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# OFFTAKER OF LAST RESORT ADVISORY GROUP

# DISCUSSION PAPER 2.02: Eligibility

### Eligibility Overview

**Headlines:**

* 1. Under the CfD, lenders will be looking for some generators to secure long-term PPAs to remove their imbalance uncertainty. The OLR is designed to encourage lending to generators without the need for such long-term PPAs, the availability of which will likely be limited.
  2. As such, we believe that eligibility for the OLR should be restricted to those technologies where, without the OLR, their imbalance risk would require them to take on long-term PPAs. This should provide generators freedom to adopt shorter contracting strategies with a wider range of counterparties, improving their route-to-market options. Other risks, such as the liquidity of the reference price market, are best dealt with through regulation and the CfD.
  3. Nascent technologies (e.g. wave and tidal) are unlikely to be developed on low-cost capital and have highly uncertain imbalance costs. As such, we believe it is not appropriate to include technologies without a commercial track record until such time as the extent of their route-to-market risks can be measured.
  4. The above criteria would restrict eligibility to the OLR to wind generators.
  5. We are concerned about risks arising from allowing very large projects to access the OLR, in particular the possible impacts on individual offtakers. For this reason, we are considering a size threshold, with projects above this threshold not being eligible. An alternative solution could involve the output from larger generators being split between multiple Backstop Offtakers. We are seeking views on the feasibility of such an approach.
  6. Given that projects have applied for Investment Contracts under FIDeR before the existence or terms of an OLR mechanism have been confirmed, we do not think that it would be justified to offer OLR protection to these projects.

**Key Questions:**

* 1. Do you agree that eligibility for the OLR should be restricted to those technologies where, without the OLR, their imbalance risk would require them to take on long-term PPAs?
  2. Do you agree with excluding nascent technologies from the OLR at the outset?
  3. Do you agree that the inclusion of large projects in the scheme could pose issues in terms of (a) having a disproportionate impact on individual backstop offtakers, and (b) restricting competition for backstop PPAs (under competitive allocation)?
  4. Would it be feasible to split the output of large plants to solve the issues with such projects entering the scheme? Can you provide examples of a project’s output being split between two unaffiliated offtakers (where forecasting and trading are done independently) – for example offshore UJV structures?
  5. Do you agree that projects supported by investment contracts should not be eligible?

### Introduction

* 1. DECC’s Call for Evidence in July 2012 and the subsequent analysis identified concerns amongst independent renewable generators about the availability of routes-to-market under CfDs, in particular because lenders will not accept merchant route-to-market risk. The majority of responses came from onshore wind developers.
  2. Long-term PPAs with creditworthy counterparties that remove or cap imbalance and route to market risk from generators (at a cost) would prove acceptable to lenders. However, there is a limited pool of offtakers that are considered “bankable”, leading to concerns as to the likely levels of liquidity and competition in the long term PPA market.
  3. The OLR is intended to address these concerns by guaranteeing generators that at any time during the operation of their CfD[[1]](#footnote-1), they will be able to access to a ‘backstop PPA’ at a specified discount to the market reference price. By providing this downside protection, we expect that lenders and providers of low cost capital will become more comfortable with generators using a wider range of PPA counterparties and/or shorter-term contracting strategies to secure a route to market. This should reduce the PPA discounts experienced by generators, both by stimulating more competition in PPA provision, and enabling generators to avoid paying the risk premium in long-term PPAs.
  4. Whilst the OLR effectively provides a cap on route-to-market risks, it would not remove them entirely. The discount will be set at a level that ensures the Backstop PPA remains a ‘last resort’, with smaller discounts being expected to be available in the open market. Generators will be motivated to find the best offers in the open market, and therefore will retain an incentive to locate and operate their sites efficiently to minimise any such discounts, since they will still be exposed to the ‘first loss’. As such, OLR is only an appropriate intervention for those risks that investors are prepared to price.
  5. Given this framework, this paper considers which projects and technologies are suitable for the OLR. Specifically we consider whether eligibility should be subject to:
  + Market risks
  + Technological maturity
  + Project size
  + Support mechanism
  1. Note, this paper will not consider the question of *how* generators access the offtaker of last resort when required; this will be the subject of a separate paper on Accessing the OLR.
  2. The paper will also not assess whether the level or terms of support under the OLR should vary across any of the eligibility criteria. This will be considered within the Pricing paper.

