



Department
of Energy &
Climate Change

Supporting Independent Renewable Investment: Offtaker of Last Resort

Consultation Document

11th February 2014

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The consultation [and Impact Assessment] can be found on DECC's website:
<https://www.gov.uk/government/consultations/supporting-independent-renewable-investment-offtaker-of-last-resort>

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Foreword



This Government has set out ambitious plans for reforming the electricity market. The Energy Act 2013 creates a framework through which the UK can develop a clean, diverse and competitive mix of electricity generation that delivers security of supply and keeps bills as low as possible for consumers now and in the future.

At the heart of our strategy is affordable energy security that meets our climate change responsibilities. We need to attract the private capital investment required in this decade to replace the power stations that are going off line and move to cleaner low carbon energy.

Independent renewable generators will make a vital contribution to this investment. They will find this investment easier under the Contracts for Difference (CfDs) which provide long-term certainty to low carbon investors by providing stable revenues and removing long-term price risk from generators.

To further encourage investment from independent renewable generators we are proposing the introduction of the Offtaker of Last Resort (OLR) mechanism, which would provide them a guaranteed, 'backstop' route-to-market for their power. In doing so, the OLR provides the generators and their lenders with greater confidence in the PPA market when making investment decisions, promotes competition in the emerging CfD PPA market, and reduces both the risk and the cost of investment in renewable technologies.

Consequently, the OLR supports our commitment to reducing emissions by reducing barriers to investment, and ultimately reducing costs to consumers.

This document sets out the detailed design options for the OLR policy, which have benefited from extensive input from the OLR Advisory Group. We welcome views from all interested stakeholders on the proposed mechanism - your responses will help to ensure that the OLR meets the needs of all parties, whilst delivering cost reductions to consumers.

I would like to thank those that have supported the development of this policy, including those that have given their time to develop the OLR proposals and those contributing to the wider workstream to smooth the transition to the CfD.

**The Rt Hon Edward Davey
Secretary of State
Department of Energy and Climate Change**

General information

Purpose of this consultation

This consultation seeks views on the Government's proposal for the Offtaker of Last Resort (OLR) mechanism. This consultation is relevant to electricity generators, electricity suppliers, electricity consumers and their representatives, network operators, Ofgem, environmental and energy efficiency organisations, electricity service companies, the construction sector, financial institutions and other stakeholders with an interest in the energy sector. DECC invites interested parties to submit comments and evidence.

Issued: 11/02/14

Respond by: 24/03/14

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Consultation reference: 14/D022 – Supporting Independent Renewable Investment: Offtaker of Last Resort

Territorial extent:

This consultation applies to England, Scotland and Wales.

How to respond:

Your response will most useful it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at <https://www.gov.uk/government/consultations/supporting-independent-renewable-investment-offtaker-of-last-resort>

Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us under the above details to request alternative versions.

Confidentiality and data protection:

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on our website at www.decc.gov.uk/en/content/cms/consultations/. This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

Quality assurance:

This consultation has been carried out in accordance with the Government's Code of Practice on consultation, which can be found here:

<http://www.bis.gov.uk/files/file47158.pdf>

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

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Executive Summary

- 1) This consultation seeks views on the Government's proposal for the Offtaker of Last Resort (OLR) mechanism. Responses are invited from all interested parties by 24 March 2014.

Context

- 2) The Electricity Market Reform (EMR) programme will stimulate investment in secure, low-carbon electricity generation, while improving affordability for consumers. The electricity sector is a critical part of the UK economy and is an important driver of growth.
- 3) EMR is the Government's response to the challenges facing the electricity sector, which, if they are to be overcome, will require estimated investment of up to £110 billion over the next 10 years. A key element of this market reform is the introduction of Contracts for Difference (CfDs) that provide long-term revenue stabilisation to low-carbon plant, allowing investment to come forward at a lower cost to consumers.
- 4) Investment from *independent* generators will play a key role in meeting the Government's decarbonisation and security of supply goals. Many of these independent generators rely on Power Purchase Agreements (PPAs) to participate in the market and sell their power. However, following the Government's Call for Evidence¹, there is evidence that independent renewable generators are currently facing difficulties under the Renewables Obligation (RO) in securing the bankable PPAs needed to finance their projects.
- 5) CfDs will improve routes-to-market and PPA availability because they greatly reduce long-term price risk and remove the need to market Renewable Obligation Certificates (ROCs). 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, has been conducting further analysis and discussing with stakeholders options for strengthening routes-to-market for independent generators².
- 6) The outputs of this process support DECC's view that the CfD addresses many of the key commercial risks that generators face and should see an improvement in the terms and availability of PPAs. However, there are some reasons why independent renewable generators may continue to have difficulty developing projects under the CfD, including:
 - i. That the uncertainty associated with the transition to the CfD, potentially presenting administrative barriers to early projects;
 - ii. The difficulties in pricing long-term imbalance risks within long-term PPAs accurately; and
 - iii. Concerns that there may not be sufficient levels of competition in the long-term PPA market under the CfD.

¹ <https://www.gov.uk/government/consultations/a-call-for-evidence-on-barriers-to-securing-long-term-contracts-for-independent-renewable-generation-investment>

² Various papers are available from the OLR Advisory Group webpage: <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-off-taker-of-last-resort-advisory-group#advisory-group>

- 7) The Government is committed to supporting the transition from the RO to CfDs. Reflecting this, we have established two industry-led working groups: the first looking at how PPA contracts will need to change to support CfDs, and the second developing a set of best practice guidelines for the PPA market³. Whilst these groups will help the transition to the CfD, DECC acknowledge that independent renewable generators may continue to face some difficulties in securing an efficient route-to-market that enables them to secure project finance. If not addressed, this would hinder competition and increase costs for consumers.
- 8) In response, the Government has developed an Offtaker 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. Powers were taken in the Energy Act 2013 to enable the establishment of the OLR.

The Offtaker of Last Resort

- 9) The OLR is designed to reduce the cost of investment in renewable electricity generation, boost competition, and lower costs to consumers. At its simplest, the OLR achieves this by providing renewable CfD generators with a guaranteed, 'backstop' route-to-market for their power: a Backstop PPA.
- 10) Eligible generators are guaranteed a Backstop PPA with an offtaker. Generators will be able to access a Backstop PPA throughout their CfD, with the terms grandfathered from the point of CfD signature. Offtakers will be allocated to generators through a competitive process, with their management fees levelised across the retail market.
- 11) In order for these Backstop PPAs to be a genuine 'backstop' for generators, power will be purchased at a significant discount to the market reference price in their CfD, thus avoiding the risk that the commercial PPA market is undermined⁴. When combined with the CfD top-up payments, generators have a guaranteed minimum price for their power⁵. Backstop PPAs will each be one year in length (with the possibility of reallocation on expiry) and designed to reflect terms and conditions in open-market PPAs as far as possible. To ensure that the OLR provides suitable support for *new* CfD signatories, the scheme parameters will be reviewed annually, with the continuation of scheme considered at the end of the current Delivery Plan period.
- 12) In this way, the OLR is designed to give comfort to lenders and finance providers over the minimum revenues that a project will receive, enabling generators to reduce the costs of raising finance and, in particular, to secure lower-cost debt finance without needing a long-term PPA with a creditworthy entity. This opens up a wider range of contracting strategies for generators and reduces pressure on the long-term PPA market, supports competition and new entry in the PPA market, increases competition between generators, and reduces costs for consumers, particularly under competitive CfD allocation.

³ Papers from the market readiness working groups can be found at: <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-emr-cfd-market-readiness-working-groups>

⁴ Note that the discount is independent of the management fees bid by offtakers. Offtakers bid a fee reflecting the net cost of managing the output at the specified discount. The bids do not affect the price the generator receives, though the price the generator receives *will* affect the bid.

⁵ This is true when the reference price is positive.

- 13) To help design the OLR, DECC established an advisory group with members from a cross-section of industry. The advisory group played a key role in bringing this consultation document to publication and we thank them for their input⁶.

Generator Eligibility (Chapter 2)

- 14) We intend to allow all renewable CfD generators to access the OLR irrespective of their size or technology type. This is because lenders have indicated that, at least at the outset of the CfD, they would otherwise require all renewable CfD generators to attain long-term PPAs in order to provide debt finance.
- 15) We propose to allow projects with Investment Contracts (a form of early CfD) to access the OLR in order to help align the Investment Contracts with the enduring CfD regime.

Offtaker Identity (Chapter 3)

- 16) We intend to *require* some suppliers to bid for Backstop PPAs, so as to ensure the mechanism is deemed bankable and promotes sufficient competition. These 'mandatory offtakers' will be determined by their supply market share by volume; those over the threshold will be required to bid for each generator seeking a Backstop PPA. The threshold will be set at a point that reflects the ability of the supplier to offer an efficient route-to-market to a wide range of generators even at times of market stress.
- 17) In addition to mandatory offtakers, licensed suppliers wishing to provide Backstop PPAs will be able to act as voluntary offtakers, in order to maximise competition. To ensure bankability, it might be necessary for offtakers to meet a minimum credit rating or post a Letter of Credit to cover for potential generator losses in the event of offtaker insolvency.

Generator Access (Chapter 4)

- 18) We anticipate the main reasons why a generator would request a Backstop PPA would be if their previous PPA expired, or was terminated due to offtaker default, and they were unable to find a new route-to-market on better terms than those offered through the OLR. We would not seek to limit access to the mechanism in these situations.
- 19) However, we do intend to revoke or suspend eligibility for further Backstop PPAs from generators that have a Backstop PPA terminated due to their material breach. This is to ensure that, even when getting support under the OLR, generators retain an incentive to manage their plant appropriately.
- 20) To protect against generators using a Backstop PPA for a very short period of time (for example, whilst negotiating a better open-market PPA), generators will have to commit to remaining within the agreement for a minimum period of six months. Failure to do so will see eligibility for further Backstop PPAs revoked.
- 21) In terms of timing, we intend for the OLR secondary legislation to come into force around the time the first CfDs are allocated in autumn 2014, depending on the outcome of this consultation, with all eligible CfD generators guaranteed OLR support as set out when they sign their CfD. Generators will typically be able to access a Backstop PPA at any point during their CfD. However, there is likely to be an initial period during which generators

⁶ Papers from the OLR Advisory Group can be found at: <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-off-taker-of-last-resort-advisory-group>. Several positions have changed between the papers and this consultation document as a result of engagement with the group.

will not be able to access a Backstop PPA in order for Ofgem⁷ and offtakers to put in place the systems to allocate Backstop PPAs and implement the levelisation process. We estimate that generators will be able to access Backstop PPAs from early 2016.

Allocation (Chapter 5)

- 22) We propose that backstop PPAs are allocated to offtakers on a competitive basis. Offtakers will bid a management fee in £/MWh to manage a specific generator's output under the terms of the Backstop PPA, pricing the likely costs and benefits of doing so into their bid. This should provide an incentive on the backstop offtaker to manage the output as efficiently as possible, and make it easier for voluntary offtakers to access the process, increasing competition and leading to more cost-reflective bids.
- 23) We propose that Ofgem use a sealed-bid process to allocate generators to offtakers, whilst providing them with discretion to switch to a regular online auction (e.g. descending clock) if it judges that this would reduce costs to consumers. The choice of mechanism is likely to depend on the volume of generators seeking Backstop PPAs at a particular time.
- 24) To give confidence to lenders and minimise risk to generators, a generator seeking a Backstop PPA will be allocated an offtaker and enter into a Backstop PPA within 6 weeks of expressing an interest.

Cost Assessment and Levelisation (Chapter 6)

- 25) The management fees of backstop offtakers (i.e. bid multiplied by volume) throughout the levelisation period will be levelised across suppliers. To avoid distorting the retail market, all licensed suppliers will be liable for the levelisation payments, with the costs shared between suppliers on the basis of the volume of electricity supplied over the period.
- 26) We plan to adopt a quarterly levelisation process at the outset of the OLR. This would be subject to the annual review, which would consider whether the current and projected volume of generation within Backstop PPAs warranted a more frequent levelisation. The levelisation process will include mutualisation provisions to guard against a shortfall in the levelisation fund, for example due to supplier insolvency.

Pricing (Chapter 7)

- 27) We propose to set the discount for the Backstop PPA as a discount to the market reference price in the generator's CfD, expressed in £/MWh, indexed to the Consumer Price Index, and fixed for the duration of the CfD.
- 28) We are minded that the discount would be between £20 and £30/MWh, with our preferred option being a discount of £25/MWh. This preference follows modelling work from Deloitte which assessed the impact of different discounts on project returns for intermittent generators. Deloitte assumed lenders would size debt against contracted revenues (i.e. a PPA or the OLR revenues), with equity able to adopt a shorter-term contracting strategy if debt was sized against the OLR. Project returns under the shorter-term contracting strategy were closest to those provided by an efficiently priced long-term PPA at a backstop discount of £25/MWh.
- 29) More qualitatively, we judge that a £25/MWh discount strikes the right balance between a discount that is sufficient to minimise the risk that it ends up being smaller than discounts

⁷ We note that, although we envisage a prominent role for Ofgem in administering elements of the OLR, their involvement is subject to discussions with their Governing Body, the Gas and Electricity Markets Authority.

in the market (increasing costs to consumers), while still providing sufficient 'firm' revenue to allow projects to obtain a reasonable level of gearing and unlock additional routes-to-market.

- 30) We are minded to offer a single discount for all technologies. The discount proposed was sized against the technologies widely expected to face the highest route-to-market costs. It should be sufficient for other technologies such as baseload, since there is arguably greater potential for equity upside with these technologies. It is also important that the OLR remains a backstop for all technologies; a consistent discount across technologies helps to ensure this whilst minimising the administration burden of the OLR.

Contract Terms (Chapter 8)

- 31) The terms of the Backstop PPA contract will be designed to be:
- i. Bankable: lenders need to be comfortable with it and prepared to lend against it;
 - ii. Simple: to fit with the short timeframe for accessing the OLR; and
 - iii. Balanced: providing a balance of risks for both Parties.
- 32) It is our preference to have one set of terms and conditions that would apply to all projects without changes to the main contract. Differences between projects would be reflected in a schedule to the contract which would detail project-specific information.
- 33) We intend for the terms of the Backstop PPA contract to be as close as possible to those of a 'typical' commercial CfD PPA to help financiers get comfortable with the terms, and to ensure an appropriate balance of risks for the parties. However, there are areas where we expect that the Backstop PPA may need to differ. These include aspects such as index price, metering and meter registration, curtailment rights and obligations, and forecasting and data provision.

Scheme Review (Chapter 9)

- 34) We are minded to report on the OLR scheme annually, and to undertake a comprehensive review of it at the end of the first EMR Delivery Plan in 2018/19.
- 35) Annual reporting would cover a range of market performance measures, including the level of competition in the PPA market, the number of generators that accessed Backstop PPAs in the past year, and the volume of CfD generation under PPAs. Whilst the terms of Backstop PPAs are grandfathered from the point of CfD signature, annual reporting could also consider whether to amend to OLR parameters for future CfD signatories. Any changes would be subject to consultation, and proposed only where terms in open-market PPAs had shifted significantly in nature.
- 36) The primary objective of the comprehensive review in 2018/19 would be to consider whether the scheme should remain open for new generators beyond the first Delivery Plan.

