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OFF-TAKER OF LAST RESORT ADVISORY GROUP (BARINGA SUPPORTING PAPER B): WHICH APPROACH TO ALLOCATION OF BACKSTOP PPAS IS LIKLEY TO RESULT IN LOWEST COST TO CONSUMERS?

Objective of the Paper

1. The first paper submitted to the OLR advisory group considers the manner of allocation of backstop PPAs. One of the key criteria in terms of selecting the optimal approach to allocation will be the extent to which the cost to consumers can be minimised in the event that the scheme is actually used.

2. This paper therefore considers which allocation mechanism is likely to result in the lowest cost to consumers of providing backstop PPAs to generators.

3. In particular it looks at the following two questions:

    a. Why is competitive allocation theoretically optimal in terms of lowering the cost to consumers?

    b. What is the risk that there will not be sufficient levels of competition to drive cost reflective bidding under competitive allocation?

Why is competitive allocation theoretically a lower cost option than administrative allocation?

4. As explained in the DECC policy paper on allocation, administrative allocation works by allocating backstop PPAs to certain large suppliers, and then compensating them through a regulated cost assessment process which estimates the cost to that entity of providing a backstop PPA.

5. This is likely to be assessed on some sort of market average basis which will balance the need to:

    a. minimise the impact on suppliers by under-compensating them against their actual costs incurred;

    b. while at the same time lowering the cost to consumers by incentivising providers of Backstop PPAs to minimise the cost of imbalance (along with other trading costs).

6. However, as highlighted in the straw man paper, in reality the cost of providing a backstop PPA is likely to vary between different potential offtakers. Differentiators could include, for example, better forecasting and/or trading capabilities, lower cost finance, better 'fit' with existing portfolio and ability to access greater embedded benefits.[1]

[1] We note the difference between a mandatory offtakers actual costs of providing a backstop PPA itself are not necessarily that relevant here as it may be able to either nominate a substitute or subcontract its obligation to the wider market. As such the cost saving with competitive allocation relative to an administrative approach is

7. As such, the key issue from the perspective of consumers with administrative allocation is that levelisation payments will be calculated assuming "average" imbalance / RtM costs, when in fact the market might theoretically be able to manage those PPAs at a lower cost.

8. By contrast, competitive allocation offers the opportunity to be a backstop offtaker to the wider market and then allocates backstop PPAs to the bidder that is able to offer that service to consumers at the lowest cost. As such, competitive allocation harnesses this differentiation across potential backstop PPA providers and passes that on to consumers by lowering the overall size of the levelisation pot. The materiality of the saving will be a function of the extent of the differentiation across eligible backstop offtakers.

Will there be sufficient competition to drive cost reflective bidding?

9. For competitive allocation of backstop PPAs to be broadly cost reflective, there must be a sufficient number of PPA providers who are both willing and able to participate in that market.

10. Theoretically, there are two reasons why this should be the case.

    a. The first is that, if the backstop PPA works as it is intended to, competition in the wider PPA market should increase thereby improving pricing of route-to-market costs to generators as a whole. If the OLR is triggered (for whatever reason), competition for backstop PPAs should be healthy if all, or substantially all, of this wider PPA market are able to participate in this new "backstop market".

    b. Secondly, even if the OLR mechanism has little or no impact on the wider PPA market, it should drive a minimum level of participation in any competitive tender for backstop PPAs. This is because:

        i. Firstly, suppliers over a certain size (so called "mandatory offtakers") will be *required* to bid in any tenders of backstop PPAs; and

        ii. Secondly, while they can theoretically bid at any price, these suppliers will be incentivised to participate and bid cost-reflectively given that levelisation will smear the management fee paid to the winning bidder across all suppliers. As such, if a supplier submits an inflated bid, its competitor could derive an additional rent above the true cost of providing the backstop PPA due to the low levels of competition.

11. In order to stress-test these assumptions, we need to ask the following questions:

    a. **Question 1** – Given that cost reflective bidding for backstop PPAs relies on a healthy wider PPA market competition, what is the risk that a drop in liquidity in the PPA market is likely to coincide with generators entering the OLR mechanism?