### Assessment Criteria

* 1. The design of the review procedure should align with the criteria set out in Table 1 below.

**Table 1: Assessment criteria**

|  |  |
| --- | --- |
| **Criteria** | **Description** |
| **Availability of financeable routes to market for independents** | * + Intervention should be targeted at those types of generator at risk of facing difficulty obtaining a financeable routes to market   + Ensure that, notwithstanding its sufficiency, the OLR is only available to those types of generator for whom it is an appropriate and proportionate intervention |
| **Minimise system costs** | * + Ensure that the generator types and technologies included in the OLR are compatible with the need to maximise competition for the provision of backstop PPAs (where competitive allocation is used) |
| **Impact on suppliers** | * + Eligibility criteria should not create the potential for undue burden on any one supplier or excessive levels of systemic risk |
| **Potential for market distortions** | * + Minimise distortionary effects in relation to investment across asset classes |
| **Practicality and cost of implementation and administration** | * + Criteria need to be transparent and easily implemented |
| **Legal risk and potential compliance cost** | * + Eligibility should be based on clear and objective criteria which minimises discriminatory treatment |

### Options

* 1. Given the objective to limit access to the OLR to those types of generator facing route-to-market risks under the CfD, we consider eligibility across the following areas.
     1. Technologies:
        1. Market risks
        2. Technological maturity
     2. Project size
     3. Support type
  2. **Technologies**
     1. **Market Risks**

Industry have raised two risks that they see as potentially compromising their route-to-market under the CfD: imbalance risk and liquidity risk

* + - 1. ***Imbalance risk***
      * Although the CfD removes long-term wholesale price risk, generators remain exposed to their imbalance costs. It is important that these costs are left with generators to encourage suitable siting of plant, accurate forecasting and technological innovation that can minimise the system costs.
      * All generators face imbalance costs. However, the materiality of these costs both now and in future will differ by technology. Intermittent generators are more likely to be out of balance; technologies whose imbalance correlates with system imbalance will be most exposed to costs.
      * We believe that the CfD will increase competition within the PPA market, encouraging new entrants and products that allow generators and offtakers to manage imbalance risk cost-effectively. However, particularly at the outset of the CfD, financers and traditional offtakers may treat the imbalance uncertainty cautiously and require generators to secure long-term PPAs to give confidence over revenues.
      * It is likely that the availability of these long-term PPAs will be low, stemming from both the limited number of potential credit-worthy offtakers that can offer such long-term contracts, and their limited capacity to do so. The combination of lenders being unwilling to take merchant route-to-market risk and a shortage of offtakers able to offer long-term PPAs creates the route-to-market risk for generators.
      * Imbalance is a risk that the market (both PPA and capital providers) can and should price. However, given the uncertainty over the potential level of long-term imbalance risk, it may be appropriate to provide protection against extreme scenarios through guaranteeing a Backstop PPA at a significant discount, thereby capping the extent of the downside risk.
      * By effectively capping the level of imbalance costs, the OLR should give comfort to capital providers over the ‘worst case scenario’. This should give generators more potential routes-to-market, including the adoption of shorter-term contracting strategies with a wider range of counterparties in order to maximise revenues and avoid a paying a risk premium for long-term PPAs (although some generators may still prefer to do this, to reduce the risk to equity providers).
      * **We believe that the OLR mechanism is therefore appropriate for generators who, without the OLR, face an imbalance risk that would require them to take on long-term PPAs in order to secure debt finance**, because:

Low-cost capital providers will not take merchant route-to-market risk, which reduces the availability of bankable routes to market for such generators

The OLR leaves generators exposed to imbalance costs, ensuring suitable siting and operation, yet caps the maximum level of this exposure

By limiting downside losses, the OLR should make finance providers more comfortable with generators using shorter-term contracts and / or a wider range of PPA counterparties

By using such strategies, generators should be able to reduce the average route-to-market costs they face over the term of their CfD (both from increased competition between PPA providers and by being able to avoid paying the risk premium on long-term PPAs, if desired).

