britain, with Northern Ireland opening its market to CfDs in 2016, at the earliest.
- 2.3. Alongside this document we are publishing a draft CfD contract, supported by an explanatory note on the key terms, and a detailed description of the allocation process. This provides developers and investors with substantial detail on how the CfD will be implemented, and support their future investment decisions.
- 2.4. This document is structured in three main sections:
 - **CfD Allocation Process** sets out the CfD allocation process and highlights the key developments since the publication of the November document.
 - **CfD Contract Terms** identifies key areas of the Draft CfD Contract Terms.
 - **Supporting the transition to the CfD** provides an update on Government’s work to ensure that there is an effective transition to the CfD arrangements and, in particular, that the CfD supports investment by independent renewable developers.
- 2.5. In developing the details of the allocation process and contract terms, we have received input from a wide range of stakeholders. This includes our delivery partners National Grid and Ofgem, and the CfD and Metering Expert Groups (which bring together industry representatives and consumer groups). Their involvement in the design of the CfD has been important and has enabled us to develop proposals that will deliver our objectives more effectively.

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65635/7077-electricity-market-reform-annex-a.pdf

⁴ <https://www.gov.uk/government/publications/electricity-market-reform-delivering-uk-investment>

Next Steps

- 2.6. The allocation process and CfD contract terms set out today reflect the views received from stakeholders on the positions previously set out by Government. In general terms, we are now moving towards the implementation of this policy, and so would particularly welcome input from stakeholders on the detail of this implementation.
- 2.7. Reflecting this move towards implementation, the process for commenting of the allocation process and CfD contract differ. These are set out below.

CfD allocation process

- 2.8. We will be engaging with stakeholders on the implementation of the CfD Allocation process in a number of ways during autumn 2013:
 - collaborative development with industry and delivery partners to develop the detailed design of EMR systems and processes for implementation;
 - continuing to work with our Expert Groups in reviewing and assessing any potential changes arising from collaborative development; and
 - formal consultation on the implementation of the CfD allocation process in secondary legislation and regulations.
- 2.9. In addition, we would particularly welcome stakeholder views on the following areas of the allocation process:
 - the approach to allocating under a constraint;
 - the approach to supporting projects with several commissioning phases; and
 - the structure and degree of the flexibilities offered to developers, through the operation of the 'substantial financial commitment' milestone and the ability to vary, within limits, the capacity delivered under the CfD.
- 2.10. In respect of these latter two aspects, any feedback should be supported with evidence and emailed to emrcfdesign@decc.gsi.gov.uk by end of business on 2 September 2013 at the latest.
- 2.11. We expect to publish the final allocation process by December 2013.

CfD contract terms

- 2.12. The Draft CfD Contract Terms published today reflect the feedback received to date and reflect the published policy positions set out in June⁵.
- 2.13. We are now looking towards implementing these policy positions in detail. Therefore we are not seeking comment on the policy positions that are expressed in the Draft CfD Terms. We are however seeking views on the mechanics and the operation of the Draft CfD Terms and in particular the Market Reference Price and Metering arrangements.
- 2.14. Any feedback on the Draft CfD Terms should be supported with evidence and structured in the format set out in the template provided at <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference> and emailed to emrcfdesign@decc.gsi.gov.uk by end of business on 2 September 2013 at the latest.
- 2.15. We expect to publish the final contract terms and allocation process by December 2013.

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209276/EMR_Spending_Review_Announcement_-_FINAL_PDF.pdf

3. CfD Allocation Process

- 3.1. In November 2012 Government described the high level process by which a developer will secure and retain a CfD. Since then a range of market participants, consumer groups and financial institutions have provided feedback on our high level policy positions and this has helped to inform the further development of the more detailed CfD Allocation Methodology for Renewable Electricity Generation (the 'Allocation Methodology'), published alongside this document.
- 3.2. The Allocation Methodology sets out a Developer's journey through the application and allocation processes, the process for contract signature and the mechanism for monitoring milestones during the construction and commissioning phases.
- 3.3. Setting out the detail of the allocation process in this way will enable the Delivery Body to progress the design of systems and processes, inform development of the CfD Counterparty, and support the process of implementing the Allocation Methodology, including in secondary legislation.
- 3.4. The key points in the Allocation Methodology published today set out:
 - **Applying for a CfD:** the eligibility criteria that each technology will need to meet as a condition for entering the allocation process including the introduction of eligibility criteria linked to the development of a robust supply chain.
 - **The allocation of contracts:** the process by which the Delivery Body will allocate contracts and how that process will evolve over time.
 - **The appeals processes:** these will allow developers to challenge the decisions made by Government, the Delivery Body or the Counterparty Body.
 - **Contract signature:** the process for signing the CfD with the CfD Counterparty.
 - **Incentives for timely delivery:** the way the contract encourages timely delivery (through the use of Milestones, Target Commissioning Windows and Longstop Dates) whilst making allowances for reasonable delays.
 - **Phased commissioning:** how large projects that deliver over a number of years will be accommodated.
 - **Capacity adjustment:** the process that developers can use to adjust the amount of capacity they are intending to build once the contract is signed.
- 3.5. These are discussed in turn below, together with information on the process for future allocation of CfDs to CCS and nuclear projects, and on the way forward.