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the difference between the levelisation assessment of an "average" offtaker and the cost to the "best in class" of providing that service.

b. **Question 2** - Where there is a competitive PPA market, what might prevent liquidity from the wider PPA market flowing into any competitive allocation of backstop PPAs?

c. **Question 3** - Does the design of the OLR mechanism actually ensure a minimum level of competition and cost reflective bidding by suppliers?

Question 1 – impact of a 'stress event' on backstop PPA market competitiveness

12. For obvious reasons, where there is little or no liquidity in the wider PPA market[2], using competitive allocation to allocate backstop PPAs presents significant risks since bidders could drive excessive rents at the expense of consumers.

13. In the event that the OLR mechanism has been successful in promoting competition in the wider PPA market, this should arguably be a remote risk. However, this assumes that this increase in competition will necessarily survive any stress event that might force generators to resort to the OLR mechanism; for example:

    a. a significant increase in imbalance risk; or

    b. a dramatic reduction in liquidity in the wholesale electricity market.

14. However, this may not be the case since these stress events could push a number of smaller players / new entrants into insolvency thereby reducing the levels of competition in the wider PPA market at precisely the time when a competitive wider PPA market is required to drive cost reflective bidding for backstop PPAs.

15. The materiality of this risk will depend in a large part on the nature of the stress event and how risk is distributed across the market. For example, we assess imbalance risk under two different scenarios.

    a. *Scenario 1*

        i. If the market response to the OLR mechanism is that generators continue to contract long term, but with a wider range of counterparties (i.e. new entrants / marginally worse credit), one would expect that any improvement in PPA liquidity would occur in the long-term market alone.[3]

        ii. If there is a significant increase in imbalance cost that was not anticipated by the market, this could drive a number of new entrant providers that have offered longer term contracts to generators into insolvency or to exit the market (as returns have not met expectations).

[2] Indeed, we note that mandatory bidding might actually have the potential to result in greater liquidity in the backstop PPA market than in the open market.

[3] Ignoring, in this example, the fact that the short term market is driven by other generator types (i.e. the small scale FIT etc).

iii. Large numbers of generators might then enter the OLR and if those backstop PPAs were tendered, there is risk that the wider PPA market could be significantly less competitive than it was before the stress event, and therefore the backstop PPA market also risks being uncompetitive.

b. *Scenario 2*

i. If, however, the market response to the OLR mechanism is that generators start to contract shorter term with a wider range of counterparties, one would expect that any improvement in PPA liquidity would occur across all tenors.

ii. As such, the impact of an unanticipated increase in imbalance costs on the wider PPA market might be less profound as, while the generators would be impacted (and therefore enter the OLR), the new entrant PPA providers are not also exposed as they are able to adjust their pricing (given that they have not taken long positions).

iii. As such, a stress event might not in this scenario materially impact wider PPA market competition, such that any subsequent tender of backstop PPAs to the market is unlikely to result in non-cost-reflective bidding (assuming all PPA providers can participate).

Question 2 – liquidity in the wider PPA market and backstop PPA market

16. This section considers the risk that liquidity from a competitive wider PPA market is not able to flow into any competitive allocation of backstop PPAs and drive cost reflective bidding.

17. Broadly speaking, PPA market participants may not bid for backstop PPAs for two reasons:

a. They *may not want* to participate, because the market is too small relative to the costs of entry, or the risk allocation / nature of a backstop PPA or the backstop tenders is not something at aligns with their business model / capability.

b. They may want to participate, however are *not be able* to, due to any eligibility requirements imposed in the design of the tender, or due to the nature of the obligations required (e.g. working capital).

18. Please see Appendix 1 for a more detailed breakdown of discussion of the factors that might lead to either of these outcomes (and their materiality). However, in summary:

a. Factors that might lead PPA provider *choosing* not to bid are only likely to lead to low levels of competition for backstop PPAs in the first instance where the size of the opportunity is relatively small. As soon as the volumes of generation in the OLR reached a certain critical mass, the backstop market would became sufficiently attractive (in terms of size and margins available) to encourage the wider market to invest the time, effort and expenditure that would be required to integrate the provision of backstop

PPAs into their respective business offering / capability. This would be an efficient outcome.

b. Of more concern, therefore, are any structural barriers built into the design of the OLR mechanism that are likely to restrict a significant proportion of the wider PPA market form offering backstop PPAs. The most material of these is likely to be the requirement on all backstop offtakers to hold a supply licence. As to whether this will actually restrict participation in competitive auctions will require an appraisal of the following:

   i. The speed and cost to an aggregator or trader of getting licenced as a supplier;

   ii. The extent to which PPA providers are likely to be licenced as suppliers in any event (e.g. this is the case for the three aggregators in the market today, Statkraft, Smartest, NEAS); and

   iii. The extent to which a supply licence imposes significant liabilities and/or obligations that non-suppliers would be anxious to avoid.