Glossary

A.BMU	Additional Balancing Mechanism Unit
Backstop PPA	PPA contract offered under the OLR
CfD	Contract for Difference
CfD Agreement	The initial section of a CfD which details the project-specific information relating to that particular contract, such as the eligible generator's name and the location of the facility
Contract for Difference	The combination of the Standard Terms and a CfD Agreement, which when signed by the CfD counterparty and an eligible generator comprise a legally binding contract
CfD counterparty	The counterparty for CfDs, which will be the CFD Counterparty Company Limited.
DSCR	Debt Service Cover Ratio
EBSCR	Electricity Balancing Significant Code Review
Eligible Generator	Any electricity generator eligible for the OLR
EMR	Electricity Market Reform
IRR	Internal Rate of Return
FIDeR	Final Investment Decision Enabling for Renewables
Generator	Any legal entity which might apply for a CfD
IC	Investment Contract
IRGs	Independent Renewable Generators
LoC	Letter of Credit
Modification	A change to the Standard Terms agreed by the CfD counterparty and a generator before that generator applies for a CfD
MPAN	Meter Point Administration Number
MRP	Market Reference Price
MW	Mega Watt
NFPA	Non-Fossil Purchasing Agency Limited
Ofgem	Office of Gas and Electricity markets
Offtaker	Licensed supplier party to a PPA or Backstop PPA with a generator
OLR	Offtaker of Last Resort
PPA	Power Purchase Agreement
REMIT	EU regulation No 1227/2011 on wholesale energy market integrity and transparency
RO	Renewables Obligation
ROC	Renewable Obligation Certificate
SCADA	Supervisory Control and Data Acquisition
ssFiT	Small Scale Feed in Tariff
System Operator	The operator of the national electricity transmission system in Great Britain, which will act as the Delivery Body for the CfD regime
T&Cs	Terms and Conditions
Variation	An automatic change to the Standard Terms that result from the completion of the CfD Agreement
VIU	Vertically Integrated Utilities
£/MWh	Pound per Megawatt hour

Chapter 1: Introduction

What is the Offtaker of Last Resort?

- 1.1 The Offtaker of Last Resort, or OLR, is designed to reduce the cost of investment in renewable electricity generation, boost competition, and lower costs to consumers. At its simplest, the OLR achieves this by providing renewable CfD generators with a guaranteed, 'backstop' route-to-market for their power.
- 1.2 The policy achieves this by providing eligible generators (see Chapter 2) with a Backstop Power Purchase Agreement (or Backstop PPA) with an offtaker (see Chapter 3). Generators will be able to access a Backstop PPA throughout their CfD, with the terms grandfathered from the point of CfD signature (see Chapter 4). Offtakers will be allocated to generators through a competitive process (see Chapter 5) with their management fees levelised across the retail market (see Chapter 6).
- 1.3 In order for these Backstop PPAs to be a genuine 'backstop' for generators, power will be purchased at a significant discount to the market reference price in their CfD, thus avoiding the risk that the commercial PPA market is undermined (see Chapter 7). When combined with the CfD top-up payments, generators have a guaranteed minimum price for their power⁸. Backstop PPAs will each be one year in tenor (with the possibility of reallocation on expiry) and designed to reflect terms and conditions in open-market PPAs as far as possible (see Chapter 8). To ensure that the OLR provides suitable support for new CfD signatories, the scheme parameters will be reviewed annually, with the continuation of scheme for new CfD signatories considered at the end of the current Delivery Plan period (see Chapter 9).
- 1.4 In this way, the OLR is designed to give comfort to lenders and finance providers over the minimum price that a project will receive for its output, enabling generators to reduce the costs of raising finance and, in particular, to secure lower-cost debt finance without needing a long-term PPA with a creditworthy entity. This opens up a wider range of contracting strategies for generators and reduces pressure on the long-term PPA market, supports competition and new entry in the PPA market, increases competition between generators, and reduces costs for consumers, particularly under competitive CfD allocation.

Why is the OLR needed?

- 1.5 On 5 July 2012, the Government launched a Call for Evidence⁹ to improve our understanding of the issues facing independent renewable generators. Based on the evidence provided by respondents, targeted interviews and advice and additional analysis undertaken by Baringa Partners LLP, Government assessed the issues facing independent generators of intermittent power generation in securing commercially viable

⁸ This is true when the reference price is positive

⁹ Available online at: <https://www.gov.uk/government/consultations/barriers-to-long-term-contracts-for-independent-renewable-generation-investment>.

PPAs and how these might evolve in future with a move to CfDs.¹⁰ The evidence suggested that there had been a general deterioration in the market, and that generators were finding it hard to secure PPAs on terms that were as beneficial as previously.

- 1.6 The main factors for the deterioration in PPA market liquidity were identified as:
- i. Increased wholesale price risk – In particular, a reduced appetite by offtakers to offer sufficient wholesale price protection (typically in the form of a price floor);
 - ii. Reduced long-term appetite for ROCs – In particular a reduced appetite to manage long-term ROC price and liquidity risk, potentially due to an increase in the ability of Vertically Integrated Utilities (VIUs) to meet their renewables obligation with their own assets, particularly with the RO closing to new entrants over the coming years;
 - iii. Increased balance sheet/credit rating impact – Fixed or floored PPAs treated as imputed debt (consistent with greater scrutiny by credit-rating agencies following the financial crisis) and greater involvement by VIUs in large-scale offshore wind projects requiring a significant amount of capital; lending requirements currently restrict the ability of other non-VIU providers in the long-term PPA market; and
 - iv. Increased regulatory and policy risk – For example, the uncertain impact of Ofgem’s Electricity Balancing Significant Code Review (EBSCR) on future balancing costs.
- 1.7 The move from the RO to CfDs should act to improve the situation for independent renewable generators. CfDs provide a guaranteed top-up payment for every MWh produced against the market reference price (a measure of the average electricity price). As such, a significant amount of price risk will be removed.¹¹ In addition, the switch from the RO removes the need to manage ROC price and liquidity risk for new projects. Long-term PPAs without price floors should have much less impact on the balance sheets of offtakers, improving the availability and attractiveness of these contracts. This should also mean that, all other things being equal, market PPA discounts should improve.
- 1.8 To further ease the transition, in April 2013 DECC initiated a CfD market readiness project to help independent generators understand and prepare for the introduction of CfDs¹². This consists of two working groups as follows.
- i. The first group is considering how power purchase agreement (PPA) contracts will need to change to complement CfDs. PPAs will need to look slightly different under CfDs, and the outputs of this group will help ensure that financiers are familiar with the structures before the first CfDs are entered into. This will also help to reduce costs for the first movers, which can be a significant barrier for smaller market participants.
 - ii. The second group is developing a set of best practice guidelines for the PPA market. This includes a description of the process for negotiating a PPA and what is expected from each party at each stage. The guidelines will reduce barriers to entry for small independents and help them contribute to a healthier market.

¹⁰ Available online at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224081/baringa_ppa_market_liquidity_call_for_evidence.pdf

¹¹ There will still remain some residual risk, for example, in relation to negative prices.

¹² Papers from the market readiness working these groups can be found at: <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-emr-cfd-market-readiness-working-groups>

- 1.9 However, despite the improvements we expect to see as a result of the CfD and the work that DECC has been doing to prepare the market, there will remain risks to the improvement of PPA market terms and liquidity. These largely stem from the following.
- i. **Uncertainty over future balancing costs** – There is uncertainty over the impact on the future cost of balancing the increasing penetration of intermittent generation on the system. This uncertainty necessitates higher risk premia being applied to long-term PPA discounts.¹³ Possible changes to the way in which imbalance costs are calculated have also added to these risks¹⁴.
 - ii. **Bank lending requirements** – Bank lending requirements currently act as a significant barrier to entry in the long-term PPA market. Lenders currently require a counterparty offering long-term PPAs to have a minimum credit rating of BBB- or above, alongside a large balance sheet, a relatively stable supply base, and a strategic position in the GB energy market in a way that makes it very difficult for them to walk away from long-term contracts and liabilities. As a consequence, large VIU offtakers are often the only entities able to offer such contracts in a way that is deemed bankable by lenders. Given the volume of projects likely to require PPAs under the CfD, there is a real concern about the ability of these long-term PPA providers to contract with the volume of independent generators that could be seeking CfDs and require long-term PPAs. Though the shorter-term market is more liquid with lower PPA discounts, lenders currently do not accept these shorter-term contracting strategies since they do not provide comfort over longer term revenues or offtake beyond the initial contract.

How will the OLR help generators and consumers?

- 1.10 The OLR guarantees renewable CfD generators a route-to-market in the event that they cannot secure one in the open-market. In doing so it should result in further benefits by addressing some of the barriers identified above.
- 1.11 Firstly, lenders can provide debt finance without needing generators to sign long-term PPAs, improving the availability and terms of bankable PPAs, and opening up a much wider range of contracting strategies and counterparties, thus improving competition and market access. In turn this should reduce the pressure on competition for long-term PPAs, helping equity investors without the risk appetite for shorter-term contracting strategies.
- 1.12 Secondly, a wider range of renewable projects developing under their optimal contracting strategy should see more competition under the CfD, lower strike prices under competitive allocation, and lower costs for consumers.
- 1.13 The OLR therefore supports our commitment to reducing emissions by reducing barriers to investment, which ultimately reduces costs to consumers.

How does this consultation fit with the wider policy design process for the OLR?

- 1.14 The 2013 Energy Act lays the legislative framework for the Government's Electricity Market Reform programme, including granting the Secretary of State powers to facilitate

¹³ The short-term PPA market involves smaller risk premia as a result of the shorter tenure of the contracts. However, lenders do not currently accept these shorter-term contracting strategies since they do not provide comfort over longer term revenues.

¹⁴ Ofgem are aiming to publish their final EBSCR policy decision in Spring 2014.

investment in electricity generation by means of a Power Purchase Agreement scheme. This is the legislative basis for the Offtaker of Last Resort.

- 1.15 This consultation seeks feedback on the key design features of the Offtaker of Last Resort. Following this, we will be launching a further consultation on the secondary legislation to support the Offtaker of Last Resort, which will also cover the detailed terms of the Backstop Power Purchase Agreement contract. We intend for the OLR secondary legislation to come into force around the time the first CfDs are allocated in autumn 2014.

Chapter 2: Generator Eligibility

- 2.1 This chapter considers which renewable CfD holders should be eligible for support under the OLR. Specifically we consider whether eligibility should be subject to technology, project size or support mechanism.

Technologies

- 2.2 The OLR has been developed in response to concerns from independent renewable generators over their current routes-to-market and those expected to be available under the CfD. Reflecting this, and the lack of evidence to date that non-renewable technologies eligible for CfDs will face similar difficulties, the eligibility for the OLR will be restricted to renewable CfD generators. We would welcome evidence from stakeholders over the route-to-market issues facing other CfD eligible technologies.
- 2.3 As set out in Chapter 1, the CfD removes long-term wholesale price risk from generators, but leaves them exposed to route-to-market costs. Particularly at the outset of the CfD scheme, lenders might have concerns over the potential magnitude of these route-to-market costs. In order to secure project finance, lenders may require generators to secure long-term PPAs in order to mitigate this residual risk, preventing the adoption of shorter-term contracting strategies that might be to their benefit. Therefore, in considering which renewable generators will require access to the OLR, we assess if some technologies will be able to secure project finance without it.
- 2.4 For intermittent generators, uncertainty over the future costs of managing imbalance¹⁵ is a key concern, both for lenders (meaning that they require generators to secure long-term contracts) and for offtakers (in pricing the discounts in those long-term contracts). Intermittent generators are more likely to be out of balance; technologies whose imbalance correlates with system imbalance will be most exposed to costs.
- 2.5 In the absence of the OLR, intermittent generators are likely to require long-term PPAs in order to secure project finance, until such time as the market gains confidence over future imbalance and route-to-market costs. Including such generators within the OLR caps the extent of their route-to-market costs, giving lenders comfort to provide finance based on the OLR revenues, enabling generators to access shorter-term contracts and a wider range of PPA counterparties. The OLR continues to leave generators exposed to a share of imbalance costs, ensuring suitable siting and operation, yet caps the maximum level of this exposure. Since eligibility for intermittent generators within the OLR should improve their route-to-market options, we consider that intermittent generators should be eligible for support.
- 2.6 With baseload generators, future route-to-market costs are less likely to change significantly from those currently seen in the market. Some concerns have been expressed about liquidity risk, though liquidity in the season-ahead reference price is adequate, and we believe will improve for a variety of reasons¹⁶. Without the likelihood of

¹⁵ Generators face imbalance costs when they produce more or less electricity than they have notified in each half hour trading period (Settlement Period). After the end of the Settlement Period, the Party's contracted (traded) volume is compared with its metered volume in order to determine its imbalance.

¹⁶ These reasons include: (1) the CfD itself should drive greater liquidity through generators trading in the reference price market; (2) Ofgem's 'Secure and Promote' proposals include a Market Maker obligation which will require

these costs increasing significantly or in unexpected ways, lenders should in theory be more comfortable providing project finance without generators having secured a long-term PPA; particularly since the project could secure a better return through a shorter-term contracting strategy. There is a question therefore as to whether baseload technologies require support through the OLR; would they require long-term PPAs without OLR support in order to secure project finance, or would lenders be comfortable sizing debt at a level below the strike price?

- 2.7 In our discussions with lenders it has become clear that, in the absence of support from the OLR at the outset of the CfD, they *will* require baseload renewable technologies to attain long-term PPAs in order to provide debt finance. This would significantly limit the contracting options for baseload generators requiring debt finance. Whilst we expect generators and lenders to become comfortable with the CfD, and for requirements to attain long-term PPAs, particularly for baseload generators, to relax, we intend to allow all renewable CfD generators access to the OLR irrespective of technology.

Consultation Question

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| 1. | Do you agree that eligibility for the OLR should include all renewable CfD generators? Please provide evidence as to why not. |
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Generator Size

- 2.8 Renewable generation projects have a diverse range of sizes; whilst the majority are small, there are a smaller number of large projects, particularly offshore wind. Given this range there could be a risk to any offtaker mandated to offer Backstop PPAs of being awarded a much larger generator than their competitors are mandated to accept, and/or awarded an offtaker that is sufficiently large (relative to the supplier's business) that they have a significant impact on the risks faced by that supply business. This is a particular concern if generators were administratively allocated to backstop offtakers.
- 2.9 Under a competitive allocation system, there is a risk that fewer offtakers would bid for the output of a large generator given that there would be a smaller pool of offtakers capable or willing to manage the output.
- 2.10 One solution would be to cap the size of projects eligible for the OLR. However, larger generators could face similar route-to-market risks to smaller generators. We have not seen evidence for why generators should be excluded from the OLR on the basis of size.
- 2.11 Instead we plan to allow plant of all sizes to get support under the OLR. We will reduce the risks from this in two ways:
- We propose allocating Backstop PPAs to offtakers through a competitive process that would enable offtakers to price in any risks they associate with specific generators; and
 - To encourage a greater number of voluntary offtakers to bid to manage larger projects through Backstop PPAs, we propose to split the output of generators above 100MW

obligated parties to post bids and offers across different forward products at maximum spreads and clip sizes, with an objective to deliver robust prices along the curve. This should further increase liquidity in the season-ahead market; (3) DECC have taken powers in the Energy Act that enable the Secretary of State to modify licence conditions in order to promote liquidity. DECC has stated that it will use these powers to improve liquidity if it believes that Ofgem's reforms are not having the intended effect; (4) the CfD contract will include provision for annual reviews of the reference price to ensure it is still appropriate.

across multiple offtakers to ensure sufficient competition within a competitive allocation process. Both points are discussed further in Chapter 5.

2.12 As such, we do not intend to limit the size of generators that are eligible for the OLR.

Consultation Question

2.	Do you agree that renewable CfD generators of all sizes should be eligible under the OLR?
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Support Mechanism

2.13 Under the Final Investment Decision Enabling for Renewables (FIDeR) process, certain projects that need to make final investment decisions before the CfD is in place are able to apply for Investment Contracts (ICs) – a form of early CfD. ICs are being designed to be as consistent with the enduring CfD as possible, with the published strike prices and the same key commercial terms under both schemes.

2.14 The route-to-market issues facing independent renewable generators are well known, and Government has long since stated its aim to resolve them should they continue to prove a significant issue. Therefore, though generators have applied for ICs without knowing the detail of the OLR intervention or whether they would be eligible for it (and therefore might not have expected to benefit), they may have had a reasonable expectation that they would be covered given Government's long-standing commitment. These projects have not yet been committed to and may require debt finance. As such there is no certainty that they would proceed with or without the OLR.