Applying for a CfD

- 3.6. Only eligible generation may be supported under the CfD. Consequently in order to be considered within an allocation process, Developers will need to prove they meet set eligibility criteria.
- 3.7. Each CfD applicant will need to demonstrate that they are developing an eligible technology which meets minimum size thresholds for new and additional renewables capacity.
- 3.8. Eligibility criteria will be technology specific, but as a minimum will require the project to have a valid planning permission and have accepted a grid connection offer for the generating station. For some technologies – particularly biomass – there may be some additional requirements.
- 3.9. CfD applicants will also be required to make a declaration that they have not received support under the Renewables Obligation, small scale FiT or the Non Fossil Fuel Obligation. An exception to this rule is set out for existing co-fired stations under the Renewables Obligation which may convert and receive a CfD as a biomass conversion.
- 3.10. In addition to meeting the above criteria, larger projects⁶ will also need to provide the Delivery Body with a letter from the Government certifying that it has prepared a supply chain plan which meets a defined standard. Government will publish details of the supply chain standards that a plan must meet and define the submission and assessment processes before the end of 2013.
- 3.11. A Developer's CfD application will also need to specify the project name, size, location, target commissioning date and make clear whether they are seeking to deliver in phases.

Strike price and budget information

- 3.12. The proposed CfD strike prices are set out in the draft Delivery Plan that Government published on 18 July. It is Government's intention to use strike prices as the principal means of bringing forward sufficient low carbon generation, while remaining within the CfD budget. Government will continue to keep the costs of constructing low carbon generation under review and where necessary will amend strike prices for new generation to ensure value for money.
- 3.13. Government will inform the Delivery Body of the CfD budget and any other supporting assumptions, so that the Delivery Body can manage the allocation process.

⁶ i.e. above a specified threshold, which is yet to be determined.

The Delivery Body's contract allocation process

- 3.14. Contracts will be initially allocated on a 'First Come, First Served' (FCFS) basis, whilst there is sufficient headroom in the CfD Budget. When 50% of the CfD Budget has been allocated through FCFS allocation the Delivery Body will check whether Government has room within Levy Control Framework (LCF) to allow FCFS allocation to continue⁷. If there is insufficient LCF budget available, the Delivery Body will begin to allocate CfDs through Allocation Rounds. The project that triggers the move from FCFS to Allocation Rounds will not receive a CfD through the FCFS process. The move to Allocation Rounds for a given delivery year will trigger the move to Allocation Rounds for all delivery years.
- 3.15. Once Allocation Rounds are in operation, the Delivery Body will seek to run two rounds per year. The application requirements for the developer will be similar to that for the FCFS period of allocation, though applicants can choose to provide a sealed bid setting out the strike price they would be prepared to accept in the event of a constrained allocation round.
- 3.16. Initially Allocation Rounds are expected to provide all eligible applicants with a CfD. However at some stage there may be more capacity trying to secure a CfD than can be supported by the remaining Budget for a particular delivery year (or across multiple years). At this point the Delivery Body will, again, check with Government whether the wider LCF budget can support unconstrained rounds continuing for that delivery year. If insufficient LCF budget is available then a constrained allocation process will be run allowing projects to be ranked by price with CfDs being secured by the least expensive projects.

Appeals provisions

- 3.17. Legislation will provide Developers a process for appealing Delivery Body decisions on eligibility to enter the application process and on allocation, where Developers have reason to believe that the Delivery Body incorrectly applied the rules. This will be a two stage process. First, the 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 of fact or process, they will be able to appeal to Ofgem to check the Delivery Body's decision. The appeals process timing will be built into the allocation timetable so that no further allocation of CfDs will be made until any outstanding appeals are satisfied, thereby protecting applicants whilst they are going through this process.

⁷ DECC will review this parameter in light of further work on the mechanisms which will govern the management of the Levy Control Framework Budget

- 3.18. It is currently under consideration whether to provide specifically within the legislation for recourse to the Courts where the Developer continues to disagree with the decision having exhausted the above appeals process.

The process for signing the CfD

- 3.19. The Delivery Body will direct the CfD Counterparty to offer a contract setting out the terms (e.g. target commissioning date, window, longstop date, etc) on which the contract will be offered to the successful applicant. The CfD Counterparty will then offer the contract and the applicant will have a set period of time to return a signed contract to the CfD Counterparty who will then sign it, bringing the contract into force.

Incentives for timely delivery

- 3.20. Government is keen to ensure that the CfD budget is used effectively and results in low carbon generation being developed. For this reason, projects that have secured a CfD will be monitored and face incentives under the contract to deliver in a timely fashion.
- 3.21. The first part of this system is the Substantial Financial Commitment milestone, which will need to be met within one year of signature of the contract. This will be proven by Developers providing the CfD Counterparty with evidence they have spent a (technology-specific) percentage of overall costs by the milestone date and/or that they have signed contracts committing significant expenditure against the delivery of the agreed capacity by the Target Commissioning Date.
- 3.22. The second element is the use of a Target Commissioning Window. This window is the period of time within which a developer is able to build and commission (including achieving the conditions precedent in the contract) without penalty. The length of the Target Commissioning Window aims to reflect the technical challenges faced by Developers of each generation type, and set so as to encourage timely delivery of the project. Once the Target Commissioning Window finishes the contract duration starts to expire, providing an incentive under the contract to Developers to plan their projects to deliver within this window.
- 3.23. The third element is the Longstop Date. This ensures that the available budget for CfDs is not permanently tied up by projects which fail to commission, and provides Developers with incentives up front to ensure that they apply for CfDs only for those projects that have a high likelihood of successful completion. Termination rights arise after the Longstop Date, which give the CfD Counterparty the right to withdraw the CfD from a project which has not delivered (which then allows the Delivery Body to reallocate that relinquished support to other viable projects).