* + - 1. ***Liquidity risk***
      * Wholesale market liquidity is an important feature of a competitive market. It provides market participants with a route to market, risk management opportunities and investment and operational signals. A liquid market aids market entry, improves competition and increases the robustness of the CfD reference prices.
      * The relevance of this risk to CfD-holding generators is different for intermittent and baseload CfDs. The reference price in intermittent CfDs is proposed to be the hourly day-ahead auction price. Since the auction pays the clearing price to all generators who have submitted offers beneath this price, liquidity is not an issue for CfD-holding generators as they can submit un-priced offers and be guaranteed to receive the clearing price. Whilst lack of liquidity could lead to the auction clearing at a lower price than it would have otherwise, this would not impact on CfD-holding generators since they would be topped up to the strike price regardless (apart from in the unlikely circumstances where the clearing price was negative).
      * The season-ahead price is proposed as the reference price for baseload CfDs initially, moving to the year-ahead market when it has sufficient liquidity. Liquidity is a more relevant consideration here, since the reference price will be the volume-weighted average price of all trades in the reference markets (the N2Ex UK Power Derivatives Seasonal Contract, and the LEBA UK Power Season Ahead Contract) on a daily basis. Generators are therefore exposed to the risk that the price they achieve is beneath the volume-weighted average price that sets the reference price. This is most likely to occur if the bid-offer spreads are high, which is likely to result from poor liquidity. There is also the risk that minimum clip size requirements mean smaller generators may have to trade through aggregators or larger suppliers, which will come at a cost.
      * There are several mechanisms in place to ensure that there is sufficient liquidity in the reference market for the baseload CfD:

DECC believes that there is currently sufficient liquidity in the season-ahead market such that generators could reasonably expect to achieve the reference price.

The CfD itself should drive greater liquidity through generators trading in the reference price market.

Ofgem’s ‘Secure and Promote’ proposals include a Market Maker obligation which will require 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.

DECC have taken powers in the Energy Bill 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 is believes that Ofgem’s reforms are not having the intended effect.

The CfD contract will include provision for annual reviews of the reference price to ensure it is still appropriate. This will include an assessment of whether the reference price reflects a price that a generator could reasonably expect to achieve through trading in the market. Generators (and other interested parties) will be able to present evidence to the review process, and dispute whether or not the process has been followed properly. The outcome of such a review could be to change the reference price to a different product which has adequate liquidity.

* + - * Unlike imbalance costs for intermittent generators, liquidity in the baseload reference price index should improve. We therefore believe that these measures should be sufficient to reassure low cost capital providers – and banks in particular – that liquidity is not a material risk under the baseload CfD, thereby enabling generators to avoid long-term PPAs and adopt shorter-term contracting strategies given that their long-term price risk has been removed by the CfD. However, this is a key issue that needs to be tested with the finance community.
      * **We therefore believe that OLR is *not* appropriate for generators where liquidity is the main route to market risk they face under the CfD**.

Q1: Do you agree that eligibility for the OLR should be restricted to those technologies where, without the OLR, their imbalance risk would require them to take on long-term PPAs?

Q2: Do you believe that the measures to ensure liquidity in the baseload CfD reference price will give sufficient comfort to low cost capital providers such that long-term PPAs are not required for such generators?

* + 1. **Technological Maturity**
       - A key issue in designing the OLR will be setting the discount to the market reference price within the Backstop PPA. To ensure it remains a ‘last resort’ mechanism, it is important that the discount in backstop PPAs is larger than the discounts likely to be available in the market. It is therefore likely that the discount will need to be different for different technologies, reflecting variation in the magnitude of the risks faced.
       - For mature technologies, there is likely to be sufficient data and information upon which an appropriate level of discount can be deduced. However, for nascent technologies route to market costs and risks are inherently uncertain. Furthermore, early projects are unlikely to be funded through low-cost capital, so such projects are unlikely to require long-term PPAs in any case.
       - For this reason, **we propose that nascent technologies are excluded from the OLR** until deployment levels are sufficient to allow an appropriate discount to be set, and low-cost capital providers are interested in investing in such projects.
  1. Table 1 sets out our view on technological eligibility based on the assessment of appropriate market risks for the OLR to address, the materiality of those risks, and the appropriateness of coverage based on technological maturity. **The criteria would see eligibility restricted to wind generators.**