2.15 On balance we think that allowing access to the OLR for IC projects has the advantage of aligning the IC with the enduring CfD regime. We therefore propose to include IC projects within the OLR.

Consultation Question

3.	Do you agree that projects with Investment Contracts should be eligible for support under the OLR?
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Chapter 3: Offtaker identity

- 3.1 Under the OLR, an eligible generator has a right to a Backstop PPA with an offtaker. This chapter considers the nature of those offtakers, particularly whether some offtakers should be subject to an obligation to offer to enter into these PPAs, and any credit requirements required to ensure the scheme is viewed as bankable by investors. Under the Energy Act 2013, offtakers to the Backstop PPAs have to hold a supply licence.

The need for mandatory offtakers

- 3.2 For the OLR to achieve its objective of guaranteeing generators a route-to-market there will need to be a counterparty or offtaker to the Backstop PPA. Under the competitive allocation process outlined in Chapter 5, offtakers will submit a bid to manage a generator's output through a Backstop PPA. In theory, therefore, there is a risk that if no offtakers bid to manage the output, then the generator would not be assigned an offtaker.
- 3.3 We consider it unlikely that a situation would arise in which no bids were received for a Backstop PPA. Under competitive allocation where the costs of managing contracts are levelised across the supply market, there is an opportunity for suppliers to generate additional profit (funded by their competitors in the supply market) by bidding above their true costs: they make a profit on the difference between the bid and true costs, with the bid costs being passed through to the retail market and incurred by their competitors. Assuming suppliers are seeking to make profit, there should always be an incentive to place a bid, even if the bid is high (though the expectation of and potential for these high bids will provide a strong incentive for others to bid at lower prices)¹⁷.
- 3.4 Whilst we would always expect suppliers to bid for Backstop PPAs, it is hard to anticipate all possible market conditions that could arise over the lifetime of a CfD which could lead to offtakers being unwilling to bid in a competitive tender. Generators and lenders would have more confidence in the scheme if at least some offtakers were *mandated* to bid for Backstop PPAs. This requirement would also help ensure a minimum level of competition within the allocation process. We therefore propose that some licenced suppliers are mandated to bid to manage Backstops PPAs, but that these bids are not constrained or capped in any way.

Consultation Question

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| 4. | Do you agree that some licenced suppliers should be mandated to bid for Backstop PPAs? |
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Nature of mandatory offtakers

- 3.5 Each mandatory backstop offtaker must be a suitable PPA counterparty to any generator that enters the scheme, including potentially in times of market stress (e.g. high imbalance costs), and offer these generators sufficient confidence of timely payment under the

¹⁷ As set out in Chapter 6, we expect that this same competitive pressure should ensure that suppliers bid in a cost-reflective manner, in order to avoid the situation whereby a competitor makes significant rents to which they have to contribute a levelisation payment.

Backstop PPA. In addition, we are mindful of the potential for Backstop PPAs to impose additional financial obligations on a supply business: something that could have a significant effect, particularly for smaller suppliers. It is likely that larger supply companies, with a strong customer base, are able to offer generators the assurance they need and be capable of managing any additional risk, without significant additional costs relative to their overall supply businesses.

- 3.6 Our assessment of the capabilities that a mandatory offtaker would need to have in order to perform the function efficiently is therefore as follows.
- i. Sufficient capital to cover the period between having to make payments to generators under the Backstop PPA and receiving compensating payments from the levelisation mechanism.
 - ii. Trading expertise and infrastructure – the ability to trade the power in the CfD reference market. This may depend on the nature of the reference price in the Backstop PPA – for example, greater capabilities are required to trade in the season ahead market (which is the proposed reference price market for baseload CfDs) than the day-ahead market (for intermittent CfDs). Note that an offtaker could outsource this function to a third party if it did not have the necessary in-house capability.
 - iii. Forecasting expertise - for intermittent generators, providing a Backstop PPA efficiently will require wind / solar / tidal forecasting capability. Note that an offtaker could outsource this function to a third party if it did not have the necessary in-house capability.

Setting the threshold for mandatory offtakers

- 3.7 In order to provide lenders with comfort that there will always be a mandatory offtaker of suitable profile to bid for Backstop PPAs, any threshold beyond which a licenced supplier would become a mandatory offtaker would need to be robust throughout the duration of a generator's CfD.
- 3.8 Thresholds based on credit-rating are therefore not appropriate given that these ratings could change over time, in addition to not being sufficiently reflective of the nature of the companies deemed appropriate to act as mandatory offtakers. Similarly, an approach which identified specific companies would not be able to withstand changes to the makeup of the electricity market.
- 3.9 Instead we propose a threshold based on a supplier's presence in the electricity market as being the appropriate proxy to reflect the required qualities of mandatory offtakers.
- 3.10 Several existing and former government schemes oblige certain suppliers to participate whilst exempting smaller suppliers for whom the costs of participation would be prohibitive. These have typically used a threshold of 250,000 domestic supply customers¹⁸.
- 3.11 Using customer numbers as the threshold for mandatory offtakers under the OLR would be inappropriate. Whilst it might be a proxy for some of the characteristics that we identified for mandatory offtakers, the OLR is not a consumer-facing scheme and customer numbers do not fully reflect a supplier's ability to contract with a generator for power.
- 3.12 Instead, a threshold based on the volume of electricity supplied is a better proxy for requirements to contract for power in the market. We propose that suppliers obligated to

¹⁸ For example: the Carbon Emission Reduction Target, Community Energy Saving Programme, Feed-in-Tariff, Energy Company Obligation and the Warm Homes Discount.

be mandatory offtakers would those that supply more than a minimum share of electricity in Great Britain.

- 3.13 Information on combined market share across both domestic and non-domestic supply markets is not publically available. Within the bounds of data confidentiality, we will work with Ofgem¹⁹ to establish robust data on combined market share, and determine the appropriate threshold. The intention is for this level to be set as follows.
- i. Be high enough that small suppliers are not covered and unlikely to be captured without a significant increase in their market share. This is to protect the OLR from concerns about the nature and bankability of mandatory offtakers. Initial indications suggest that this level would need to be above 5% of electricity supplied.
 - ii. Be low enough such that (a) the largest suppliers are mandated to bid for Backstop PPAs, and (b) it is unlikely that more than one of these suppliers would fall out of this obligation without a significant change to their market share. This is to protect the OLR from lenders' concerns about a low number of mandatory offtakers, and to encourage competition within the allocation process. Initial indications suggest that this level would need to be below 8% of electricity supplied.
- 3.14 There is a risk that, in the event that the electricity retail market becomes highly fragmented, there could be many suppliers each with a share of the supply market below the threshold. A threshold of between 5-8% of electricity supplied should be sufficient to ensure that at least one supplier was always mandated to bid for contracts. However, to ensure confidence that there will always be a mandatory offtaker, we intend that the Secretary of State would review and adjust the threshold in the event that too few suppliers would be covered by the obligation.

Consultation Question

5. Is our approach to setting the mandatory offtaker threshold appropriate?

Ensuring credit-worthiness

- 3.15 For the OLR to achieve its objectives, generators and lenders will need to be comfortable about the credit-worthiness of the offtakers. Equally, to minimise the costs of the OLR to consumers and to help promote competition in the retail market, we are keen that non-mandated licenced suppliers are able to bid to offer Backstop PPAs voluntarily, and that the requirements to do so are not too onerous. Striking the correct balance between providing confidence to lenders, maximising competition and reducing costs will be crucial.
- 3.16 For generators and lenders, their concerns over the credit worthiness of offtakers are two-fold: what is the chance of the entity becoming insolvent, and how quickly could the project be reallocated an alternative offtaker if an insolvency did occur?
- 3.17 With regard to the first of these questions, the likelihood of insolvency is influenced by the length of the contract and the credit rating of the offtaker. As set out in Chapter 3, whilst eligible generators are entitled to support from the OLR for the duration of their CfD, each individual Backstop PPA is only one year in length²⁰. The generator's contract with the offtaker will expire at the end of the year, meaning that lenders should only have concerns

¹⁹ We note that, although we envisage a prominent role for Ofgem in administering elements of the OLR, their involvement is subject to discussions with their Governing Body, the Gas and Electricity Markets Authority.

²⁰ If a generator wishes to secure a further Backstop PPA at the expiry of its existing one, it is able to do so but will be reallocated an offtaker.

that an offtaker would go insolvent for the twelve months from the point at which they enter a Backstop PPA.

- 3.18 As set out in Chapter 3, we propose that generators can enter a Backstop PPA six weeks after they notify Ofgem that they would like one. Any losses to the generator in the event of offtaker insolvency would therefore be limited to the monies owed at the point of insolvency, and the difference between the revenues they would have had under the terminated Backstop PPA and those they can receive from the market directly, perhaps by spilling power, for the six week period until reallocation.
- 3.19 The risk to generators and lenders is therefore limited due to the short-term one year contract and the relatively quick reallocation process. However, it is likely that lenders will still require some reassurance that the generator will be protected in the event of offtaker insolvency.
- 3.20 Whilst mandatory offtakers are more likely to have better credit ratings than voluntary offtakers, it is conceivable that they might not. Mandatory offtakers are identified because of their established presence in the market rather than because they have a higher credit score. To avoid a situation in which mandatory offtakers face less stringent requirements than voluntary offtakers, we propose that the chosen credit requirements from the options set out below apply to all participating offtakers.
- 3.21 We are considering three options to ensure that generators are protected from offtaker insolvency as follows.
- i. Offtakers need to meet **either a minimum credit rating or post a Letter of Credit** from a financial institution which meets a minimum credit rating²¹. This approach would most closely mirror the approach taken in the wider market, but does introduce an additional cost on smaller offtakers that do not have a credit rating.
 - ii. **All offtakers need to provide a Letter of Credit** from a financial institution which meets a minimum credit rating. This should lead to increased competition from voluntary offtakers, although offtakers with a higher credit rating would be able to get a letter of credit more cheaply.
 - iii. **Do not include any specific credit requirements.** It is common for commercial short-term PPAs not to require specific credit cover. Replicating this approach could result in the lowest cost to consumers through minimising offtaker costs and maximising competition, though it could increase the risk of offtaker insolvency. For the OLR to remain bankable, lenders would need to be confident that generators were compensated for lost revenue in the event of such an insolvency. Protection could be provided by providing compensation to generators through the mutualisation provisions in the levelisation fund if any monies owed cannot be recovered from the insolvent offtaker. This would leave the costs of any offtaker default being borne across all suppliers.

²¹ Any Letter of Credit would need to cover the generator for lost revenues in between any offtaker default and the generator being reallocated a replacement Backstop PPA through the OLR. This would be calculated by Ofgem prior to the competitive allocation process and would be a function of the time it takes to reallocate to another offtaker; the spread between the cash-out prices and the market reference price; and the generator's output over the previous year.

Consultation Questions

6.	<p>Are specific credit requirements necessary and if so what form should these take?</p> <ul style="list-style-type: none">(1) Should all offtakers be required to provide a Letter of Credit?(2) If not, what credit rating would an offtaker need to have to negate the requirement for a Letter of Credit?
7.	<p>If no specific credit cover is required, would it be appropriate to rely on the mutualisation provisions to provide compensation in the event that any monies cannot be recovered from an insolvent offtaker?</p>

Chapter 4: Access

- 4.1 The OLR is designed to provide a 'last resort' route-to-market for generators on specified terms, effectively capping their long-term route-to-market costs and allowing them to use shorter-term PPAs with a wider range of counterparties whilst securing project finance. The OLR thus provides support to generators even if a Backstop PPA is never required. Indeed, at the levels of backstop discount proposed in Chapter 7 we would not expect generators to need Backstop PPAs; they should be able to secure open-market PPAs on better terms throughout their CfD.
- 4.2 However, for the OLR to prove a bankable proposition and deliver on its objective to provide a guaranteed route-to-market, the Backstop PPAs need to be easily accessible to generators should they need them.
- 4.3 This chapter considers whether there should be any restrictions on the circumstances under which generators can access Backstop PPAs, and any requirements for committing to and remaining in a Backstop PPA once one has been awarded. It also sets out the likely timetable for OLR implementation, acknowledging that the systems required to allocate Backstop PPAs will not be up and running by the time the first CfDs are signed.

Accessing the OLR

- 4.4 We anticipate the main reasons why a generator would request a Backstop PPA would be if their previous PPA has expired or been terminated due to offtaker default, and they are unable to find a new route-to-market on better terms than the Backstop PPA. These are the principal circumstances that the OLR has been designed to provide protection for, and we would not seek to limit access in these situations.
- 4.5 There are, however, scenarios in which generators might seek to access a Backstop PPA where their PPA had not expired, or where the open-market PPA discounts do not exceed those offered via the OLR. We discuss these below.

Scenario 1 - Generators defaulting on an open-market PPA

- 4.6 One scenario in which generators may seek a Backstop PPA is if their original PPA was terminated as a consequence of the generator defaulting on its obligations. In such a situation, even if route-to-market costs are *less* than the backstop discount, the generator may be unable to attain an open-market PPA on better terms because offtakers are unwilling to contract with a generator that has previously been shown to be unreliable.
- 4.7 There is a concern in allowing a generator to enter a Backstop PPA in such circumstances as it could reduce the incentives on the generator to meet its obligations in its original PPA. Further, there is a risk that such a generator may fail to meet their obligations under the Backstop PPA given their previous history of poor performance.
- 4.8 One solution would be for scheme rules to prevent generators that have had an open-market PPA terminated from accessing the OLR. However, we believe that there are a number of difficulties with this approach, including the following.
 - i. The extent to which Ofgem (or any other competent authority) would be in a position to determine whether a breach of the original PPA that led to termination had indeed occurred, and establishing fault. This could put any administrator in a difficult

position where breach was dependent on circumstance or commercial / legal interpretation.

- ii. It may be a disproportionate response to an issue that is unlikely to occur and may not be due to fault by the generator. For example, prolonged force majeure might lead to termination of a generator's PPA, but it may not be appropriate to penalise generators for this by not offering them OLR protection after the force majeure has been lifted.
- 4.9 Instead, we intend to overcome the concern that the OLR would reduce a generator's incentive to meet its open-market PPA objectives by ensuring that the backstop discount to the market reference price is significantly larger than we expect to see in open-market PPAs; generators will continue to face strong economic incentives not to default on their PPAs. The existence of the OLR will therefore not remove the normal incentives to maintain and replace an open-market PPA, although it would mitigate the extent of potential losses.
- 4.10 We do however propose that access to the OLR is revoked, or eligibility for further Backstop PPAs suspended, for generators that have a *Backstop PPA* terminated by an offtaker as a result of material breach. This is to ensure that, once a generator is within a Backstop PPA, they are appropriately incentivised to properly cooperate with the backstop offtaker to enable that offtaker to manage that generator's physical position.
- 4.11 If, as we propose, backstop offtakers are allocated competitively, it is unlikely that an offtaker would want or need to frustrate a Backstop PPA. However, to reduce this risk further, we propose that Ofgem may take enforcement action following any court decision that found an offtaker to have terminated a Backstop PPA without due reason.
- 4.12 Lenders often insist on PPAs including a cure-period to enable them to make good any issues that have been identified by an offtaker before a contract is terminated. We therefore think that the Backstop PPA should allow for the provision of a '*direct agreement*' between the lender and offtaker if the lenders require. More detail is included in Chapter 8.