3.24. Both Target Commissioning Windows and Longstop dates will be technology specific.

Phased commissioning

- 3.25. Some offshore wind projects are built in a series of annual stages or 'phases'. The CfD allocation process therefore sets out a mechanism to ensure that these projects can secure a CfD and be held to account against appropriately tailored Substantial Financial Commitment Milestones, Target Commissioning Windows, Longstop Dates and Termination Provisions.
- 3.26. To qualify for phased CfD support, offshore wind projects must meet the following conditions:
- a. The total capacity of the project must not exceed 1500MW. Any project with a capacity greater than 1500MW will not be eligible;
 - b. All phases of the project must be within the same Crown Estate lease area, i.e. offshore wind development with the same owner/operator which are in different parts of the country will not be eligible for phasing;
 - c. At least 35% of the capacity must be registered in the first phase;
 - d. The Target Commissioning Date for the first phase must be no later than 31 March 2019; and
 - e. The Target Commissioning Date for the final phase must be the earlier of the two following points:
 - i. no later than two years after the Target Commissioning Date of the first phase;
 - ii. no later than 31 March 2021
- 3.27. Each phase of a qualifying project will receive the strike price applicable at the Target Commissioning Date of the first phase. Each phase will then attract a separate Target Commissioning Window, with only the first phase attracting the risk of contract termination (which provides an appropriate contractual incentive for the project to progress in a timely manner, without exposing developers to the risk of termination should later phases fail to progress as originally planned).

Capacity Adjustment

- 3.28. The November Operational Framework proposed that projects would need to deliver at least 95% of the capacity they initially proposed in their application by the CfD

longstop date or their CfD would be terminated. Following feedback from industry we will introduce a greater degree of flexibility. Developers will be able to vary their capacity by circa 30% less than the initially agreed capacity.⁸ Part of this flexibility will be available without any cost, whilst the remainder will result in an adjustment to the strike price. This approach provides developers with considerably more flexibility, whilst also ensuring that the contract provides a financial incentive for developers to plan to deliver capacity in line with their original application, supporting the efficient use of the CfD Budget.

- 3.29. In particular, we are now proposing to include in the contract the right to two ‘cost-free’ capacity adjustments: (i) flexibility that must be used or surrendered at the Substantial Financial Commitment Milestone and (ii) flexibility that is available up to the Longstop Date. We currently propose allowing a 5% adjustment to be made at each of these stages (each applied to potentially reduce the capacity delivered below the level originally allocated / applied for).⁹
- 3.30. In addition to the two cost-free capacity adjustments, we also propose to allow the developer to deliver less than the adjusted level of capacity, albeit at a reduced strike price. Contract Termination would only be a risk if the amount of capacity delivered by the Longstop Date falls below a minimum level, which will be set at circa 70% of the initially agreed capacity. It would be open to Developers to plan to use this flexibility at any time; so a Developer might choose at financial close to change its project in a way that reduced capacity delivered (in the knowledge that this will reduce the strike price).
- 3.31. This new proposal allows greater flexibility, incentivises delivery and reduces the threat of termination which might otherwise increase the cost of investment.
- 3.32. We will continue to review this approach in light of feedback from stakeholders and will consider whether we could achieve a similar result without a termination right and instead rely solely on a strike price adjustment.

Nuclear and CCS

- 3.33. The arrangements in this document are specific to renewables technologies. Government’s intention is that future CfD allocation for nuclear and CCS projects takes place through competitive project selection processes, wherever practical and effective. This is in line with Government policy of increasing competition within and between low-carbon technologies, which over time will assist with meeting Government’s goals for least-cost decarbonisation of the power sector over the longer

⁸ Developers are also provided with flexibility should ‘force majeure’ occur and if the completion of their project is affected by relevant geological issues (more detail is set out in Section 4 of this document).

⁹ This capacity adjustment only allows reductions below the original contract capacity. These flexibilities are not symmetrical and do not allow Developers to increase the contracted capacity.

term, and should also facilitate more effective management of the Levy Control Framework.

- 3.34. Bilateral negotiation remains an alternative for nuclear and CCS CfD allocation where competitive processes are not practical. In such circumstances, any final allocation decision would still be subject to strict value for money considerations and an assessment of overall budget constraints. It is open to Government to amend any budget allocation between technologies, which may be an important way to foster inter-technology competition and maximise value for money.
- 3.35. We expect to engage further with nuclear and CCS developers in developing these arrangements during the remainder of this year. We will also be assessing with developers the applicability of the draft generic CfD to early stage CCS projects and whether this needs to be tailored to provide appropriate support for this technology.

