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Going, going, gone--how do green energy auctions work?

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Environment analysis: What are green energy auctions and how are they working in practice? Tim Pugh, partner at Berwin Leighton Paisner LLP, considers the pros and cons of green energy and contracts for difference (CfD) auctions.

Original news

Energy auctions boost renewables projects, says DECC, LNB News 26/02/2015 183

Competitive auctions have led to contracts being offered to 27 renewable electricity projects, which together could power 1.4 million homes, according to the Department of Energy and Climate Change (DECC). The green energy auction has also reduced prices by as much as 58% in some cases, DECC says, and the projects will lead to the UK emitting four million fewer tonnes of CO2 into the atmosphere each year.

What are green energy auctions/CfD auctions and how do they work?

Electricity Market Reform (EMR) and the background to CfD

CfDs are a mechanism of EMR underway following the Energy Act 2013.

The objectives of EMR are:

- to maintain a secure supply of electricity
- to enable the UK to meet carbon reduction and renewables targets
- to accommodate projected increases in demand for electricity over the next four decades

As part of this it is intended to incentivise investment in secure low carbon electricity generation and to improve affordability for consumers. DECC estimates that £110bn of investment is required in the energy sector by 2020 in order to achieve these objectives.

CfDs are intended to provide long term price stabilisation to low carbon plant. They are private law contracts between the government, via a government owned placement company, the Low Carbon Contracts Company (LCCC), and a low carbon electricity generator.

Under the terms of a CfD, the generator is guaranteed a price for electricity over a defined period of time irrespective of market movements. In essence it is paid the difference between a 'strike price' (a price for electricity designed to reflect the price of investing in a particular piece of low carbon technology) and the 'reference price' (a measure of the average market price for electricity in the domestic market). The objectives are to give greater certainty and stability of revenues to electricity generators by managing exposure to price volatility, while providing protection to consumers from having to pay higher support costs when prices are high.

Critically, CfDs enable generators, lenders to generators and investors in generators and generating projects to be confident that if energy is generated, it can be sold within a specified price range. Thus the path to investment in renewables is intended to be smoothed.

CfD allocation oversight and budgetary limits

The process of allocating CfDs is overseen by the EMR delivery body, National Grid. Under the allocation process, National Grid notifies the LCCC of projects successful in particular allocation rounds and therefore which potential generators (and with which projects) are to be offered CfDs in response to their applications.

There are finite resources available to meet the cost of CfDs. The limits are set annually under a Levy Control Framework (LCF), which is designed to ration levy funded public expenditure to meet DECC's decarbonisation policies. Among other things, such expenditure is funded indirectly by consumers via the supplier obligation, a levy on electricity suppliers. Caps on spending under the LCF have been outlined up to 2020/21. The total spending cap for 2011/12 was £2bn. It rises to £7.6bn in 2020/21.

CfD eligibility criteria

There are criteria for eligibility for CfDs. The project must be from a qualifying list of renewable technologies and associated fuels, and evidence must be provided by the applicant that a project meets specific eligibility criteria.

CfD allocation process

CfDs are allocated in rounds. For each round, an allocation framework is published in advance. For the first round, (which opened for applications in October 2014 and under which CfDs were awarded on 25 February 2015) eligible technologies were grouped into three 'pots':

- established technologies (including onshore wind, solar PV, energy from waste (EfW) with combined heat and power (CHP), hydro, landfill gas and sewage gas)
- less established technologies (offshore wind, wave, tidal stream, advanced conversion technologies, anaerobic digestion, biomass with CHP and geothermal), and
- biomass conversion

Auctions, to award CfDs, are only necessary where applicable budgets would be exceeded if all eligible applications were granted (known as a 'constrained' allocation round).

CfD auction characteristics

Sealed bids are invited under rules set by the allocation framework. If there are minimum requirements for a particular technology within a given year, a pre-auction is carried out (for which the following rules apply separately as they would for the main auction) with remaining technology being reduced to bidding for the balance of the available budget.

Particular features of the auction process include the following:

- bids must stipulate a strike price
- generators may make multiple bids for the same project stipulating different strike prices to account for later delivery or alternative capacity levels
- bids are ranked from lowest to highest strike prices
- bids are accepted sequentially from the lowest upwards subject to overall budget constraint and maximum and minimum price thresholds, until acceptance of a further bid would cause the budget to be exceeded

Once the auction is closed, qualifying projects are awarded a clearing price equal to the strike price of the last project approved.

There are 'non-delivery disincentives' (NDDs) designed to deter bad-faith or speculative behaviour such as low balling but then not proceeding to contract.

What are the pros and cons of competitive green energy auctions?

The pros and cons of competitive green energy auctions are essentially those of any resource-intensive auction process.

Pros include the opportunity for the auction seller to secure the best bids at the best prices for its product (in this case CfDs) within the parameters set for the auction. The seller is able to choose the schemes most likely to deliver the desired capacity at the best price for the technology concerned. Contracts are bid competitively and are exposed to the market before award. The procedure is reasonably fair and transparent within the bounds of respect for commercial confidentiality.

Cons include that the auction process can be highly time and resource intensive and there are inevitably losers as well as winners.