Question 3 – Incentives on suppliers to participate

19. As discussed above, in addition to participation in the backstop arrangements being driven by wider PPA market liquidity, a supplier should also be sufficiently incentivised to participate and compete to avoid a transfer of value to its competitor under levelisation.

20. The strength of this incentive, however, will depend on a number of factors.

    a. Firstly, how material is any potential transfer of value to a competitor when considered in the context of the cost base that makes up any supplier's retail tariff?

       i. If the levelisation payment is likely to represent a very small proportion of that cost stack (even with high rents charged by participating bidders in any auction of backstop PPAs), this could dampen the incentive to participate.

       ii. As such, in the same way as the level of competition for Backstop PPAs is likely to be a function of the size of the market (i.e. volumes of generation actually in the backstop arrangements), the strength of the signal on a supplier to participate will also be a function of the volume of backstop PPAs being offered to the market.

       iii. The greater the volumes, the greater the impact on their business, and therefore the more concerned they will be to ensure that the pricing is broadly cost reflective and that they are not funding rents for their competitors.

    b. Secondly, how competitive is the underlying retail market?

       i. If the underlying retail market has concentrated then the likelihood of the levelisation process (in and of itself) driving cost reflected bidding reduces.

ii. This is because

1. Firstly, in a world with only 2 or 3 large vertically integrated suppliers (that also dominate the wider PPA market), the risk of collusion in competitive allocation is greater and therefore there the risk of high successful bids increases.

2. Secondly, where the retail market is "sticky" (as is the case in the domestic segment today), there is a greater risk that suppliers will take the view that they can pass on a greater cost of levelisation without necessarily materially affecting their market share.

Conclusions

21. Competitive allocation is likely to drive the greatest savings to consumers relative to administrative allocation where there is significant diversity amongst potential backstop PPA providers of the cost of providing the services (due to better forecasting and/or trading capabilities, lower cost finance, better 'fit' with existing portfolio and ability to access greater embedded benefits).

22. These benefits are most likely to be realised for the benefit of consumers through cost reflective bidding where:

    a. competition in the wider PPA market is healthy; and

    b. the volumes of generation in the OLR mechanism are high enough such that:

        i. Firstly, it is worthwhile for participants in the wider PPA market investing in the capability of entering this market and pricing competitively; and

        ii. Secondly, incentives on suppliers through levelisation are sufficiently sharp to "keep the market honest" by submitting broadly cost-reflective bids.

23. Key risks for consumers are therefore:

    a. Firstly, the risk that any improvement in competition in the PPA market triggered by the introduction of the OLR mechanism does not survive the stress event that might force generators to trigger their right to a backstop PPA; and

    b. Secondly, the risk that structural barriers in the design of the OLR mechanism (in particular the definition of an eligible backstop offtaker), may place barriers to the free flow of wider PPA market liquidity into any competitive tender of backstop PPAs.

24. There are a number of options for how the design of the OLR could mitigate these risks. These are:

    a. **Option 1** – Use administrative allocation unless:

i. competition in the underlying PPA market is sufficiently strong (as measured by Ofgem); and

ii. the volume of backstop PPAs exceeds a given threshold.

b. **Option 2** – Start with competitive allocation, but with appropriate safeguards including:

i. monitoring of bidding behaviour by Ofgem (as it does today with retail pricing); and/or

ii. imposition of reserve prices based upon what it would have assessed the cost if the contract had been administratively allocated.

c. **Option 3** – Ensure that the design of the backstop PPA and the OLR mechanism minimises the structural barriers to entry into any competitive tender of backstop PPAs, for example as follows.

i. Reduce the requirement for backstop providers to have a minimum credit rating by maintaining bankability through:

1. alternative credit support; or

2. ensuring that a generator can be transferred to an alternative backstop provider swiftly.

ii. Streamline the process for application to be a supplier for prospective participants in the backstop market.

iii. Minimise the working capital burden on backstop PPA providers through the design of the levelisation process.