Table – Assessment of technologies against imbalance risk, maturity, and resultant appropriateness for the OLR. Colour indicates whether question is answered positively or negatively (green = positive; pink = negative)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technology** | ***Significant imbalance risk that could increase over time?*** | ***Requires long-term PPA to mitigate imbalance risk?*** | ***Mature technology[[2]](#footnote-2)?*** | ***Is OLR an appropriate solution?*** |
| Onshore Wind (smaller) | Risk of significant increase in imbalance costs as wind output increasingly drives more volatile cash out prices, which wind generators are disproportionately exposed to. | Yes | Yes | Yes |
| Onshore Wind (larger) | Yes | Yes | Yes |
| Offshore Wind (R2/3) | Yes | Yes | Yes |
| *We are not minded to include the following technologies in the OLR eligibility criteria:* | | | | |
| Solar PV (>5MW) | Risk that imbalance costs increase with more volatile cash out prices. Forecasting errors more predictable and less likely to be correlated with system imbalance, so likely to be less material than for wind. | No | Yes | No – imbalance risk is not sufficient that debt require long-term PPAs |  |
| Wave | Risk that imbalance costs increase with more volatile cash out prices. Forecasting errors more predictable and less likely to be correlated with system imbalance, so likely to be much less material than for wind. |  | No | No – the technology is not sufficiently developed to understand the extent of the imbalance risk and the degree of discount within a Backstop PPA. |  |
| Tidal | No. Generation should be highly predictable (although variable), so should not be exposed to imbalance risk. |  | No | No – no material imbalance risk |  |
| EfW | No |  | Yes | No – no material imbalance risk |  |
| Anaerobic Digestion | No |  | Yes | No – no material imbalance risk |  |
| Biomass | No |  | Yes | No – no material imbalance risk |  |
| CCS – gas and coal | No |  | No | No – no material imbalance risk |  |
| Nuclear | No |  | Yes | No – no material imbalance risk |  |

* 1. **Generator Size**
  2. We consider eligibility issues pertaining to generator size only for the technologies identified above as being potentially eligible for the OLR: Onshore and Offshore wind.
  3. 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. Figures 1 and 2 illustrate both the number of solar, onshore and offshore wind projects within the planning system across different size bands and the total volume of capacity within each band. As might be expected, the vast majority of projects are below 50MW, yet most of the capacity is contributed by projects above 100MW.
  4. Given the range of project sizes, with most projects small in nature, there is a risk associated with the allocation mechanism that the inclusion of large generators could distort the supply market (regardless of the levelisation process) if one offtaker is mandated to enter into a backstop PPA with a large generator whilst their competitors are awarded much smaller sites.
  5. There is an additional risk that the variance in projected generation capacity that an Offtaker might be required to support under the Backstop PPA could reduce the appetite for suppliers to offer PPAs in the open market (see Baringa supporting paper 1A). It is also unclear whether, under competitive allocation of backstop PPAs, there would be sufficient competition to be able to accurately price a Backstop PPA for a very large generator.
  6. Coupled with the risks above, there is a separate question on whether large generators require the comfort of a Backstop PPA. It could be argued that larger generators are more likely to use balance sheet finance for their projects and may be better placed to manage long-term imbalance risk without needing long-term PPAs. We are seeking views on this.
  7. For these reasons **we are considering capping the size of projects that are eligible for the OLR**. Based on the distribution of projects in the planning system (Figures 1 and 2 above) and the threshold above which generators have to be licenced by Ofgem and sign up to the BSC, 100MW might be an appropriate threshold above which generators are not eligible for the OLR.
  8. An alternative approach to mitigating the risks posed by larger generators would be to split their output across a number of offtakers. For example, a 500MW site could be allocated to five separate offtakers in tranches of 100MW.

Q3: Do you agree that the inclusion of large projects in the scheme could pose issues in terms of (a) having a disproportionate impact on individual backstop offtakers, and (b) restricting competition for backstop PPAs (under competitive allocation), and that such projects may have less need for OLR protection?

Q4: Would it be feasible to split the output of large plants to solve the issues with such projects entering the scheme? Can you provide examples of a project’s output being split between two unaffiliated offtakers (where forecasting and trading are done independently) – for example offshore UJV structures?