Next Steps on CfD allocation

- 3.36. We will engage with delivery partners as well as industry stakeholders over the summer to:
- develop the Allocation Methodology to a level of detail that supports implementation;
 - inform certain aspects of the design of the allocation processes that are to be delivered (notably the structure of the flexibilities available to Developers, the approach to phased projects and the implementation of price rationing); and
 - develop and assess the options regarding the timing and design of any competitive processes for nuclear and CCS.
- 3.37. With regards to nuclear and CCS we will invite stakeholders to a first workshop in September to assist in developing options, with a further session to discuss the assessment of these options later in the year. Based on feedback from stakeholders, we will provide an updated position on nuclear and CCS allocation in December alongside the final Delivery Plan, with the timing of any final decision to be confirmed, but having regard to developers' needs.
- 3.38. In parallel we will draft secondary legislation to give effect to Government's policy choices. We will consult on the form of this legislation in the autumn.
- 3.39. Further detail of the budget available to low-carbon generation, and the CfD strike prices, was included in the draft Delivery Plan published 18 July 2013. Subject to Royal Assent, a final Delivery Plan will be published in December 2013.

- 3.27. The intention remains to implement the CfD mechanism in summer 2014. This is, of course, subject to Royal Assent to the Energy Bill 2012, Parliamentary time and approval of secondary legislation.

4. CfD Contract Terms

- 4.1. The Draft CfD Contract Terms published today contain detailed information about rights and obligations of Developers who enter into a CfD. This information therefore provides further detail on the overall allocation of risk, building on the information previously published. The Draft CfD Contract Terms also provide developers and investors with additional information on the operation of the CfD regime as a whole.
- 4.2. Where the drafting of the clauses is not complete we have set out within this document our intention of what will be included in the final contract terms. We have also provided explanatory notes to the Draft CfD Contract Terms which explain the meaning of key clauses and the operation of the contract.
- 4.3. The key terms that have been updated and the policy confirmed since November are listed below:
 - Contract Term
 - Installed Eligible Capacity Adjustment
 - Termination
 - Metering Arrangements¹⁰
 - Inflation Indexation
 - Reference Price
 - Refinancing
 - Change in law and other adjustment
 - Force Majeure
 - Dispute Resolution
 - Relevant Geological Issue adjustments
- 4.4. In each case, further detail is set out in the Draft CfD Terms and in the accompanying Explanatory Notes, and a summary included in this document.

¹⁰ Including the arrangements for the Renewable Qualifying Multiplier, Fuel Management and Sampling Agreements.

Contract Term

- 4.5. The EMR Spending Review Announcement of June 2013¹¹ confirmed our position that the appropriate duration for CfD difference payments (for most renewable technologies) would be 15 years. This position is based on a trade-off between value for money for consumers and bankability for investors. These factors are in tension, with analysis suggesting that a shorter contract gives better value for money, but investors tend to prefer a longer period of support.
- 4.6. The decision on the standardised contract length was based upon a need to balance these conflicting tensions. However, the Secretary of State will retain the flexibility to allocate CfDs directly where there is a strong case to do so, for example for early CCS, nuclear, tidal range and potentially large hydro projects. These directly-negotiated CfDs might include a number of variations, including to the duration of CfD difference payments (and thus the overall contract length).

Termination

- 4.7. Based upon significant feedback since the publication of the November CfD Heads of Terms¹² we have reduced the number of default termination events and as a result the Draft CfD Terms now provide for an appropriate and proportionate approach to contract enforcement. Events which give the CfD Counterparty a right to terminate a CfD will now be limited to:
 - a. failure by the Generator to achieve the Initial Conditions Precedent within a limited period after contract signature, the Significant Financial Commitment milestone or the Further Conditions Precedent by the technology specific Long Stop Date (see CfD Allocation Process), subject to force majeure and grid connection delay protections;
 - b. where a Qualifying Change in Law prevents completion of construction or permanently prevents generation in the operation phase; and
 - c. breaches of specified key provisions of the CfD, principally insolvency, non-payment, failure to comply with collateral obligations, fraud, loss of legal ownership, metering non-compliance, and breach of the CfD's transfer obligations.

¹¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209276/EMR_Spending_Review_Announcement_-_FINAL_PDF.pdf

¹² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65636/7078-electricity-market-reform-annex-b.pdf

- 4.8. Under (a) and (b) neither party is entitled to a termination payment, albeit that under (b) the Generator may receive compensation under the Change in Law provisions. Termination under (c) requires the Generator to pay a termination payment to the CfD Counterparty where they occur on or after the start date (i.e. when the contract duration starts to expire).
- 4.9. Stakeholders were concerned that an immediate Termination event associated with the failure to pay any difference payment or other payment (referred to in Draft CfD Contract Terms as Net Payable Amount and non-Net Payable Amount) could lead to 'hair-trigger' termination events. We have reduced the risk of such events occurring by introducing cure periods for these events before termination can take place.

Metering Arrangement

- 4.10. Metering arrangements have been designed to support a wide-range of generation technologies. We have also sought, where possible, to establish consistency with existing metering arrangements. For example, where generators sell their power on the Transmission System and Distribution Systems, the contract will provide for loss net adjusted metered energy for each settlement period, at the BSC (Balancing and Settlement Code) boundary point. This is consistent with existing settlement arrangements under the BSC.
- 4.11. Where a generator uses a Fuel with Variable Renewable Energy Content, it will be necessary to introduce specific provisions to ensure that payments under the CfD are accurate. In such circumstances¹³ an additional calculation (a Renewable Qualifying Multiplier (RQM)) will be applied to a generator's loss-adjusted net metered output value, to determine the level of 'low carbon' metered output that is eligible for support payment.
- 4.12. The RQM calculation is likely to be linked to fuel sample testing results, enforced through a Fuel Measurement and Sampling Agreement (FMSA). Further information on how FMSA will work, its objectives and requirements are currently under development and will be shared over the coming months. It is our expectation that this will mirror existing arrangements, where appropriate, that are already in place for the Renewable Obligation scheme.