Consultation Question

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| 8. | Do you agree that a generator's entitlement to a Backstop PPA should be revoked in the event that they have a Backstop PPA terminated for material breach? |
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Scenario 2 - Offtakers terminating long-term PPAs

- 4.13 The OLR could create an incentive for offtakers to 'buy out' generators from a long-term PPA once route-to-market costs exceed the backstop discount. In doing so offtakers would be able to socialise their losses by letting the generator enter the backstop, whilst making the generator good for the difference between the price the generator was receiving under the long-term PPA and the backstop price. Generators might also look to share in some of the avoided losses from the offtaker. In this way, long-term PPA providers may be able to liquidate losses below the backstop in exactly the same way as a generator on a short term PPA strategy can.
- 4.14 Mutual termination would represent a change in the marketplace and could mean that generators access a Backstop PPA before the term of their existing open-market PPA expires. However, this is not something that we propose to prevent through the OLR design; preventing offtakers from terminating long-term PPAs in order to socialise losses beneath the backstop would only create a bias towards shorter term contracting strategies,

distorting the market and reducing flexibility for generators. Furthermore, if the OLR reduces some of the risk in offering long-term PPAs, its introduction could help to improve the terms and availability of such long-term contracts. This is particularly beneficial for lower-cost equity providers (such as infrastructure and pension funds) who will likely still require long-term PPAs given their lower appetite for risk.

Consultation Question

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| 9. | Do you agree that generators should be allowed access to Backstop PPAs if they have agreed early termination or suspension of a long-term PPA (such as when route-to-market costs exceed the Backstop PPA discount)? |
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Scenario 3 - Seeking a Backstop PPA despite lower discounts in the open-market

- 4.15 In order to limit the exposure of offtakers, each Backstop PPA will have a tenor of one year, with generators having the option to run these contracts sequentially for the duration of their CfD. A short-term contract allows generators to exit the OLR and return to the open-market readily, and avoids offtakers having to price in the risk of managing a generator's output over a long period.
- 4.16 However, as the OLR is designed to provide a 'last resort' route-to-market, it is not intended to provide support if better alternatives are available in the open-market. We would not expect any generator to seek a Backstop PPA if better alternatives existed.
- 4.17 Such a scenario could occur, since generators might want access to a Backstop PPA for a short period when negotiating a new open-market PPA. Here, allowing access to a Backstop PPA could allow generators to negotiate more forcefully in the knowledge that they had a backup contract if necessary that could be used to plug any gap. We believe that this does not reflect the objective of the OLR: a Backstop PPA should exist to provide support if open-market PPAs are not available on better terms, but not to strengthen the negotiating hand of generators or reduce their desire to enter open-market PPAs in a timely manner.
- 4.18 Furthermore, there is a cost associated with generators frequently entering Backstop PPAs for a very short period of time – both in terms of administrative costs of allocation to Ofgem and offtakers, and reduced incentives on offtakers to forecast and actively trade the power generated (which would ultimately lead to higher costs to consumers).
- 4.19 One solution to this could be to require generators to remaining within a Backstop PPA for the full length of the one year contract. However, whilst we want to minimise the use of the OLR as a short-term stop-gap, we would also like to see generators to return to the open-market if the terms on offer are preferable to those in Backstop PPAs.
- 4.20 As such, we propose that generators that seek a Backstop PPA should be committed to remaining within the agreement for a minimum period of **six months**, with a six week minimum notice period for leaving. If a generator terminated a Backstop PPA earlier than this or without giving due notice, they would lose their eligibility for future Backstop PPAs.

Consultation Questions

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| 10. | Do you agree that a Backstop PPA should have a minimum period of six months, with six weeks' notice required for exit beyond this? |
| 11. | Should a generator's early termination of a Backstop PPA lead to their eligibility for the OLR being revoked? |

Timing of Access to Backstop PPAs

4.21 The point at which generators are able to access Backstop PPAs will depend on the time it takes to implement the OLR and set up associated systems, and any restriction on the timing of access to the OLR. This section discusses each of these in turn.

Implementing the OLR

4.22 We intend for OLR licence and code modifications and regulations to come into force around the time the first CfDs are allocated. Any generators signing CfDs before these licence and code modifications and regulations come into force would be eligible for the OLR on the terms set out within those modifications. We believe that this should provide generators and lenders with confidence over the detailed OLR provisions at the point at which the CfD is open to applicants.

4.23 Additional time will be required once the secondary legislation comes into force for Ofgem and offtakers to put in place the systems to allocate Backstop PPAs to generators and implement the levelisation process. We estimate that this would see Backstop PPAs available to generators from early 2016.

4.24 We do not expect this to impact generators since they will not need a Backstop PPA before commissioning, likely to be several months (at least) after signing their CfD. The risk of a generator needing a Backstop PPA during the initial years of the CfD is likely to be very low.

Point of access

4.25 Generators are unlikely to require a Backstop PPA in the early years of their CfD, given that over the short term, both imbalance and route-to-market costs are reasonably predictable and PPA liquidity (1-3 years) is currently robust. Lenders have indicated that, even with the OLR, they are likely to require generators to have PPAs with a minimum initial tenor in order for them to provide debt finance, and therefore providing generators with access to Backstop PPAs during the term of this PPA would have little impact on their willingness to lend to the project. If we restricted access to the OLR during an initial period of a generator's CfD it could help ensure the OLR remained a last resort.

4.26 However, since we would not expect generators to need a Backstop PPA during the early years of their CfD, given the magnitude of the discount proposed, and since we do not consider that the OLR will distort the open PPA market, we propose that, beyond the initial implementation period, eligible generators are able to access a Backstop PPA once their CfD payments begin. This would have a further advantage in reducing the length of the initial PPA required by lenders if they become more comfortable with shorter-term contracting strategies under the CfD.

Consultation Question

12.	Do you agree that generators should be able to access Backstop PPAs throughout the duration of their CfD?
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Chapter 5: Allocation

5.1 Generators in need of a Backstop PPA need to be allocated an offtaker as counterparty to the contract. This chapter considers the nature and duration of the allocation process.

Allocation methods

- 5.2 Generators will most likely require a Backstop PPA when their existing PPA expires or their offtaker defaults. Generators (and their lenders) require confidence that they will be able to secure a Backstop PPA with an appropriate offtaker in such circumstances within a reasonable amount of time and via a clear, objective process.
- 5.3 We considered two options for allocating Backstop PPAs to offtakers: a regulatory process and a competitive process. Under a regulatory process, Ofgem would allocate Backstop PPAs according to a set of pre-defined rules, and then compensate those suppliers awarded the contracts for the costs they incur in providing the service. The cost would be determined centrally through a regulated cost assessment.
- 5.4 Whilst the initial contract allocation under this approach is reasonably straightforward, the cost-assessment would be administratively burdensome and very complicated if it is to accurately reflect the additional costs faced by a particular supplier as a result of contracting with a specific generator. In our view, this precludes it from being a viable option²².
- 5.5 Instead we propose that generators are allocated a backstop offtaker through a simple competitive process, under which offtakers bid a fee (£/MWh) to manage the generator's output under the terms of the Backstop PPA. The contract is awarded to the lowest bidder, and the fee is recouped by the offtaker through the levelisation process (see Chapter 6).
- 5.6 This is likely to be more efficient than the regulatory approach, since offtakers would judge for themselves the likely costs and benefits of entering into a Backstop PPA with a particular generator and reflect this in their management fee. Bids are thus representative of the specific project characteristics and reflect the offtaker's ability to manage the output, resulting in a more appropriate match between generator and offtaker. The approach also provides greater certainty to suppliers over their costs and removes the need for a lengthy cost assessment by Ofgem.
- 5.7 As discussed in Chapter 3, the levelisation of management fees should provide sufficient incentive to offtakers to bid for contracts in order to prevent their competitors from securing excessive rents. However, to give confidence to lenders and generators that there will always be an offtaker to manage the contract, we propose that mandatory offtakers would

²² The complexity of the cost assessment reflects the difficulty in making an informed estimate of the costs incurred and benefits received by an offtaker in managing a Backstop PPA. The variety of technologies and sizes of generators eligible for the OLR could result in a wide range of route-to-market costs that backstop offtakers would have to bear. To assess these costs accurately would require an exact understanding of the costs involved and would be difficult and time consuming to establish. We judge that Ofgem would find it difficult to assess these costs accurately, giving rise to a very real concern that, because the costs are levelised, backstop offtakers could be over- or under-compensated for managing a Backstop PPA. In turn, this could have knock-on effects on the open-market, as suppliers may view the OLR as a profitable source of income, and withdraw from the open PPA market, thus increasing costs to consumers.

be required to submit bids as part of their supplier licence conditions²³. This ensures that generators are guaranteed a backstop offtaker, regardless of the size or technology of the project, whilst encouraging maximum competition between offtakers in order to minimise costs to consumers.

- 5.8 Competitive allocation offers the opportunity to be a backstop offtaker to the wider PPA market as voluntary offtakers would be able to compete. They could choose to bid only for suitable generators on a competitive basis, without the risk that their actual costs would exceed those determined centrally by Ofgem. The involvement of voluntary offtakers increases competition, helping to promote more cost-reflective bids and better outcomes for consumers.
- 5.9 As offtakers would bid competitively, the risks associated with imposing a Backstop PPA on a reluctant offtaker are largely mitigated. There would be no need for Ofgem to exercise discretion over allocation or cost assessment. The likelihood of an offtaker attempting to frustrate a Backstop PPA should be reduced, providing greater comfort for generators and lenders.

Risks: competition and distortions

- 5.10 Whilst we consider that competitive allocation has considerable advantages over a regulatory approach, there are some risks that have been identified. Firstly there is a risk that the prices bid by offtakers under a competitive process would not be cost-reflective, for example if suppliers submitted inflated bids in order to avoid having to enter into a Backstop PPA. In theory, this could lead to higher levelisation payments and greater costs to consumers.
- 5.11 However, as illustrated in Box 1, the levelisation process should ensure that this doesn't happen. The total costs to offtakers of managing Backstop PPAs are levelised across all suppliers, so that if a supplier wins a contract whilst bidding at an inflated price, the costs are borne by their competitors. As a result, suppliers are incentivised to bid competitively both in order to win the contract and to prevent their competitors from making excessive rents that they themselves are required to fund through levelisation.
- 5.12 Another risk is that, if the generator is relatively small, mandatory offtakers will not submit cost-reflective bids in the knowledge that their levelisation costs from the contract will be minimal. We do not judge this as a significant risk since voluntary offtakers would be in a better position to bid for these smaller contracts and, again, would do so to avoid a transfer of value to competitors under levelisation. The Non-Fossil Purchasing Agency (NFPA) has shown in their regular ePower auctions for short-term PPAs that even the smallest capacity generators are subject to competitive bidding, and we judge that Backstop PPAs under the OLR will follow a similar pattern²⁴.
- 5.13 Finally, some stakeholders have raised a concern that the OLR would lead to offtakers withdrawing from the open PPA market in favour of offering OLR contracts. We do not believe that this risk is significant: if the open PPA market is *competitive*, the OLR would make little difference until such time as route-to-market costs reached the backstop discount. In the scenario where the open PPA market is *uncompetitive* then offtakers can charge the maximum discount that would see a project get built, and they would do this whether or not the OLR is present. The OLR would only act to *cap* the discounts offered by suppliers in an uncompetitive market.

²³ Though, as set out in Chapter 3, we do not intend to cap the bids

²⁴ <http://www.nfpa.co.uk/>

Box 1 – Illustration of how competitive allocation and the levelisation of management fees should incentivise competitive bidding

Supplier A is allocated a Backstop PPA at a cost of £4/MWh in a market with four suppliers of equal size. The generator produces 100MWh across the levelisation period, meaning that the supplier is owed £400 from the levelisation fund. This cost is split between all four suppliers, giving each (including supplier A) a net loss of £100.

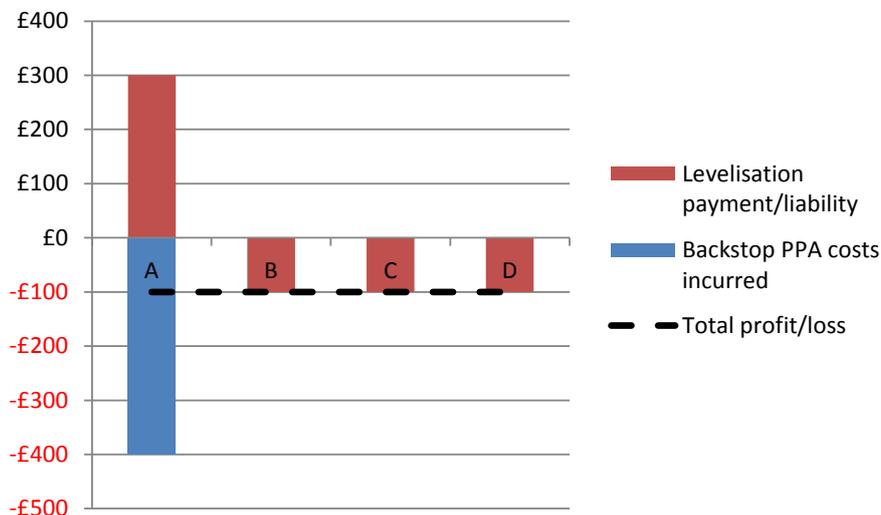


Figure 1 – payments across suppliers if the winning bid is cost-reflective

Any mark-up on the management fee of the winning bidder against the true cost of managing the output will create profit for that supplier; the degree to which a supplier might bid above their true costs will depend on the amount of competition for the contract.

A lack of competition between suppliers could allow Supplier A to win the same contract at a bid of £8/MWh despite it costing only £3.50/MWh to manage. The levelisation process means that Supplier A is entitled to £800 from the levelisation fund, split between the four suppliers. This means Supplier A receives a net payment of £600 despite the contract costing only £350 to manage. As a result, Supplier A makes a £250 profit and is £450 better off relative to their competitors, who each lose £200.

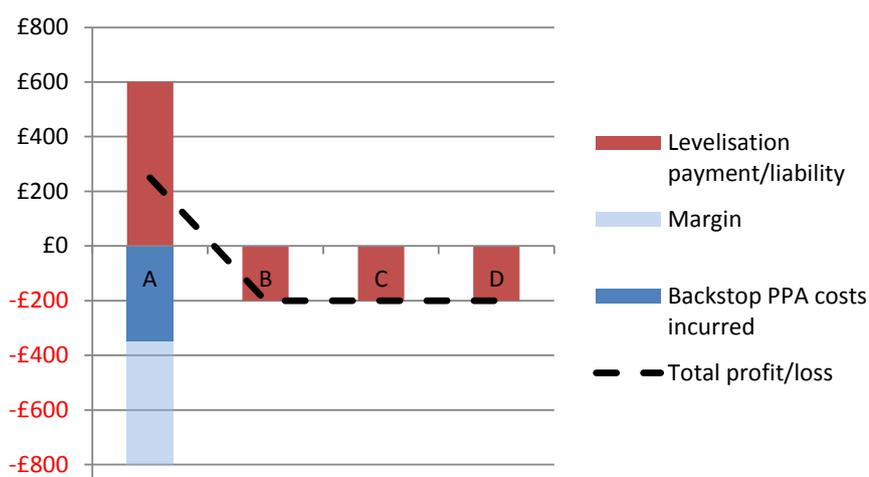


Figure 2 - payments across suppliers if the winning bid includes a margin

The levelisation process will therefore incentivise suppliers to bid competitively to win contracts and prevent their competitors from making excessive profits in this way.

Consultation Question

- 13. Do you agree that competitively allocating generators to offtakers is the most appropriate and efficient approach to use? Please provide evidence as to why not.**

- 5.14 As discussed in Chapter 2, competitive allocation reduces concerns with a broad eligibility criteria for the OLR, allowing for a wider range of technologies (since complications with a regulated cost assessment for myriad technologies are avoided) and for larger generators in the OLR (since offtakers can price any premium associated with managing the higher volume into their bid).
- 5.15 However, larger generators would still introduce a risk in terms of competition. There would likely be a smaller pool of offtakers able to bid to manage the output of larger generators, increasing the chance of less competitive bids. To address this and improve competition between offtakers for generators above 100MW, we propose to allow offtakers to bid for the capacity in 100MW tranches.