25. Note, it is entirely possible that the OLR mechanism could combine elements of all three options.

Appendix 1

Barriers to entry / reasons for non-participation in any backstop market

Factor	Description	Materiality / Mitigants
Barriers to entry		
Requirement for a supply licence	▶ The Energy Bill requires all providers of backstop PPAs to be suppliers (the reasons for which are explored in DECC policy paper on Offtaker Identity). ▶ Aggregators and traders, who could potentially provide backstop PPAs may not have supply licences and therefore would be ineligible to participate.	▶ The materiality of this issue will depend on the following: ✓ The speed and cost to an aggregator or trader of getting licenced as a supplier. ✓ The extent to which PPA providers are likely to be licenced as suppliers in any event (e.g. Statkraft, Smartest, NEAS). ✓ The extent to which a supply licence imposes significant liabilities and/or obligations that non-suppliers would be anxious to avoid
Working capital requirement	▶ In order to increase certainty for smaller suppliers as to future levelisation payments (for setting retail tariffs), levelisation payment terms may involve delay. ▶ This could exclude offtakers unable to access the working capital required to "carry" these reconciliation payments.	▶ This has the potential to be a material issue given that this is likely to be a requirement specific to participation in the backstop market. ▶ This is because under a normal PPA, a PPA provider takes delivery and normally pays in arrears.[4] ▶ There is therefore likely to be a trade-off in the design of the OLR mechanism between the need to maintain competition in the retail market and the need to maintain competition for the provision of

[4] We note that under the backstop PPA only the "out of the money" element of the contract is paid through levelisation. As such, this may only be relatively small amounts (compared with the amount of the payments due to the generator).

Factor	Description	Materiality / Mitigants
		backstop PPAs
Minimum credit rating / balance sheet strength	▶ In order to maximise the bankability of the scheme, the definition of a voluntary offtaker (i.e. an entity entitled to bid in any competitive tender of backstop PPAs) might be restricted to offtakers that meet certain minimum credit ratings or balance sheet tests. ▶ Depending on where that threshold is set, this may restrict the proportion of the PPA market that participates in a competitive allocation.	▶ Any eligibility requirements on voluntary offtaker will need to be reviewed in light of the credit support requirements in the backstop PPA itself. ▶ Nevertheless, this may not be a significant barrier to entry as PPA providers are likely to have to meet certain minimum credit requirements in order to contract with a generator in the open market in any event (notwithstanding the OLR).
Length of PPA	▶ If backstop PPAs are tendered out over long (e.g. 5 to 10 year) tenors, that could restrict the numbers of participants willing and able to price over that timescale.	▶ Unlikely to be a material barrier as backstop PPAs are likely to be regularly re-tendered (i.e. over shorter tenors) to minimise risk premiums and balance sheet impacts.
Non-Participation		
Divergence of terms	▶ At the point at which early CfD generators enter the backstop arrangements, their grandfathered backstop PPAs may (if the market has shifted significantly) represent a different allocation of risk to that which is accepted in the market at the time these backstop PPAs are tendered. ▶ If the risk allocation is so different as to be almost an entirely different product, there is a risk there will be limited	▶ All these factors, while they might potentially result in low participation in the first instance, would be eroded if it became sufficiently attractive to enter the backstop market. ▶ This is likely to be where the size of the market and the margins available incentivise a greater proportion of the wider market to invest the time, effort and expenditure that would be required to integrate the provision of backstop PPAs into their

Factor	Description	Materiality / Mitigants
	appetite within the existing pool of offtakers (thereby reducing competition).	respective business offering / capability.
Diversity of Backstop PPAs	▶ It is also important to consider the extent to which Backstop PPAs *themselves* will vary through time (i.e. through a shift in PPA terms through time). ▶ If they do, this may fragment liquidity as bidders would need to separately appraise each Backstop PPA, not just against the asset, but also the terms themselves.	
Set up costs / capability	▶ Inevitably, competing for backstop PPAs will involve PPA provider not just potentially understanding a different product (as described above), but also a different business process and capability. ▶ For example, rather than a bilaterally negotiated market, as in the open PPA market (with the exception of the NFPA), backstop PPAs would be auctioned / tendered.	