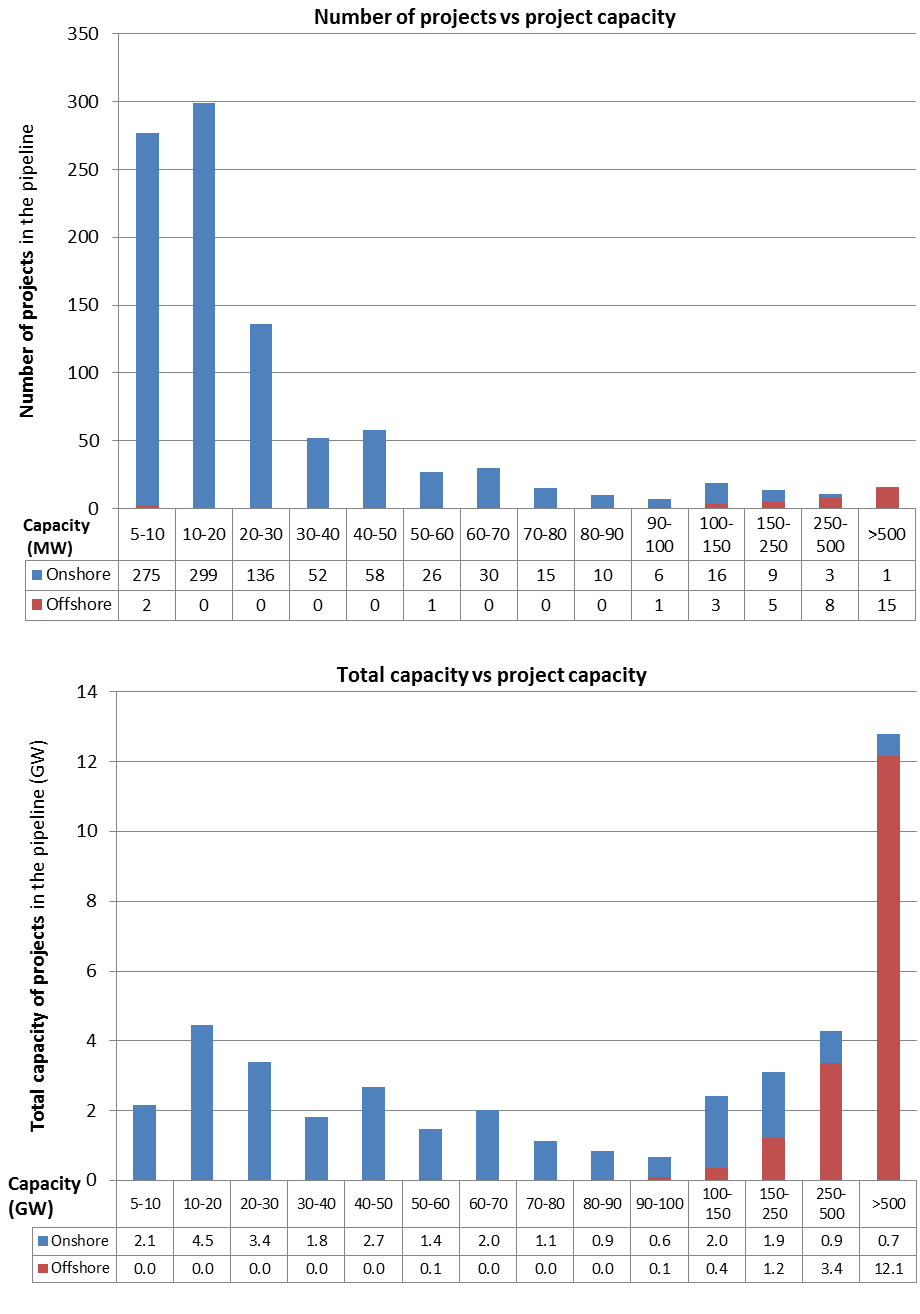


Figure and 2 – The capacity distribution of onshore and offshore wind projects within the planning system, by number of projects (Fig1) and by total capacity (Fig2). [Source: RESTATS]

* 1. **Investment Contract projects**
  2. Under the 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 identical strike prices and key commercial terms under both schemes.
  3. Developers seeking ICs are applying for them without the expectation that an OLR mechanism will be in place or any knowledge over how the mechanism might operate. Investors/lenders must therefore be sufficiently comfortable with the regime such that they are happy to proceed with their application without the OLR.
  4. As such, inclusion of IC projects within the OLR will provide these projects with an unnecessary and unexpected benefit. For this reason we do not intend to allow IC projects access to the Backstop PPA.

Q5: Do you agree that generators holding investment contracts should not be eligible for the OLR?

1. Although access might be restricted during an initial period of the CfD (to be considered further in a separate paper on Accessing the OLR). [↑](#footnote-ref-1)
2. By ‘Mature’ we mean that the technologies have been deployed at commercial scale. [↑](#footnote-ref-2)