Consultation Question

- 14. Do you agree that splitting the output of large generators (above 100MW) would help increase competition between offtakers when bidding for Backstop PPAs?**

Competitive Allocation process

- 5.16 There are different ways to allocate a contract competitively. For example, Ofgem could simply ask offtakers by email to submit a sealed bid containing their fee to manage the output of a generator, and award the contract to the lowest bidder. Alternatively, an online auction could be run to allocate the contracts.
- 5.17 Generators should be agnostic over how contracts are allocated, providing that they are comfortable that they will be allocated within a specified period of time. For Ofgem, offtakers and consumers, it is vital that the allocation mechanism is appropriate, and minimises costs of administration.
- 5.18 The most appropriate form of allocation will depend on the volume of generators seeking Backstop PPAs. A sealed bid approach has a lower fixed administrative cost but higher variable cost making it most appropriate when there are few generators seeking Backstop PPAs. A dynamic auction has a higher fixed administrative cost but small variable cost, making it preferable when a large number of generators are seeking Backstop PPAs.
- 5.19 Rather than prescribe the manner of competitive allocation throughout the project life, we are minded to give discretion to Ofgem choose the most appropriate approach given the prevailing circumstances. This should minimise costs to consumers. However, in order to give confidence over the process to generators and lenders, we propose that the allocation mechanism at the outset would be by sealed bid. Ofgem would be able to switch to a more comprehensive auction if, given the volume of Backstop PPAs, it judged that this would reduce costs to consumers.

Consultation Question

- 15. Do you agree that the method used should be a sealed bid, with Ofgem able to move to a more comprehensive auction when in consumers' interests to do so?**

Allocation timetable

- 5.20 Generators and their lenders need to understand the risks they face under the OLR if they are to view it as a bankable route-to-market. A key risk will be the length of time that it will take them to secure a Backstop PPA.
- 5.21 The allocation timetable therefore needs to be robust to the competitive allocation process adopted by Ofgem, giving a consistent ‘worst-case’ allocation period across different approaches. We propose that, regardless of the competitive allocation method, Ofgem would identify an offtaker and allocate the Backstop PPA such that the contract is operational within a maximum period of time. We propose that the contract is operational six weeks from the point at which the generator expresses an interest to Ofgem²⁵. Figure 3 illustrates how a competitive allocation process might work under a sealed bid approach with the Backstop PPA becoming operational in this timeframe.
- 5.22 Generators would have an initial two-week no-regrets period during which they could revoke their interest in a Backstop PPA without penalty. Beyond this, we propose that the generator would be committed to entering the Backstop PPA and remaining within it for a minimum of six months.
- 5.23 Ofgem’s role would begin at the point at which they receive the expression of interest and finish with the award of the Backstop PPA to an offtaker five weeks later. Beyond this it will be up to the backstop offtaker to register the meters and ensure that the contract comes into force the following week.

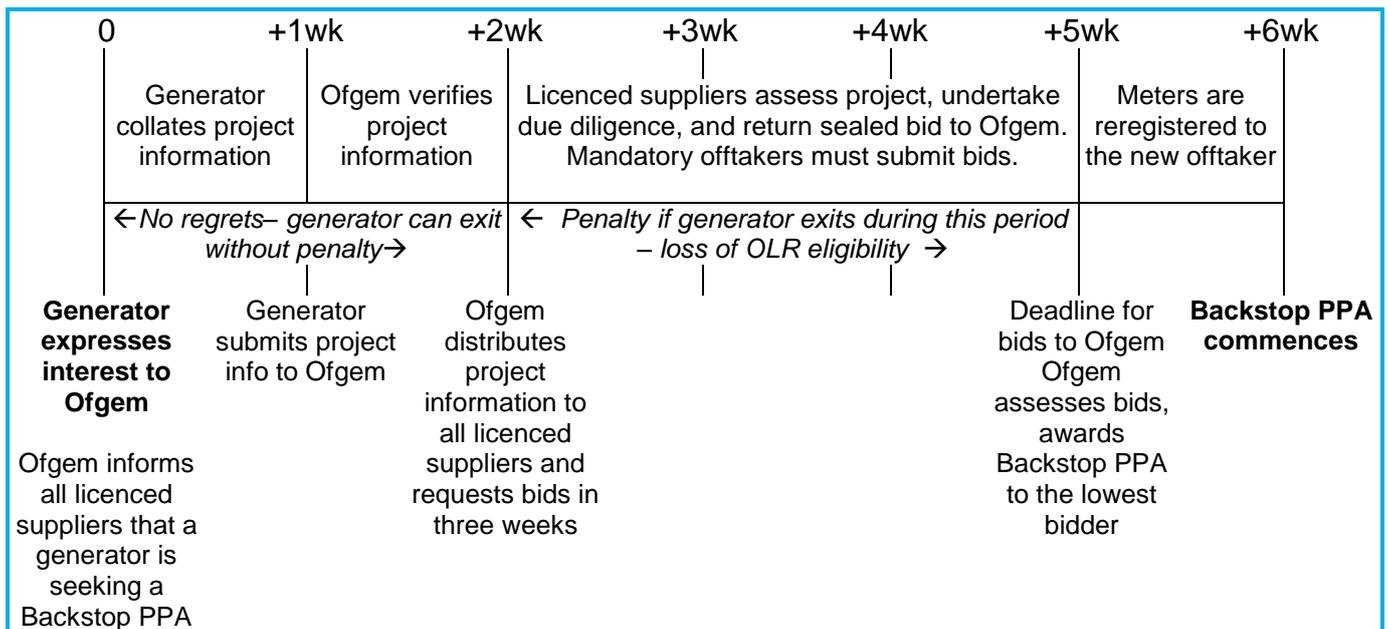


Figure 3 – Illustrative timeline for the allocation of a Backstop PPA, operational within 6 weeks of the generator expressing an interest to Ofgem

- 5.24 As described previously, generators and their lenders will want assurance that, were Ofgem to adjust the manner of the competitive allocation, they would continue to be able to enter a Backstop PPA within six weeks of expressing an interest to Ofgem. Under a more comprehensive auction, we envisage that the timeline would be as follows.

²⁵ Subject to the generator having submitted all required information to the satisfaction of Ofgem. Our timeline below would require the generator to supply this information within one week of expressing an interest to Ofgem. Failure to provide the information on time would ‘stop the clock’.

- i. The auctions would run on a monthly basis, but would be cancelled if there were no generators applying.
- ii. A generator would commit to entering the auction one week before the process runs²⁶. Project information would need to be submitted by the generator at this point.
- iii. The contract would come into force one week after the auction was run and the backstop offtaker determined.

5.25 For a generator, the period of time that it would take to be allocated a contract would depend on the point in the auction cycle at which they submitted interest. The *longest* they would have to wait to be awarded an offtaker would be if they informed Ofgem six days before the next auction, i.e. having missed the deadline for the next auction by one day. In this worst-case scenario they would have to wait until the following month's auction (five weeks) and then a week for their meter to be reallocated (one week). Thus, a generator would also be able to commence a Backstop PPA within six weeks under this approach.

Consultation Questions

16.	Does our high-level timeline for allocating a Backstop PPA look appropriate?
17.	Do you agree that an allocation period of no more than 6 weeks is appropriate for generators, offtakers and Ofgem?

5.26 Generators and their lenders have conveyed some concern that they would face additional losses if, for whatever reason, Ofgem did not allocate a backstop offtaker five weeks after the generator expressed an interest (such that the Backstop PPA could come into force within the six-week timeframe). Ofgem have a proven record of running competitive allocation processes at short notice and we would expect contracts to be awarded promptly. However, to ensure the bankability of the OLR, we are considering two options that would give greater comfort to generators over the allocation period.

5.27 The first is that the allocation of the contract within five weeks of the generator expressing an interest could form a Key Performance Indicator (KPI) for Ofgem. Delivery against this indicator would be set out in Ofgem's Annual Reports which are scrutinised by Parliament. KPIs of this nature have been adopted to monitor Ofgem's role in delivering other Government policies, such as the ssFiT and the RO.

5.28 The second option is that generators are compensated for wholesale market losses in the event that, despite the generator meeting its obligations on time, a Backstop PPA is not allocated within five weeks and the contract does not come into force six weeks after interest was expressed. In this unlikely scenario, compensation could be provided via the mutualisation provisions within the levelisation process, with the costs borne by all licenced suppliers.

Consultation Question

18.	Should the allocation timetable be ensured through a KPI on Ofgem and/or should generators be fully compensated for losses via the levelisation process?
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²⁶ This gives offtakers less time to scrutinise the project. However, if monthly auctions are being run by Ofgem, offtakers will be geared up to evaluate Backstop PPAs and should be able to process these more quickly.

Chapter 6: Cost Assessment and Levelisation

- 6.1 As discussed in Chapter 5, Backstop PPAs will be allocated on a competitive basis, with offtakers submitting bids to manage the contracts. Bids will be on a £/MWh basis, representing the management fee for each unit of output.
- 6.2 We propose to levelise these management fees across the retail market via a levy on suppliers, since they are best placed to pass these onto consumers' tariffs in a way that will least distort the retail market. This chapter sets out how the cost is assessed and how the levelisation process will work.

Cost Assessment

- 6.3 Under a competitive allocation process, cost assessment is the aggregate total of management fees charged by all Backstop Offtakers. For example:
 - i. A generator enters the backstop arrangements and is awarded to Supplier A based on a management fee bid of £4/MWh.
 - ii. If the generator produces 100MWh in a given period, then the cost assessment would calculate the cost to Supplier A of being party to the Backstop PPA at £400.
 - iii. If we assume that there are three additional suppliers in the market (i.e. Supplier B, C and D), each with equal market share, then each supplier would then be liable under levelisation to reimburse Supplier A £100 (i.e. £400 x 25%)²⁷.
- 6.4 Cost assessment is thus straightforward under a competitive allocation process: the amount bid by the successful bidder multiplied by the volume of electricity generated under the Backstop PPA across the levelisation period. We do not intend to levelise any additional fixed costs for offtakers, instead assuming that these will be priced into bids.

Levelisation

- 6.5 There are several electricity policies, existing and in development, where the costs and benefits to individual suppliers are shared across all suppliers to avoid distorting the retail market, including the small scale Feed-in-Tariff (ssFiT), the Renewables Obligation (RO) and the CfD. We seek to build on these established approaches where appropriate under the OLR levelisation processes. Importantly, the levelisation process will be mechanical, with the details provided to Ofgem by DECC.

Parties to levelisation

- 6.6 Smaller licensed suppliers are exempted from participating in some Government policies. These tend to be energy efficiency policies with significant fixed costs that would disproportionately impact upon a smaller supplier.

²⁷ This example is also used in Box 1, Chapter 5, to illustrate why competitive allocation with levelisation of management fees should encourage competition between offtakers and cost-reflective bidding for Backstop PPAs.

- 6.7 We expect Backstop PPAs to be used by generators rarely, if at all. In the event that they are used widely, there could be a disproportionate burden on those suppliers bearing the cost of levelisation payments if some suppliers are exempted from this process. Since the ssFiT, RO (and soon the CfD) require all suppliers to share costs, requiring smaller suppliers to levelise OLR payments should not involve a significant additional fixed cost.
- 6.8 Therefore, we propose that all licensed suppliers, not just those mandatorily or voluntarily offering Backstop PPAs, are obligated to participate in the levelisation process.

Consultation Question

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|------------|---|
| 19. | Do you agree that all licensed suppliers should be obligated to participate in the levelisation process? |
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Market share

- 6.9 We propose that the costs (or benefits) incurred by offtakers are split between suppliers on the basis of the volume of electricity supplied over the levelisation period, as is the case with the ssFiT.
- 6.10 At the end of the levelisation period, Ofgem would determine the volume of electricity generated under a Backstop PPA. This data would be matched with Ofgem's record of the management fee bid to give the levelisation sum needing to be borne by all licensed suppliers. The sum of these amounts across all Backstop PPAs would give the total levelisation fund for the period.
- 6.11 Each supplier's share of the levelisation fund would then be established based on the volume of electricity that they have supplied over the period. Payments due would be netted off against the management fees incurred by a particular supplier from being party to Backstop PPAs.

Payment timetable

- 6.12 We have considered two options for how suppliers would make OLR levelisation payments:
- i. Adopting a quarterly levelisation process similar to that employed under the ssFiT; or
 - ii. Daily settlement using systems being procured for settlement of supplier obligation payments to the CfD Counterparty.
- 6.13 Each approach has its merits. Daily settlement reduces the cost of carry for offtakers (i.e. how long it would be until they receive the payments they are owed), but would require adaptation of the settlement systems at a potentially significant cost. This approach is unlikely to be cost-effective unless there are a large volume of Backstop PPAs.
- 6.14 Quarterly settlement is a fairly straightforward process that suppliers are comfortable with under the ssFiT. However, in the event that the OLR was being used extensively, there could be significant cumulative costs of 'carry' that would be priced into offtakers bids, which could exceed the cost of procuring a daily settlement system.
- 6.15 Since we do not anticipate that a large number of generators will sign Backstop PPAs for several years, if at all, it would seem appropriate to utilise a simpler quarterly levelisation process at the outset of the OLR. This would be subject to the annual review, which would consider the current and projected volume of generation within Backstop PPAs. The

intention would be to increase the frequency of levelisation payments in the event that the OLR was widely used.

- 6.16 Should the review project a much larger volume of generators to enter the OLR, the frequency of levelisation would be adjusted, and an assessment conducted into the viability of adapting the CfD settlement systems to handle OLR payments. This would reduce the working capital requirements of backstop offtakers and therefore reduce barriers to entry.
- 6.17 As with the ssFiT, we propose that suppliers make their levelisation payment as one lump sum. An annual reconciliation would account for changes in measured data across the quarterly periods.

Consultation Question

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| 20. | Do you agree that management fees should initially be levelised quarterly, with scope to review this approach if there is high uptake of Backstop PPAs? |
|------------|--|

Mutualisation

- 6.18 As part of the quarterly levelisation process, we propose that mutualisation provisions are included to guard against a shortfall in payments to the levelisation fund. Should a shortfall arise (such as through supplier insolvency), suppliers would have to make mutualisation payments once they are issued with a mutualisation notice.
- 6.19 We do not propose to set a cap on the amount of shortfall that could be mutualised. In theory, a cap could guard against a domino effect of insolvency in the situation where a large supplier defaulted and left a very large shortfall that, in turn, pushed additional suppliers into default. However, there are two reasons why we do not think a cap is appropriate here:
- i. Should a large supplier go into administration, it is highly likely that they would enter the Energy Supply Company Administration Regime and retain the liabilities in their licence conditions, meaning that levelisation payments would continue to be made; and
 - ii. Setting a cap on the shortfall to be mutualised is particularly difficult under the OLR since the amount of money involved could be very variable each year and is entirely dependent on the number and size of generators with Backstop PPAs.
- 6.20 Mutualisation provisions remain important however to cover for small supplier default: in the event that a Supplier of Last Resort was appointed, the liabilities of the original supplier would fall away leaving a shortfall in the levelisation payments to backstop offtakers.

Consultation Question

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| 21. | Do you agree that mutualisation provisions are included, without a cap on the sum that could be mutualised? |
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Collateral

- 6.21 We do not propose to require suppliers to post collateral for their levelisation payments under the OLR. Posting collateral can be expensive and since we do not expect the OLR to be used frequently, requiring collateral would be disproportionate.

- 6.22 In the CfD Supplier Obligation, collateral serves a specific purpose in assuring generators that they will be paid by the Counterparty Body under the pay-when-paid principle. However, generators require no such assurance under the OLR since offtakers will be contractually obliged to make payments under the terms of the Backstop PPAs, regardless of the levelisation mechanism.
- 6.23 To ensure that there is enough money in the levelisation fund to pay backstop offtakers, Ofgem may use its enforcement powers against those suppliers that do not contribute what they owe. Whilst provision of collateral could reduce the chance of the levelisation fund being 'short' in the event of a supplier becoming insolvent, we consider that the negative impact of requiring collateral provision would outweigh the reduction in what is already a low probability risk.