¹³ Where a generator uses a fuel with variable renewable energy content, a FMSA will need to be agreed and executed with the Counterparty prior to contract start date.

Private Wire Generation

- 4.13. We are currently developing separate metering arrangements for generators who operate inside private wire networks. This will include generators who are engaged in the private generation and supply of electricity, outside of the BSC and the Transmission and Distribution networks.
- 4.14. The arrangements being developed will include a:
- a. method for metered data collection and processing;
 - b. model for calculating metered output for settlement; and
 - c. framework for enforcing the compliance and technical assurance of metering systems, data integrity and the accuracy of metered output.
- 4.15. As above, where appropriate, a RQM calculation will be applicable to determine eligible 'low carbon' metered output, linked to a FMSA for those facilities that fall within Private Wire Networks.
- 4.16. We will continue to work with the Expert Group on Metering in developing these arrangements.

Dual Scheme Facilities

- 4.17. In line with the Government's 2011 White Paper on Electricity Market Reform¹⁴, the CfD scheme will seek to provide support for any additional, separate and unaccredited capacity installed by a generator who has their existing capacity accredited under the Renewable Obligation scheme (Dual Scheme Facilities).
- 4.18. To prevent the risk of double support, Dual Scheme Facilities will be expected to treat the capacity accredited under each scheme (including both fuel and electricity inputs, and electricity outputs) as distinct and separate.
- 4.19. To enable this process, we are developing a set of specific metering requirements (building on those discussed in the RO Transition consultation document¹⁵ published in July 2013). These requirements are likely to include a condition that the administrators of each scheme should be satisfied that the metering system installed by the Dual Scheme Facility will meet the metering requirements outlined under each scheme.

¹⁴ <https://www.gov.uk/government/publications/planning-our-electric-future-a-white-paper-for-secure-affordable-and-low-carbon-energy>

¹⁵ <https://www.gov.uk/government/consultations/transition-from-the-renewables-obligation-to-contracts-for-difference>

- 4.20. We will engage with developers and existing generators as we develop these areas further and would welcome feedback on issues in relation to metering arrangements.

Inflation Indexation

- 4.21. In the November CfD Heads of Term we indicated that the CfD strike price would be indexed to the Consumer Price Index (CPI), either wholly or partially. In the EMR Spending Review Announcement of June 2013 we confirmed that the CfD strike price would be fully indexed in line with CPI throughout the entire term of the CfD.¹⁶
- 4.22. Whilst some investors indicated a preference for RPI, we consider that there is a clear case for CPI to be used for indexation: it is the preferred government measure of general inflation; is governed by international legislation; and therefore is arguably more robust and durable than alternative indexation measures.
- 4.23. The indexation of 100% of the CfD strike price, against a well understood general measure of inflation, should also accommodate the requirements of the wide a range of different investors we expect to come forward under the CfD. We believe that this should also be attractive to investors who have not traditionally participated in the financing of low carbon generation in the UK.

Reference Price

- 4.24. Previously we had stated our preference for the baseload reference price to be based on annual forward prices; giving a single market reference price for each year. This approach would deliver the most efficient outage planning by operators and therefore support security of supply and help minimise the total costs of managing the system.
- 4.25. However, industry has expressed concerns about low liquidity and consequent basis risk (i.e. of not being able to sell their output at the reference price) if we move straight to a year-ahead price. Additionally a number of concerns have been raised regarding the high cost of collateral and the inability to trade in a way that matches the reference price, due to restrictions on the minimum volumes which are traded. Overall, this could lead to greater risks to investors, and increase costs to consumers.
- 4.26. Some stakeholders have argued that the day-ahead index should be used for baseload generation, as this index would be the most robust. However, as we recognised in the November Operational Framework, using this approach for baseload generation could distort trading decisions and reduce incentives to time maintenance appropriately, thereby increasing overall costs.

¹⁶ <https://www.gov.uk/government/publications/electricity-market-reform-delivering-uk-investment>

- 4.27. Consequently, the reference price for baseload generation will initially be calculated from a forward season index / indices¹⁷ selected using objective criteria to be set out in the contract (i.e. that there will be two reference prices each year; one set every six months). The criteria for selecting the index / indices are still being developed and as such are not included in the Draft CfD Contract Terms published today. However the following paragraphs set out our current intentions. We welcome views on these metrics and will work with industry to develop precise parameters over the coming months.
- 4.28. Given concerns around the reliability of reported prices, and practical difficulties of avoiding double-counting trades, it is intended that the index / indices used as a price source will be based upon actual, auditable trades. However, if a review shows that there is a sustained and material difference between the reference price and a reported market index, and that there is adequate confidence that this is not as a result of market manipulation, a reported index may be included in the reference price calculation (at an appropriate weighting factor). Any indices which cover less than a set percentage of total relevant volumes or fewer than a set number of trades will be disregarded.
- 4.29. For intermittent generation, the reference price will be the GB day-ahead hourly price published under the GB European market hub coupling arrangements. The contract sets out the backup arrangements for where this price is not directly available, which involves utilising prices from the two constituent auction platforms for the GB Hub day-ahead price – namely N2Ex and APX-UK.