In the current round a concern expressed by losers has been that smaller operators have lost out to bigger operators and that nascent and potentially more 'green' technologies have lost out to more established less adventurous but ultimately less 'green' technologies which have been developed further.

Smaller operators argue that the complexity of the process and the expense of pursuing it create an unlevel playing field, with new technologies and new entrants disadvantaged. They say that larger operators are able to absorb costs of both successful and unsuccessful bids whereas for smaller operators, the expense of an unsuccessful bid can be crippling. They say also that with allocations to pots, the groupings within pots include both more and less expensive technologies and therefore favour those such as onshore wind farms which are less resilient in energy terms but have lower capital and running costs.

Larger operators will doubtless disagree. They will counter by pointing towards the time, energy and resources sunk over many years in developing now 'conventional' renewable technology and related supply chains to their current state of cost and delivery predictability. They will also agree with government assertions to the effect that where resources are finite and in the energy and utility industry more generally, value for money and tried and tested technology tend to go hand in hand.

Which projects and organisations have been offered contracts? Have certain technologies been favoured?

A total of 26 contracts have been awarded, with projected capacity of 2.1Gw and at a total cost of £315m.

Five different technologies have been chosen:

- onshore wind
- offshore wind
- solar PV
- EfW with CHP, and
- alternative conversion technologies

More detail about the projects, developers and technology awarded is set out in DECC: Contracts for Difference (CFD) Allocation Round One Outcome.

Wind power would provide by far the largest capacity at approximately 1.85 GW in total--of which offshore wind would provide more than 1.16 GW from two contracts and onshore wind just under 0.75 GW from 14 contracts. Only 15% of capacity would be provided by the remaining three technologies even though numerically they would make up nearly 50% of the contracts awarded.

Industry commentators have put the apparent disparity down to:

- the greater maturity (and hence greater risk predictability) of wind technology
- its lower costs and relatively lower subsidy requirement, and
- the greater ability of established larger players in the wind energy field to absorb costs associated with a complex auction process

What lessons can be learned from this first auction and will we see more of these?

Likelihood of more auctions

There is no legal guarantee that there will be more auctions. In theory those applying for CfDs as part of each of the allocation rounds that are due over forthcoming years may seek contracts for less capacity than is on offer all within the funding cap. In practice, however, with more schemes consented and in the pipeline than have been awarded contracts in this round, continuing energy market volatility and reluctance on the part of capital markets to finance absent a guaranteed minimum return, demand for CfDs seems likely to exceed supply. Therefore, there will undoubtedly be more auctions.

The next CfD allocation round is intended to open in October 2015.

In evidence to the Commons Energy and Climate Change Committee inquiry into implementation of EMR, it was indicated that DECC will undertake a review process over the summer 2015 to make decisions on whether changes to the allocation and auction processes will be necessary.

Commons Energy and Climate Change Committee Report

A large question mark posed by the Commons Energy and Climate Change Committee in its report on Implementation of Electricity Market Reform published on 4 March 2015 (see LNB News 04/03/2015 99) is whether the proportion of the LCF already allocated to early contracts for renewables, even before the current CfD auction, may have pre-empted better value for money (greater capacity and/or resilience for the same or lower quantum) by drawing disproportionately on available funds early in the process.

Particular pressure is likely to be put on DECC to undertake auctions more frequently, to allow unsuccessful smaller operators to rebid during a subsequent round without carrying holding costs for cripplingly long periods and without having to redo work due to lapse of time.

The Committee has also asked DECC:

- to carry out its review by August 2015
- to publish its findings well in advance of the next capacity auctions and CfD allocations, and
- to make things easier for smaller organisations to compete on a level playing field

What should lawyers advising in this area take note of and what should they advise their clients?

Matters of which to take note include:

Judicial review

The risks of judicial review of CfD awards, particularly if, objectively viewed, eligibility criteria are not met, strike prices or financial information are not robustly defensible or there is evidence of anti-competitive behaviour. Civil servants will remember with trepidation Virgin's challenge to the award of the West Coast Main Line Franchise. Similar administrative, regulatory and competition law principles as apply to awards of government transport contracts apply to government awards of energy contracts.

European intervention

The risks of European intervention on grounds such as state aid delaying award or the ability to act on an award. The recently announced European Commission's state-aid based investigation into a CfD awards to one proposal to convert an existing coal fired power station to biomass illustrates the risks here.

Post-general election policy

The risk that post-general-election policy volatility will influence future allocation rounds.

All of these factors would routinely be considered by seasoned advisers of generators, project promoters, lenders and investors. Applications will have been carefully scrutinised and decision documents swept for unexploded ordinance by civil servants and their legal teams.

Nevertheless, with any decision-making process where there are winners and losers, some losers can be better and less doggedly troublesome than others. Moreover, in a process involving more and less environmentally controversial proposals, disaffected competitor bidders are not the only potential litigators of whom to beware. With rumours of further attempts at challenge to contracts in relation to nuclear energy procurement at Hinckley, one could imagine disaffected members of the renewable energy and anti-onshore wind lobbies looking closely for ways of challenging at least some of the awards made.

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