Consultation Question

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| 22. | Do you agree that suppliers should not be required to post collateral to cover their share of the levelisation payments? |
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Chapter 7: Pricing

- 7.1 In order to ensure that Backstop PPAs are a last resort, generators will be paid by offtakers for their output at a discount to the market reference price in their CfD. This chapter is concerned with how that discount is set. Specifically, it considers:
- i. the nature of the discount;
 - ii. the methodology for determining the discount;
 - iii. the resultant size of the discount; and
 - iv. whether the discount should vary for different technologies or classes of generator.

Nature of the discount in Backstop PPAs

- 7.2 This section considers whether the discount should be expressed as a percentage of the reference price or in absolute £/MWh terms, whether it should be fixed or change over time, and whether it should be indexed.

Percentage or absolute discount?

- 7.3 PPAs for intermittent plant in the market at present are typically structured as a *percentage* discount to a market price (e.g. the day-ahead price). This makes sense from the offtaker's perspective, as there is currently a degree of correlation between the day-ahead price, intraday prices, and cash-out prices. As such, the PPA discount is bigger in absolute terms when the market price is higher, corresponding to the time at which imbalance/basis risk is likely to be greater for offtakers. It also makes sense from a generator's perspective, as the generator's revenue will track movements in market prices (i.e. the generator's total revenue will be higher when market prices are higher, notwithstanding the effect of the discount).
- 7.4 However, under the CfD the situation for generators will be different, since the CfD removes long-term price risk and the link between higher (lower) market prices and an increase (reduction) in revenue. In fact, a PPA struck at a percentage discount to the market price would result, all else being equal, in the generator receiving *less* total revenue as market prices increase, because the generator is topped up from the market price to a fixed strike price. This is illustrated in Figure 4. Generators may therefore seek absolute discounts in the open-market to remove this risk, or alternatively will have to factor a degree of wholesale price risk into their business case.
- 7.5 The question is whether the discount in Backstop PPAs should be on a percentage or absolute fixed basis. Our view is that it is best structured as a fixed route-to-market fee expressed in £/MWh because:
- i. The Backstop PPA is meant to represent a last resort that further reduces CfD developer risk. Leaving the generator exposed to a degree of wholesale price risk would reintroduce risk that the CfD is intended to remove, and might reduce the bankability of the revenue;
 - ii. The risk to offtakers from being party to a Backstop PPA at an absolute discount is mitigated through the levelisation process;

- iii. The open-market may move to absolute discounts, so offering percentage discounts through the OLR would risk it being out of line (in a negative direction) with the open-market; and
- iv. over time, the correlation between day ahead prices and imbalance cost (for wind generators in particular) may weaken as the volume of wind on the system grows²⁸.

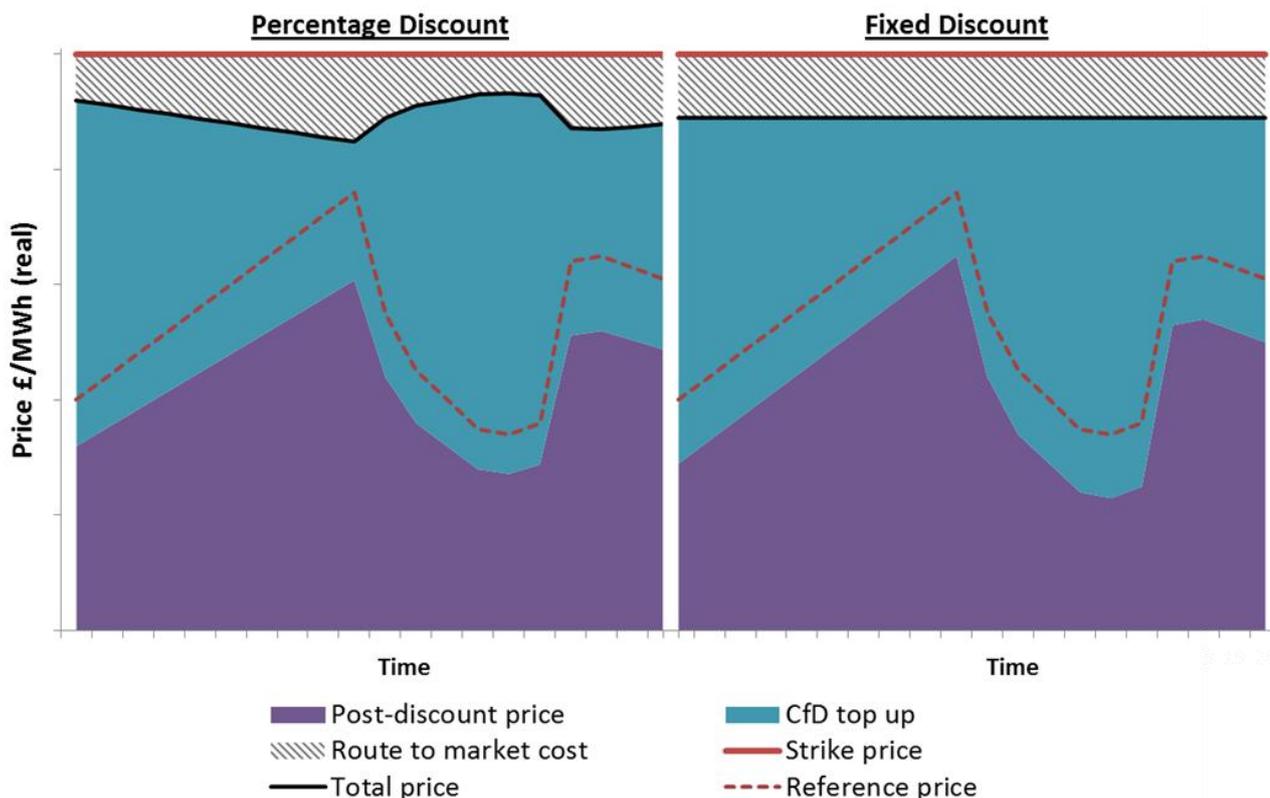


Figure 4 – Illustration of the price a generator will receive for its output under the CfD, after a PPA discount based on a percentage of the reference price (left) or a fixed discount (right). The fixed discount gives a stable price for the generator when the reference price fluctuates.

7.6 However, there are some risks with this approach:

- i. if the open-market does not move towards absolute discounts, this could make the OLR more attractive to generators. However, this risk should be mitigated by the size of the discount;
- ii. it could set a precedent for open-market PPAs that is not appropriate; and
- iii. it may make it harder for Ofgem or off-takers to assess imbalance risk under Backstop PPAs if imbalance costs remain correlated with day ahead prices.

7.7 On balance, we consider that the benefits of an absolute discount within the Backstop PPA outweigh the risks.

Consultation Question

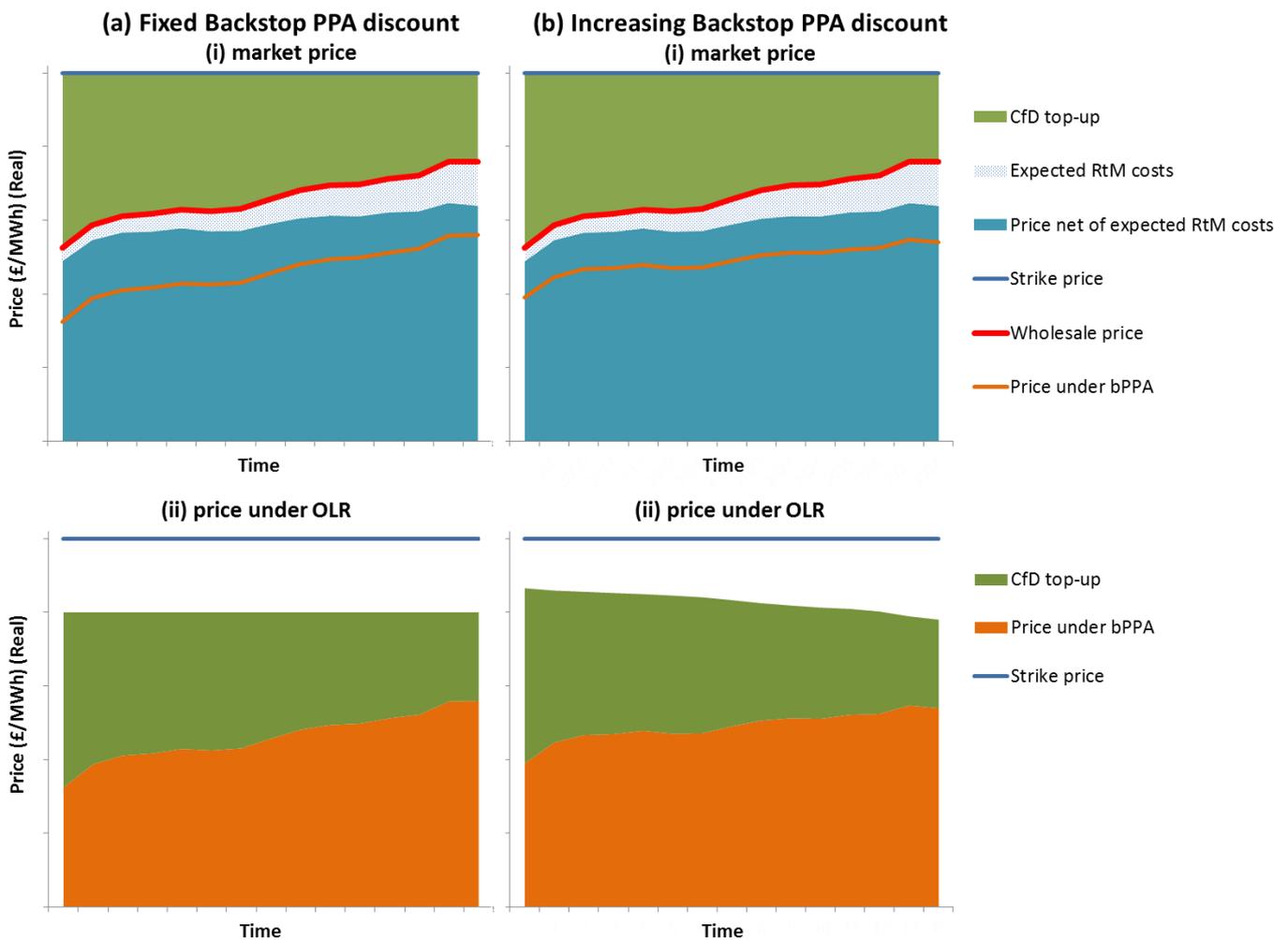
23. Do you agree that discounts in Backstop PPAs should be set on a £/MWh basis?

²⁸ For example, when there is a strong wind forecast at the day-ahead stage, day ahead prices would be depressed. An unforecast drop in wind speed near to delivery could lead to high cash-out prices and high imbalance costs for those generators who are out of balance.

Fixed or varying over time

- 7.8 Some elements of route-to-market costs – in particular imbalance costs for wind generators – are expected to increase over time, primarily driven by the increasing volume of intermittent generation on the system driving more volatile cash-out prices and increasing the risk that individual wind assets are out of balance in the same direction as the system.
- 7.9 Whilst PPAs in the market at present are typically structured with a fixed percentage discount throughout the contract, we are aware of some PPAs where the discount increases over time or that contain reopeners for the discount level at a future point in the contract, to reflect expectations that route-to-market costs may increase.
- 7.10 There is therefore a question as to whether the discount in Backstop PPAs should be fixed for the duration of the generator’s CfD, or if it should increase over time to reflect the increased imbalance risk.

Figure 5 - Fixed vs increasing Backstop PPA discount (real prices)



- 7.11 A **fixed discount** is consistent with the objective of the OLR to protect against uncertain long-term route-to-market costs. It is simpler to set the size for and assess the impacts of a fixed discount because there is less need to understand the likely trajectory of route-to-market costs in detail. As shown in Figure 5(a)(ii) a fixed discount yields stable price (in real terms) under the OLR, whilst an increasing discount would lead to decreasing price from the OLR (Figure 5(b)(ii)).

- 7.12 However, with a fixed OLR discount, the difference between discounts in short-term open-market PPAs and the Backstop PPA is likely to be greatest in the near term and narrow over time (Figure 5(a)(i)), which increases the likelihood of generators accessing the backstop towards the end of their CfD.
- 7.13 A **varying discount** could be structured as a constant amount above expected route-to-market costs, with the intention of making the likelihood of generators accessing Backstop PPAs constant over time, rather than highest towards the end of their CfD (assuming route-to-market costs follow an increasing trajectory). This might give more ‘room to manoeuvre’ in setting the discount, as it might be possible for average revenues under the backstop to be the same (or larger) as under a fixed discount, while having a higher margin above route-to-market costs in the long-term (when, for wind generators, imbalance costs are expected to be highest) – see Figure 5(b)(i). This might reduce the chance of generators actually accessing the backstop towards the end of their CfDs.
- 7.14 However, the evolution of route-to-market costs is very uncertain – including for generators other than wind – so a trajectory of rising backstop discounts is more prone to error. For example, a rising profile could make it more likely that generators would access the backstop if, for example, imbalance costs spiked in the early 2020s but reduced in the late 2020s.
- 7.15 On balance, we feel that a fixed discount is more appropriate, particularly because it is simpler to set and in line with the objectives of the OLR.

Consultation Question

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| 24. | Do you agree that discounts should be fixed in real terms for the duration of a generator’s CfD? |
|------------|---|

Indexation

- 7.16 The intention of the OLR is to provide generators with a stable minimum all-in price for their power (taking the CfD top-up and Backstop PPA together)²⁹. Since CfD strike prices are indexed to CPI, if the discount in Backstop PPAs is set in £/MWh and fixed for the duration of the CfD, it would be necessary to index the backstop discount to CPI in the same way to achieve a stable price.

Consultation Question

- | | |
|------------|---|
| 25. | Do you agree that discounts should be indexed to CPI, in line with the CfD strike price? |
|------------|---|

Setting the Backstop PPA discount

- 7.17 The following section presents our modelling outputs and assumes that, as discussed above, the backstop discount is a fixed £/MWh discount indexed at CPI for the duration of the generator’s CfD.

²⁹ There will still remain some residual risk, for example, in relation to negative prices.

Choosing a backstop discount

- 7.18 Given the objective of the OLR to be a 'last resort', we believe that the backstop discount should be large enough to minimise the risk that it ends up being smaller than discounts in the market while still providing a sufficient 'firm' price to allow projects to obtain a reasonable level of debt and equity returns.
- 7.19 We therefore propose that the general principles for selecting an appropriate backstop discount should be as follows.
- i. It should be significantly larger than discounts that could reasonably be expected to be available in the market at any point over the CfD term. A discount set too low could create adverse incentives in the market, and increase costs to consumers.
 - ii. With a shorter-term contracting strategy supported by the OLR, the project should be capable of supporting a reasonable level of gearing when compared with the gearing achievable if the project had a 15-year PPA.
 - iii. With a shorter-term contracting strategy and reasonable assumptions about route-to-market costs thereafter, equity IRR should be broadly similar to the expected IRR under a 15-year PPA, with any reduction in gearing offset by the increase in potential upside from better PPA pricing.