Reference Price Adjustment Post CfD Signature

- 4.30. We are mindful of the need to ensure that the CfD Market Reference Price continues to be a fair representation of the price of electricity in the market (for intermittent and baseload generators) for the term of the CfD.
- 4.31. In particular, we are conscious of the need to take account of :
- a. the potential for EU Market Coupling Arrangements to cause changes to the market in which a CfD Generator operates;
 - b. new relevant indices that are not used in the market reference price formulae being introduced into the electricity market or indices used within these formulae ceasing to exist, and
 - c. material changes to the volumes of electricity being traded through different platforms used within the market reference price formulae as time passes.

¹⁷ Note that reference to index or indices is not an indication of any decision by DECC on relevant index/indices.

- 4.32. It is our longer term intent to move from a Baseload Reference Price based upon season-ahead prices to a Baseload Reference Price based upon year-ahead prices for baseload generation. This move will occur when suitable indices are available in the market to achieve a robust reference price.
- 4.33. The formulae currently set out in Clause 7 (Baseload Market Reference Price) and Clause 8 (Intermittent Market Reference Price) do not allow for such changes to be factored in to the way in which the Baseload and Intermittent Market Reference Prices are calculated.
- 4.34. We are therefore developing provisions for the final CfD that will set out how these formulae will be updated following certain trigger events (such as, in particular, those referred to in the paragraph above).
- 4.35. It is our position that:
- a. the way in which the Baseload and Intermittent Market Reference Prices would be adjusted, and the triggers for such adjustment should be deterministic in nature. This will provide potential generator signatories foresight and confidence in the way in which the Baseload and Intermittent Market Reference Prices could be adjusted following CfD signature; and
 - b. the provisions around (i) the triggers for Baseload and Intermittent Market Reference Price review, and (ii) the mechanics behind how the Baseload and Intermittent Market Reference Price would be adjusted would be set out within the CfD as contractual mechanisms.
- 4.36. We are mindful that it may not be possible to develop entirely deterministic procedures for the way in which the Intermittent/Baseload Market Reference Price would be adjusted in all circumstances. If this is the case, we consider that an independent expert or panel of experts would need to be provided for in the drafting of the CfD. Should such a panel be required we envisage that it would need to exercise a certain amount of discretion to adjust the Market Reference Price in accordance with stated principles. We are conscious in this instance that it would be important that potential generators and the CfD Counterparty could be confident in the impartiality of the independent expert(s).
- 4.37. It is our intention that any changes to the Baseload/Intermittent Market Reference Price should apply to all CfDs. We will work with industry to develop the most appropriate means to achieve this when we publish our final position in December.

Refinancing

- 4.38. In the November CfD Heads of Terms, we considered the potential role for 'Refinancing' clauses, which would have reduced Strike Prices should certain refinancing events reveal particularly high returns. Feedback received from investors

and developers was that the imposition of such refinancing gain-share clauses could create an upfront barrier to certain forms of investment, and may have introduced additional risk that is currently not present in the RO regime.

- 4.39. We are also mindful of the importance of capital recycling to investment in new build projects, and of the impact of these conditions on investors' perceptions of the attractiveness of the UK as a place to invest (particularly those less familiar with the UK framework and who have a choice about where they invest their capital).
- 4.40. Therefore we have concluded that a refinancing/gain-share clause is not required in the CfD used within the standard allocation process.
- 4.41. However, it may be appropriate to include refinancing provisions where CfDs are directly negotiated. This is because the process of directly negotiating a CfD is likely to include the detailed scrutiny of financial models, which allows bespoke refinancing terms to be developed (where appropriate).

Change in Law

- 4.42. In the November CfD Heads of Terms¹⁸ we set out an approach to change in law which included a number of tests to determine whether a project or the CfD Counterparty qualified for compensation. These tests included the type of change in law and the impact on the project of the relevant change in law. These were focused on changes in law that impacted upon a particular project or technology types.
- 4.43. Having considered feedback from stakeholders – including concerns that projects might be vulnerable to general changes in law that were, in fact, intended to discriminate against a particular project or technology – the Draft CfD Terms now provide additional protection against certain changes in law.
- 4.44. In particular, they include clauses to cover general changes in law that have a discriminatory effect and which lack objective justification (defined as “Other Changes in Law” within the CfD). This is in line with our approach of offering cover for changes which are targeted at CfD generators or a particular technology type, but not for changes which have a broader impact or which are introduced to support the continued effective operation of the energy sector.
- 4.45. We have also refined our approach to what is a foreseeable change in law, following feedback that the previous phrasing created significant uncertainty. As a result the Draft CfD Contract Terms now include a description of the documents – for example draft Bills, secondary legislation – that will be deemed foreseeable.