Modelling approach

- 7.20 There is no simple formula that can be used to determine the discount. Instead, our approach has been to model the impact of different discounts on project finance metrics under different assumptions about route-to-market strategies and costs. This illustrates a range of capital structures and returns to equity that might be feasible given particular backstop discounts – although, of course, what individual projects can achieve will vary depending on the specifics of the project, PPAs available in the market, expectations over imbalance costs, and the risk appetite of debt and equity providers.
- 7.21 We commissioned Deloitte to conduct project finance modelling of achievable gearing and project returns using assumptions provided by DECC and Baringa Partners. This analysis focussed on onshore and offshore wind, and solar PV, since these technologies have route-to-market costs that can be estimated and that are expected to increase over time. For each technology, Deloitte used the cost assumptions for the 'marginal' project expected to be viable under the draft strike prices published in the draft Delivery Plan in July³⁰. We have also made assumptions about potential route-to-market costs and typical financing strategies, including cost of debt and repayment profiles, informed by discussions with lenders, equity providers, and our advisers (Deloitte and Baringa Partners).
- 7.22 Two scenarios were modelled, with debt sized against the contracted revenues available as follows.
- i. A '**reference case**' for achievable gearing and returns *without the OLR* assuming an efficient, competitive market for long-term PPAs. The project has a 15-year PPA with a credit-worthy counterparty. After CfD expiry the generator is expected to obtain rolling 1-year PPAs for the remainder of the asset life.

³⁰ Following the Deloitte work, the Final Delivery Plan was released with slightly amended strike prices.

- ii. A **short-term contracting strategy made feasible by the OLR**, where the project has an initial 5-year PPA³¹ with a credit-worthy counterparty, and that expects to use rolling 1-year PPAs for the remainder of the asset life.

- 7.23 In calculating the level of gearing for the levered projects, we assumed that debt sizing is based only on contracted revenues and OLR revenues, under ‘base case’ assumptions (P50 output, 1.25x debt service cover ratio (DSCR)). In the reference scenario, debt is sized against the 15-year PPA. In the OLR scenario, debt sizing is based off PPA revenues for the first 5 years, followed by OLR revenues to the end of the CfD³². The debt tenor is assumed at 12 years, and debt repayments have been manually sculpted to achieve the required DSCR in each period.
- 7.24 Equity IRR is calculated using the level of gearing calculated in the preceding stage, and uses expected market revenues throughout the project life. For the reference scenario this is the 15yr PPA followed by rolling 1yr PPAs. In the OLR scenario this is the initial 5yr PPA followed by one-year rolling PPAs thereafter.
- 7.25 This approach is illustrated conceptually in Figure6 showing how lenders might size debt under different PPA contracting strategies. On the left, the generator has secured a long-term PPA at a significant discount to the reference price (and thus the Strike Price). Debt is sized against the revenues secured by this contract. The revenues for equity are identical.

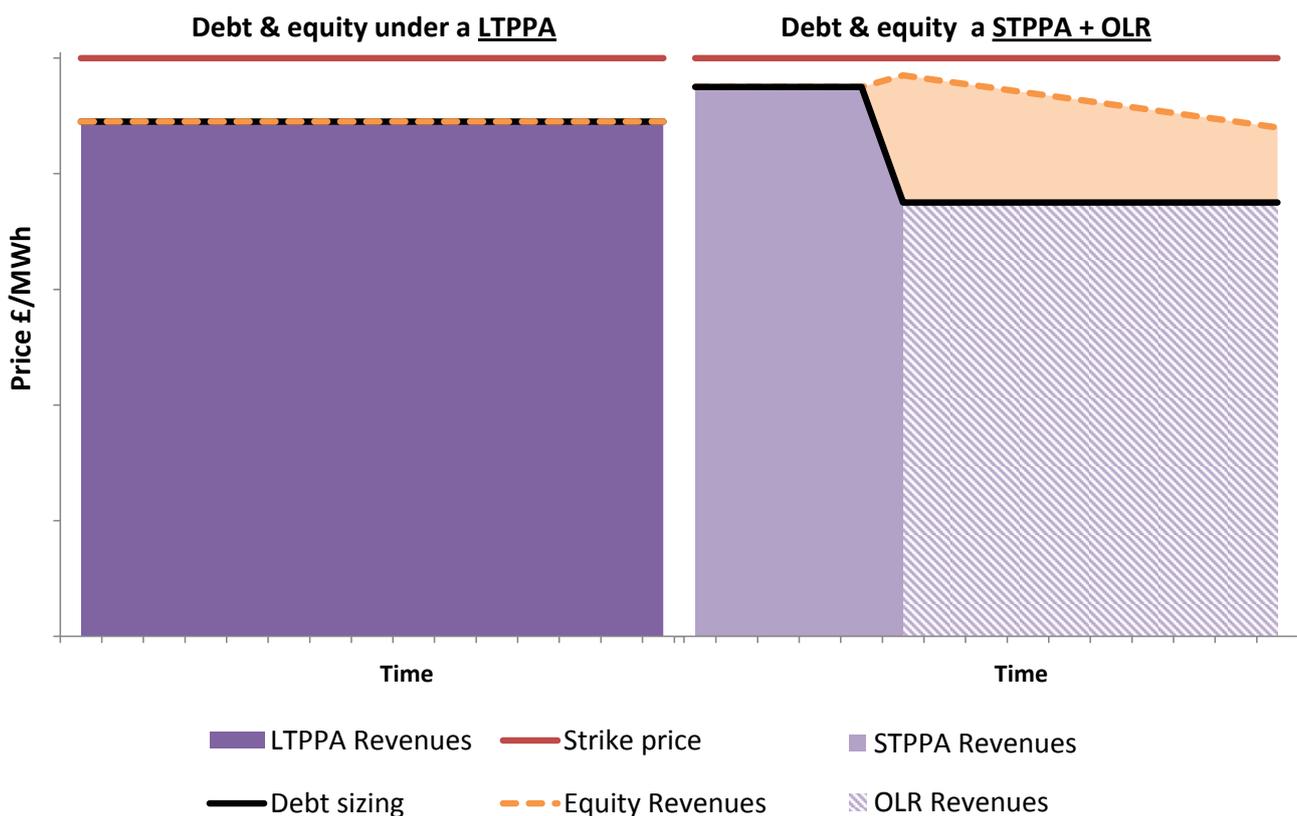


Figure 6 – Illustration (in real terms) of the different approaches to debt sizing used in the modelling

³¹ The 5-year PPA discount is backed out of the 15-year discount using the same assumptions for route-to-market costs and an estimated risk premium.

³² Note that these are conservative assumptions – some lenders have indicated they would treat Backstop PPA revenues as a stress test (i.e. P90 output and 1.10x DSCR), and would take into account expectations about uncontracted market revenues in their base case.

- 7.26 On the right hand side, the generator has secured a shorter-term PPA, at a much lower discount to the reference price (and thus the Strike Price). Beyond the initial contract, lenders have no comfort over the revenue stream, so make a conservative assumption that the generator would revert to the OLR. The lenders therefore size their debt against the initial PPA and the OLR revenues.
- 7.27 However, the project developers would probably not be as pessimistic over the availability and terms of PPAs beyond the initial contract. They may be able to capture significant upside through contracting shorter term beyond the original PPA (orange line). Even if route-to-market costs increase, they might never get to the level of discount in the OLR.
- 7.28 This illustrates the different contracting models that the OLR opens up and the consequences in terms of project returns (orange line) and gearing (black line). Projects can continue to contract longer term, enabling them to get more debt into the project and reduce their cost of capital, but by sacrificing bigger discounts to offtakers. Alternatively, they could contract shorter term, capture more upside, but with a lower gearing and a higher cost of capital.
- 7.29 We have sized the OLR discount such that the project returns under central assumptions would be consistent between the two approaches.

Consultation Question

26. Do you agree with our general approach to understanding the impact of different discounts?

- 7.30 We modelled the short-term contracting case against three OLR discounts: £20/MWh, £25/MWh, and £30/MWh. The results for these scenarios and reference case are shown in Table 1 below.

Table 1 - Modelling scenarios for various Backstop PPA discounts. These results are compiled based on modelling undertaken by Deloitte, and published alongside this consultation.

Technology	Reference case (15-year PPA)		£20/MWh discount		£25/MWh discount		£30/MWh discount	
	Gearing	Equity IRR	Gearing	Equity IRR	Gearing	Equity IRR	Gearing	Equity IRR
Onshore wind	70.6%	13.1%	67.6%	13.3%	65.1%	13.0%	62.7%	12.7%
Offshore wind	75.5%	15.2%	73.8%	15.5%	71.9%	15.2%	69.8%	15.0%
Solar PV	63.9%	10.3%	60.3%	10.3%	58.7%	10.2%	57.1%	10.1%

- 7.31 As expected, project gearing is lower under the OLR scenarios, and reduces as the discount increases. Equity IRR also reduces as the discount increases. The colouring of

the cells indicates whether the project IRR is (0.2 percentage points or more) better or worse than under the reference long-term PPA case. A £20/MWh discount typically gives bigger equity returns; a £30/MWh discount gives lower returns. £25/MWh gives broadly similar project returns at lower gearing levels than with a 15 year PPA.

- 7.32 Though these discounts are significant, discussions with industry suggest that they are in line with the level of discounts provided by a floor within long-term RO PPAs. The OLR can be thought of as analogous to a floored RO PPA, since, when combined with the CfD top-up payments, it provides a minimum price for output against which lenders can size debt, whilst allowing upside for equity³³.
- 7.33 Based on this analysis we are minded to introduce an OLR discount between £20 and £30/MWh, with our preferred option being a discount of £25/MWh.

Consultation Question

- | | |
|------------|--|
| 27. | Do you agree that the discount within Backstop PPAs should be between £20 and £30/MWh? Do you agree with our preference for a discount of £25/MWh? Please provide evidence if you consider this would not be a suitable discount. |
|------------|--|

Different discounts for different eligible technologies?

- 7.34 An important question is whether there should be a single Backstop PPA discount, or if the discount should vary by technology. Our analysis suggests that a £25/MWh discount is appropriate for onshore wind, offshore wind and solar generators. Other renewable technologies, including baseload, have not been modelled since it is not possible to quantify the extent of route-to-market risk for these generators because they are less likely to be linked to imbalance uncertainty and less likely to see their route-to-market costs increase over time³⁴.
- 7.35 As discussed in Chapter 2, under the CfD we expect lenders to be more comfortable in providing debt without a long-term PPA to baseload generators than to intermittent generators. However, we accept that this might take some time, and are therefore proposing to include baseload generators as eligible technologies. Our OLR stakeholder Advisory Group advised that OLR eligibility will be particularly helpful for some emerging baseload technologies, where lenders and offtakers are cautious over output expectations, often reflected in larger long-term PPA discounts.
- 7.36 Baseload generators might argue that they warrant a smaller backstop discount than intermittent generators, since their route-to-market costs are likely to be smaller if they are not linked to imbalance costs. However, we do not propose to differentiate the discount by technology for the following reasons.
- 7.37 Firstly, it is important to maintain the OLR as a backstop, particularly if we are not to undermine the emergence of open-market PPAs for these generators. Reducing the level of discount for some technologies would increase the risk of Backstop PPAs competing with open-market PPAs rather than being a 'last resort', and therefore see consumers bearing a greater share of the route-to-market risk.
- 7.38 Secondly, although the discount is sized for technologies facing the highest potential route-to-market costs, it should also provide sufficient revenues for technologies likely to face smaller route-to-market costs, since they would have greater potential 'equity upside'.

³³ This is true when the reference price is positive

³⁴ In fact, for the reasons identified in Chapter 2, we expect these risks to reduce.

Using the same methodology as for intermittent generators, it is the relative difference between short-term and long-term PPA discounts that effectively determines the appropriate level of the OLR discount, since the value of the OLR is in unlocking shorter-term contracting strategies. We have heard from stakeholders including our Advisory Group that long-term PPA discounts will remain high for baseload generators. Because short-term PPA discounts for baseload technologies should be much smaller, it could be argued that these technologies would warrant a *greater* OLR discount to give equity a balanced choice between long-term and short-term contracts.

7.39 Finally, setting a consistent discount across technologies helps to minimise the administration burden of the OLR. Simplicity suggests that, if we extend eligibility to baseload generators, then it should be on the same terms as those offered to intermittents.

Consultation Question	
28.	Do you agree that we should use a single discount for all eligible generators? Please provide evidence of why a single discount would not work.

Chapter 8: Contract Terms

- 8.1 Eligible generators requiring support under the OLR will be allocated a Backstop PPA. The terms in the Backstop PPA are intended to mirror closely those in typical bankable commercial PPAs currently available, since using familiar structures will help lenders understand the risks they are exposed to, and smooth the transition for generators into and out of the OLR.
- 8.2 However, the Backstop PPA will need to differ from the currently available commercial contracts in some areas, firstly to reflect the differences between the CfD and the RO, and secondly since the Backstop PPA will be a regulated rather than commercial contract.
- 8.3 The CfD Market Readiness Working Groups have been considering the first of these differences³⁵. This chapter focusses on the second, presenting the areas where the Backstop PPA contract terms may need to differ from those expected within CfD PPAs.

Principles

- 8.4 In developing the terms and conditions for the Backstop PPA contract we intend to adhere to the following three key principles.
 - i. **Bankability.** Ultimately the test of the Backstop PPA is whether lenders are comfortable with it and are prepared to lend against it. It should therefore be as close as possible to a 'typical' commercial PPA to help financiers understand the shape of the contract. In the absence of any existing commercial CfD compatible PPAs, we intend to base the contract on the work undertaken by, and output of the CfD Market Readiness Working Group, which DECC convened in April 2013.
 - ii. **Simplicity.** To fit with the short timeframe for accessing the OLR, the Backstop PPA will need to be simple and (to the extent possible) standard across all technology types and project sizes. Standardisation will make it easier for offtakers to size their bids in the competitive allocation process.
 - iii. **Balance of risk.** It must provide an appropriate balance of risks for the Parties. Although the mechanism exists to assist generators to finance their projects, the interests of the offtakers must also be protected, and the overall costs to consumers mitigated. It will not be appropriate to simply transfer all risks to the offtaker to protect the generator. Basing the contract on a typical commercial PPA contract will help provide this balance. However, there may be areas where adjustments are needed to account for the different nature of a regulated contract and ensure normal operational incentives are maintained.

Structure

- 8.5 Our strong preference is to have one set of terms and conditions (T&Cs) that would apply to all projects without amendment. Differences between projects would be reflected in a schedule to the contract which would detail project-specific information such as: site

³⁵ Further information on the CfD Market Readiness Working Group can be found at: <https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-emr-cfd-market-readiness-working-groups>

details; specific pricing information; capacity and effective dates. This approach would mean that once offtakers became familiar with the T&Cs, they would only need to focus on the schedule in order to decide their bidding strategy for competitive allocation, reducing the amount of administration needed.

Consultation Question

- 29. Are there specific issues that would prevent a single set of terms and conditions being applied to all contracts?**

Index Price

- 8.6 The index price for the Backstop PPA shall be the relevant CfD Market Reference Price for that particular project. Whether this is the intermittent (day-ahead) reference price or the baseload reference price shall be detailed in Schedule 1 to the contract. If the basis for constructing this index changes during the course of the Backstop PPA, the PPA shall continue to index to the CfD Market Reference Price as amended and as set out in the relevant CfD.
- 8.7 We believe that this approach provides the most bankable solution for generators as it removes any residual price risk. For the day-ahead reference price it should always be possible to trade the power at (or very close to) the index price, while for the baseload reference price any change will only occur if the previous index lost liquidity or if sufficient liquidity emerged in the year-ahead market to enable the baseload MRP to be constructed year ahead (and only if the developer opted to switch to a year-ahead index). We therefore believe that offtakers will be able to manage this risk, with any residual risk factored into their bids under competitive allocation.

Metering and meter registration

- 8.8 The key differences for the metering section reflect the fact that a Backstop PPA will need to come into force relatively quickly compared to a commercial PPA. For transmission connected generators the process of meter reallocation is relatively straightforward and requires the new offtaker to ask Elexon to transfer the Metering Point Administration Number (MPAN) to their account. For unlicensed distribution-connected generators the process involves setting up a new Additional BMU (A.BMU) registered to the offtaker, a process that is required to comply with the timescales of the BSC registration process³⁶. In the event that the offtaker's A.BMU cannot be set up within the five working day timetable set out in Chapter 5 we propose that the new offtaker uses data from the previous A.BMU for payment under the Backstop PPA.