¹⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65636/7078-electricity-market-reform-annex-b.pdf

- 4.46. Where there is a qualifying change in law and the CfD generator is deemed to qualify for compensation, compensation will be provided for in the following way:
- a. the compensation would normally be provided in the form of uplift to strike prices receivable by generators over the remaining period of the CfD;
 - b. generators would be compensated for any increase in operating costs that fall within the remaining CfD term and which result from the relevant change in law;
 - c. generators would be compensated for relevant changes in law that result in reduced electricity output; and
 - d. generators will be compensated fully for any additional capital expenditure, if the change in law event were to occur during the first 12 years of operation; beyond this, the proportion of compensation receivable shall decrease in a linear fashion reaching nil at the end of the CfD-supported life.
 - e. where the qualifying change in law results in savings to the generator then a downward adjustment to the strike price will be made.

Changes to Balancing Services Use of System (BSUoS) and Transmission Loss Multiplier (TLM) Charges

- 4.47. Following feedback from stakeholders we have considered the case for further contract protection against certain network charges. BSUoS (charges to cover network balancing) and TLM (an adjustment to cover transmission losses) both recover costs from generators that are normally passed through to the wholesale market price to a high degree, and which also do not play a significant role in setting incentives to invest or operate efficiently. For these reasons, there is a value-for-money case for providing a degree of cost pass-through for BSUoS (balancing costs) and TLM (energy losses), but not TNUoS. The details of how this compensation mechanic will operate are being developed and we would welcome feedback from stakeholders on this point.

Curtailement due to network capacity issues

- 4.48. We are also aware of the concern that the greater penetration of low-carbon generation could increase the frequency of system operator actions to balance the electricity system or resolve transmission constraints. At present, generators affected by these system operator actions receive market-based compensation for the impact on their operations. Whilst we do not consider it likely, it is *possible* that the current

system of market-based compensation could be replaced by one that does not provide generators with economic levels of compensation.

- 4.49. As a result we are developing a further compensation mechanic. This compensation is likely to be applied in the unlikely scenario where government has directly intervened in the market and the result is that the relevant CfD generator is curtailed involuntarily and less than a minimum level of compensation is paid. This should ensure that investors do not increase hurdle rates in order to reflect a risk that is unlikely to crystallise.

Force Majeure

- 4.50. The draft CfD Contract includes terms that set out the criteria to qualify for force majeure. These provisions allow for a degree of additional flexibility in a developer's contractual obligations (including an extension to the CfD Target Commissioning Window and Long Stop Date). This will provide protection against events outside the reasonable control of the CfD generator or certain of its principal contractors.
- 4.51. In claiming force majeure for events that are outside the CfD generator's/principal contractor's control it will need to be demonstrated that the CfD generator/principal contractor has acted to a "Reasonable and Prudent Standard" (as defined in the Draft CfD Terms).

Dispute Resolution

- 4.52. The Draft CfD Terms incorporate a binding dispute resolution procedure through arbitration or, where the parties agree, expert determination. The only exception to this approach is in the event of a dispute in relation to the metered data in respect of the electrical output of the relevant plant. In this case, the relevant dispute resolution procedure under the BSC is used. Prior to this dispute resolution procedure applying, the CfD generator and the CfD Counterparty will be required to seek to agree informal resolution of disputes.
- 4.53. For the avoidance of doubt, Government will have no contractual right to impose settlements in respect of CfD disputes.

Relevant Geological Issue (RGI) adjustments

- 4.54. Following feedback from stakeholders we have included a Relevant Geological Issue (RGI) adjustment clause in the Draft CfD Terms. This allows the generator to adjust their installed eligibility capacity estimate to take account of unforeseeable geological

issues which make the original Installed Eligible Capacity Estimate uneconomic for the Generator to install.

Next Steps on CfD contract terms

- 4.55. The Draft CfD Contract Terms published today reflect the feedback received to date and reflect the published policy positions set out in June¹⁹.
- 4.56. We are now looking towards implementing these policy positions in detail. Therefore we are not seeking comment on the policy positions that are expressed in the Draft CfD Terms. We are however seeking views on the mechanics and the operation of the Draft CfD Terms and in particular the Market Reference Price and Metering arrangements.
- 4.57. Any feedback on the Draft CfD Terms should be supported with evidence and structured in the format set out in the template provided at <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference> and emailed to emrcfdesign@decc.gsi.gov.uk by end of business on 2 September 2013 at the latest.
- 4.58. In parallel we will draft secondary legislation to give effect to Government's policy choices. These draft regulations will set out in detail the elements of the CfD allocation, contracting and management processes and where how they will fit into the CfD architecture. We will consult on the form of this legislation in the Autumn.
- 4.59. We expect to publish the final contract terms and allocation process by December 2013.

¹⁹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209276/EMR_Spending_Review_Announcement_-_FINAL_PDF.pdf

5. Supporting the transition to the CfD

RO to CfD Transition Period

- 5.1. The Renewables Obligation (RO) is the current support mechanism for large-scale renewable electricity generation. After the introduction of CfDs in 2014, there will be a period during which the CfD and the RO are running as parallel support mechanisms, until the RO is closed to new generation on 31 March 2017.
- 5.2. During that transition period between 2014 and 2017, new generation will have a choice between the two mechanisms. Detailed arrangements for the transition period are set out within the RO Transition Consultation, published on 17 July 2013.²⁰