Curtailment

- 8.9 Although not a feature of current PPAs, it may be appropriate to include protection for the generator under Backstop PPAs to reduce the risk that they generate during periods where to do so would reduce project revenues – most likely to be the case in periods of negative reference prices. It is likely that in a commercial PPA the generator would expect the offtaker to provide this protection, either by curtailing the generator if the index price falls below a certain point, or by notifying the generator (leaving the ultimate decision on

³⁶ Note that we are working with Elexon to ensure that unlicensed distribution-connected generators can be assigned A.BMUs quickly.

whether to curtail with the generator). In practice, the point at which the generator wishes to curtail will be a function of the strike price and the generator’s short-run marginal cost (including costs associated with shut-down and start-up). We therefore propose that the generator should specify their short run marginal costs, which would be used to calculate the point at which this curtailment occurs.

- 8.10 In addition, we are minded to include a provision allowing the offtaker to curtail the generator at any time (or instruct the generator to self-curtail), on the condition that the generator is fully compensated for any financial loss. This would enable the offtaker to bid the facility into the Balancing Mechanism or to trade efficiently in the intra-day market, which will ensure that the generator continues to play a normal role in the market, supports system stability and avoids perverse incentives that might add to volatility associated with negative price events. The compensation would be calculated via a simple formula: the market reference price plus the top-up the generator would have received, minus the discount in the PPA, minus the generator’s short-run marginal costs (including costs associated with shut-down and start-up).

Consultation Questions	
30.	Do you agree that the offtaker should curtail or notify the generator if the index price falls below a certain point, and would this be technically feasible? Do you agree that this point should be determined by the generator? Could this result in any unintended consequences?
31.	Do you agree that allowing the offtaker to curtail the generator at any time (with full compensation) would enable the offtaker to act more efficiently in the Balancing Market or in the event of extreme price volatility?

Forecasts and data provision

- 8.11 The generator should be responsible for providing accurate forecasts on availability and up-to-date information about any unplanned outages. At a minimum this should include notifying the offtaker of any planned outages at the start of the contract. Baseload and dispatchable generators should provide estimates of their expected output profile for the term of the contract (much as they are required to provide to the CfD Counterparty under the CfD contract). Generators should notify the offtaker as soon as reasonably practical of any changes to their availability or estimated profile during the term of the contract.
- 8.12 Additionally, the generator will need to provide accurate real-time information to the offtaker on the availability and performance of the plant in order to facilitate integration into the offtaker’s portfolio. We are therefore minded to require that all generators that wish to access a Backstop PPA ensure that it is possible to provide a link to SCADA³⁷. The generator will be required within two days of the start of the contract to set up their systems to provide the necessary data to the offtaker in accordance with a standard File Transfer Protocol. The offtaker will then have two days to notify the generator if any reconfiguration of the data format is necessary. If so, the generator then has two further days to make the necessary changes to the data format. Failure to comply with these timings would constitute a breach of the contract. To ensure that it is possible to meet these deadlines there will be a minimum standard for data provision, which will be specified in the contract.

³⁷ Supervisory Control and Data Acquisition (SCADA) systems allow the offtaker to monitor, and in some cases control, the output of a generator

8.13 This timetable means that it is possible that the offtaker does not have SCADA integration for the first six days of the contract. During this time the generator should notify the offtaker as soon as reasonably practical of any unforeseen outages that result in more than a 10% loss of capacity.

Consultation Question

32.	Is the requirement for SCADA access appropriate for all generators, or should there be a threshold below which it is not required? Is the process and are the timings appropriate for aligning SCADA systems? What minimum standards should there be on data provision and timing of connection?
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8.14 Even with SCADA connection there will still be a responsibility for the generator to notify the offtaker of the timing of their return to normal capacity following any unplanned outage. Due to the regulated nature of the Backstop PPA, there is a risk that normal incentives to maintain a constructive relationship with the offtaker are weakened. There may therefore be a case to include additional penalties to ensure that the generator accurately notifies the offtaker of their availability, any unplanned outages and the timing of restarting generation following any outage.

8.15 We are therefore minded to provide incentives for good performance through the pass through of cash-out prices for any time, with the exception of Force Majeure, that the offtaker is not appropriately notified of the availability or expected output of a plant. Tolerance limits should be set to allow for small variations as follows.

- i. For intermittent generators the tolerance limit should be expressed as a change to the capacity greater than 10% of the total capacity of the plant.
- ii. For baseload generators the tolerance limit should be expressed as a change to the electrical output of the plant greater than 10% of the forecast output.

Consultation Questions

33.	Do you agree that the proposed tolerance levels for penalties for poor performance are appropriate for intermittent and baseload technologies?
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34.	Other than Force Majeure, should there be exceptions to the penalties for breaching the tolerance limit?
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Termination

8.16 The contract terms will include a robust definition of an 'event of default', which will give either party the right to terminate their Backstop PPA. This definition will include either party being declared insolvent, liquidated or under administration, as well as either Party providing false information or failing to perform an obligation (including payment) and not remedying this.

8.17 In addition, after the first 6 months of the contract, the generator will be able to terminate the contract without liability by providing 6 weeks' notice to the offtaker. This is intended to give the offtaker sufficient certainty to be able to bid competitively, while allowing the generator to return to the open market for a contract if they are able to obtain better terms.

Direct Agreements

8.18 As a requirement of receiving debt finance, the generator may need the ability to transfer their rights in respect of the facility to their lender as security. This would allow the lender to step in if the generator was in financial difficulty and struggling to meet its commitments under the contract. Therefore the offtaker may be required to enter into a '*direct agreement*' with the lender. We do not propose to specify the terms of any direct agreement but would leave this to bilateral negotiations.

Consultation Question

35.	Is it appropriate to leave any direct agreement to bilateral negotiations, or should minimum terms be specified?
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Change in Law

8.19 Due to the short-term, one-year nature of the Backstop PPA, we do not think there is a need to provide for change in law protection within the contract. Any change in law that occurs during the term of the PPA would, in all likelihood, be known in advance with offtakers able to factor it into their bidding strategy.

Chapter 9: Scheme Review

- 9.1 The terms of the OLR will be grandfathered from the point of CfD signature, with eligible generators able to access a Backstop PPA throughout the course of their CfD. However, the OLR mechanism is intended to be a temporary measure, accessible for *new* CfD signatories only until the market for bankable PPAs is sufficiently robust, and lenders, generators and offtakers have become comfortable with the CfD regime.
- 9.2 To ensure that the OLR provides the appropriate level of support to new CfD signatories, it will be necessary to review the scheme. This chapter sets out the procedure for review, and how review will consider the amendment and closure of the scheme for new entrants.

Review Options

- 9.3 Two broad options have been considered for scheme review: a trigger-based approach, using a pre-determined date/volume threshold, or a more holistic review of the OLR on a regular basis.
- 9.4 **Time-based or volume-based closure to new entry** would involve an explicit expiry date for the OLR or an expiry based on a volume of CfD contracts signed, after which no new entrants would be eligible of the OLR. In either case generators would have comfort that the scheme would remain open and unchanged until these triggers were reached. However, there are concerns that this approach would poorly align the scheme with the market need such that it could be closed too early, become ineffective before the trigger is reached, or provide Backstop PPAs that are too generous when compared to open-market PPAs.
- 9.5 Instead we prefer an approach of **annual reporting and evaluation together with a comprehensive review**. Annual reporting would evaluate the scheme against a number of market parameters to ascertain whether there have been any significant shifts in the market that require the OLR to be reviewed. The intention, however, would be to leave the scheme unchanged until the end of the first EMR Delivery Plan in 2018/19, other than if there was a significant change in open-market PPAs that needed to be reflected in Backstop PPAs.
- 9.6 This option would be accompanied by a comprehensive review, most likely to take place in 2018/19, to consider whether the scheme should remain open to new CfD signatories after the end of the first EMR delivery plan. If at this point there is evidence for a continuing need for the scheme then it could be kept in place, with the potential for a number of design or parameter changes.
- 9.7 This is our preferred approach since it is more effective at aligning the scheme with market need, enabling adjustments to be made when there is evidence of significant changes to the market conditions.

Annual Reporting and Evaluation

- 9.8 DECC would report on the performance of the OLR scheme itself and the wider PPA market as part of the annual updates to the EMR delivery plan. The annual reporting could cover a range of key market performance measures, and might include:

- Volume of CfD generation brought forward by independent generators (i.e. generators without a significant supply arm in Great Britain);
 - Volumes of CfD generation under PPAs of different tenors for both OLR-eligible and non-eligible plant;
 - The number of offtakers active in the PPA market (for all tenors); and
 - Number of generators that have accessed Backstop PPAs in the past year, and their installed capacity.
- 9.9 Annual reporting would consider, for new CfD signatories, whether different types of CfD generators should be eligible for the OLR, and whether the discount or terms of Backstop PPAs need to be changed.
- 9.10 The Secretary of State would only agree adjustments to the Backstop PPA terms following the annual reporting if PPAs in the open-market had shifted significantly in nature, meaning that Backstop PPA terms need to be altered to retain a consistency of provisions (e.g. in the event that the Backstop PPA is no longer providing sufficient comfort to lenders over adopting a wider range of routes-to-market.)
- 9.11 Similarly, the Secretary of State would only agree changes to the backstop discount following annual reporting if there was evidence for substantial changes in open-market PPA discounts. Such changes would need to mean that the Backstop PPA was at risk of no longer being a 'last resort' or was no longer providing sufficient comfort to lenders over adopting a wider range of routes-to-market.
- 9.12 Any changes to the terms or discount would be subject to consultation and only apply to new generators, with existing generators' rights of access to the OLR mechanism and terms of their Backstop PPAs being grandfathered from the date on which their CfD was signed.
- 9.13 There are a number of possible sources of data available for the annual review:
- The CfD Counterparty Body may be able to provide information on the identity of CfD-holding generators.
 - PPAs may fall within the terms of the EU REMIT regulations, in which case the discount and terms of these agreements would be available to Ofgem. Even if available, it is unclear whether it is permissible to use REMIT data for wider purposes, or whether Ofgem will be able to share data.
 - If PPAs are excluded from REMIT, Ofgem may be able to request this information using its general monitoring powers under Part 1 of the Electricity Act 1989.
- 9.14 However, there is a risk that there would not be sufficient information available upon which to monitor the appropriateness of the OLR parameters. This could increase the risk that the scheme was not designed in the most effective way, particularly if there was a significant shift in the nature of open-market PPAs. In order to ensure that information is available, we are proposing that generators are required to provide information on their *initial* route-to-market at the point at which their CfD payments commence. The information would likely cover:
- i. The PPA tenor;
 - ii. The discount to the reference price (or other price metric); and
 - iii. Any substantive clauses that might need reflecting in future Backstop PPAs.

Consultation Question

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| 36. | Do you agree that generators should be required to post information about their initial open-market PPAs in order for the appropriateness of the OLR to be assessed effectively? |
|-----|---|

Comprehensive review

- 9.15 The comprehensive review would consider whether the OLR should continue beyond 2018/19, the end of the first EMR delivery plan, for new CfD signatories. The review would also consider whether any aspects of the design need to be changed.
- 9.16 In addition to the sources of data identified for the annual updates, the comprehensive review would likely include a Call for Evidence.

Consultation Question

- | | |
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| 37. | Do you agree with the proposed combination of annual updates and comprehensive review? |
|-----|---|

Annex 1: Consultation Questions

Consultation Questions	
Eligibility	
1.	Do you agree that eligibility for the OLR should include all renewable CfD generators? Please provide evidence as to why not.
2.	Do you agree that renewable CfD generators of all sizes should be eligible under the OLR?
3.	Do you agree that projects with Investment Contracts should be eligible for support under the OLR?
Offtaker Identity	
4.	Do you agree that some licenced suppliers should be mandated to bid for Backstop PPAs?
5.	Is our approach to setting the mandatory offtaker threshold appropriate?
6.	Are specific credit requirements necessary and if so what form should these take? <ol style="list-style-type: none"> i. Should all offtakers be required to provide a Letter of Credit? ii. If not, what credit rating would an offtaker need to have to negate the requirement for a Letter of Credit?
7.	If no specific credit cover is required, would it be appropriate to rely on the mutualisation provisions to provide compensation in the event that any monies cannot be recovered from an insolvent offtaker?
Access	
8.	Do you agree that a generator's entitlement to a Backstop PPA should be revoked in the event that they have a Backstop PPA terminated for material breach?
9.	Do you agree that generators should be allowed access to Backstop PPAs if they have agreed early termination or suspension of a long-term PPA (such as when route-to-market costs exceed the Backstop PPA discount)?
10.	Do you agree that a Backstop PPA should have a minimum period of six months, with six weeks' notice required for exit beyond this?
11.	Should a generator's early termination of a Backstop PPA lead to their eligibility for the OLR being revoked?

12.	Do you agree that generators should be able to access Backstop PPAs throughout the duration of their CfD?
Allocation	
13.	Do you agree that competitively allocating generators to offtakers is the most appropriate and efficient approach to use? Please provide evidence as to why not.
14.	Do you agree that splitting the output of large generators (above 100MW) would help increase competition between offtakers when bidding for Backstop PPAs?
15.	Do you agree that the method used should be a sealed bid, with Ofgem able to move to a more comprehensive auction when in consumers' interests to do so?
16.	Does our high-level timeline for allocating a Backstop PPA look appropriate?
17.	Do you agree that an allocation period of no more than 6 weeks is appropriate for generators, offtakers and Ofgem?
18.	Should the allocation timetable be ensured through a KPI on Ofgem and/or should generators be fully compensated for losses via the levelisation process?
Cost Assessment and Levelisation	
19.	Do you agree that all licensed suppliers should be obligated to participate in the levelisation process?
20.	Do you agree that management fees should initially be levelised quarterly, with scope to review this approach if there is high uptake of Backstop PPAs?
21.	Do you agree that mutualisation provisions are included, without a cap on the sum that could be mutualised?
22.	Do you agree that suppliers should not be required to post collateral to cover their share of the levelisation payments?
Pricing	
23.	Do you agree that discounts in Backstop PPAs should be set on a £/MWh basis?
24.	Do you agree that discounts should be fixed in real terms for the duration of a generator's CfD?
25.	Do you agree that discounts should be indexed to CPI, in line with the CfD strike price?
26.	Do you agree with our general approach to understanding the impact of different discounts?
27.	Do you agree that the discount within Backstop PPAs should be between £20 and £30/MWh? Do you agree with our preference for a discount of £25/MWh? Please provide evidence if you consider this would not be a suitable discount.
28.	Do you agree that we should use a single discount for all eligible generators? Please provide evidence of why a single discount would not work.

Contract Terms	
29.	Are there specific issues that would prevent a single set of terms and conditions being applied to all contracts?
30.	Do you agree that the offtaker should curtail or notify the generator if the index price falls below a certain point, and would this be technically feasible? Do you agree that this point should be determined by the generator? Could this result in any unintended consequences?
31.	Do you agree that allowing the offtaker to curtail the generator at any time (with full compensation) would enable the offtaker to act more efficiently in the Balancing Market or in the event of extreme price volatility?
32.	Is the requirement for SCADA access appropriate for all generators, or should there be a threshold below which it is not required? Is the process and are the timings appropriate for aligning SCADA systems? What minimum standards should there be on data provision and timing of connection?
33.	Do you agree that the proposed tolerance levels for penalties for poor performance are appropriate for intermittent and baseload technologies?
34.	Other than Force Majeure, should there be exceptions to the penalties for breaching the tolerance limit?
35.	Is it appropriate to leave any direct agreement to bilateral negotiations, or should minimum terms be specified?
Scheme Review	
36.	Do you agree that generators should be required to post information about their initial open-market PPAs in order for the appropriateness of the OLR to be assessed effectively?
37.	Do you agree with the proposed combination of annual updates and comprehensive review?

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