Power Purchase Agreements

- 5.3. Investment from independent developers will play a key role in meeting the Government's decarbonisation and security of supply goals. Many of these independent developers rely on Power Purchase Agreements (PPAs) to participate in the market and sell their power. However, following the Government's Call for Evidence²¹, there is evidence that independent renewable developers are currently facing difficulties under the RO in securing bankable PPAs in order to finance their projects.
- 5.4. The CfD will improve routes to market and PPA availability as it reduces risks to developers and providers of PPAs, and removes the need to market the ROCs²². However, Government has continued work to understand whether there is a case for further action and, since the introduction of the Energy Bill in November 2012, DECC has been conducting further analysis and discussing with stakeholders strengthening routes to market for independent developers.
- 5.5. The outputs of this process²³ support DECC's view that the CfD addresses many of the key commercial risks that developers face. There are, however, some concerns raised by stakeholders that might not be addressed by the introduction of the CfD:

²⁰ <https://www.gov.uk/government/consultations/transition-from-the-renewables-obligation-to-contracts-for-difference>

²¹ <https://www.gov.uk/government/consultations/a-call-for-evidence-on-barriers-to-securing-long-term-contracts-for-independent-renewable-generation-investment>

²² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65635/7077-electricity-market-reform-annex-a.pdf

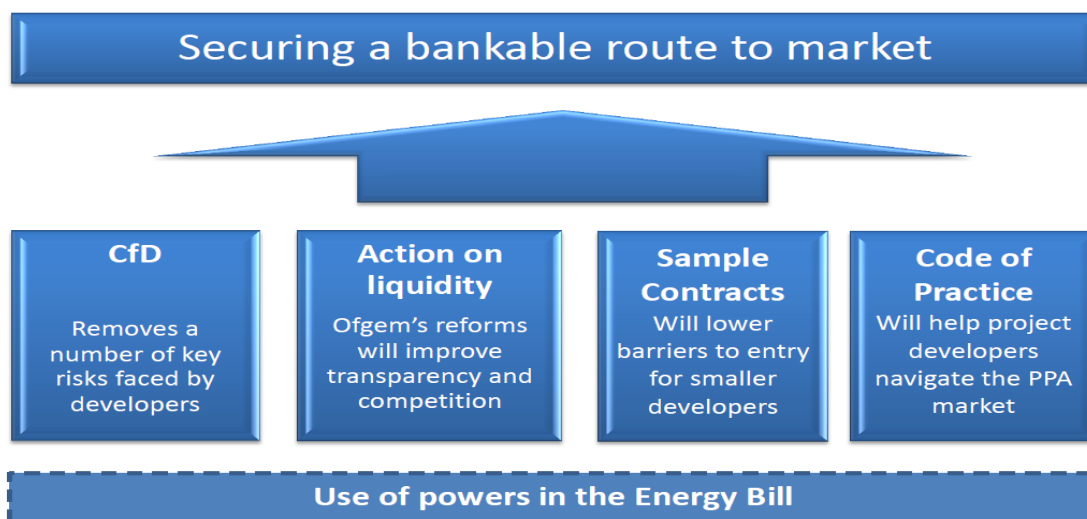
²³ Also at <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-emr-cfd-market-readiness-working-groups>

- That the transition to the CfD creates uncertainty and presents administrative barriers to early projects;
- The difficulties in pricing imbalance risks accurately; and
- Concerns that there may not be sufficient levels of competition in the PPA market under the CfD.

Preparing the market for the CfD

- 5.6. The Government is committed to supporting the transition from the RO to CfDs. Reflecting this, we have established a steering board and two working groups, working with market participants to raise understanding and prepare for the introduction of the CfD. The working groups are developing standard Power Purchase Agreement (PPA) contracts, which can support CfD generation, and a voluntary code of practice for the PPA market in order to establish standards and encourage market participation.
- 5.7. Working group and steering board membership includes a range of stakeholders including large and small suppliers, independent generators, legal firms active in the market and a consumer group. Further information, including membership, terms of reference and meeting papers is available on the GOV.UK website²⁴.

Figure 1. Action to support independent generators.



²⁴ <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-emr-cfd-market-readiness-working-groups>

Energy Bill powers to facilitate investment in independent generation

- 5.8. Some independent renewable developers (and others) have proposed a Green Power Auction Market as a solution to the route to market issue. The Government has considered the available evidence and remains of the view that this approach is not a suitable way forward for the reasons set out in November 2012.
- 5.9. However, in response to industry concerns, the Government has developed an Off-taker of Last Resort (OLR) mechanism, which it considers has the potential to increase competition and reduce PPA discounts by enabling independent generators and lenders to rely on shorter-term PPAs and a wider variety of PPA counterparties. A 'straw man' of this proposal has been developed and shared widely with industry.²⁵
- 5.10. The proposed OLR mechanism would provide a generator with a right to a back-stop PPA in the event that they are unable to find an off-taker in the market. The off-taker would be required to purchase the generator's power at a specified discount to the market price. The discount would be set at a level intended to ensure that the OLR is a true 'last resort' that all parties are incentivised not to use.
- 5.11. The Government has amended the Energy Bill to seek powers to enable the establishment of the OLR mechanism. While we believe the OLR has the potential to open up additional routes to market, further analysis is needed on its practicality and potential consequences in the market. The Government will consult during the passage of the Bill on the creation of an OLR. The consultation will consider the case for creating the mechanism and its detailed design.

²⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/212740/Baringa_Report_-_Backstop_PPA_Strawman_2013.pdf

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