



Department
of Energy &
Climate Change

CFD Auction Guidance

25 September 2014

This Guidance is intended for information only, it remains subject to change and is not legally binding. This Guidance does not constitute legal or investment advice and applicants are urged to obtain their own independent advice.

In relation to CFD auctions, applicants must consider:

- (a) the Contracts for Difference (Allocation) Regulations 2014¹;***
- (b) the Contracts for Difference (Definition of Eligible Generator) Regulations 2014²; and***
- (c) the Contract for Difference Allocation Framework³;***

For the avoidance of doubt, if there is any conflict or inconsistency between any provisions of this Guidance and provisions of any of the CFD Regulations or Allocation Framework then the provisions of CFD Regulations and Allocation Framework shall prevail.

¹ <http://www.legislation.gov.uk/uksi/2014/2011/made>

² <http://www.legislation.gov.uk/ukdsi/2014/9780111116807>

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/349370/Final_Allocation_Framework.pdf

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Introduction

The Allocation Framework, as directed by the Contracts for Difference (Allocation) Regulations, sets out the detailed process for the allocation of Contracts for Difference (CFDs). This publication serves as a supporting document to assist applicants in their understanding of the CFD auction process, focussing on the processes following National Grid's determination of application eligibility. This includes explanations of the trigger for constrained allocation, the submission of sealed bids and the auction mechanism.

This document does not cover the wider allocation process, and applicants may wish to refer to other publications including, but not limited to, the National Grid CFD User Guide⁴. Further documents relating to the allocation round are available on the DECC, the Delivery Body and the LCCC websites⁵.

This guidance document refers only to the first Allocation Round.

The CFD generator journey

- 1.1. The first part of the CFD journey is the application/allocation stage, which includes the Low Carbon Contract Company's consideration of minor and necessary modifications, developers applying to the Delivery Body for a CFD, the Delivery Body's assessment of eligibility, the allocation process set out in detail in this document and the contract review and signing processes. These stages are then followed by the pre-start date, post-start date and contract closure stages as set out in Figure 1 below.
- 1.2. This document focusses on the trigger for constrained allocation, the submission of sealed bids and the auction mechanism.

Allocation round timetable

- 1.3. The provisional timetable for the October 2014 Allocation Round is set out in Figure 2 below. The table shows the shortest (with no appeals) and longest (with maximum appeals) scenarios. If there are minor disputes, the auction notice may be given at any of the intervening dates. All other dates will follow at the intervals set out below.
- 1.4. Once applicants have submitted their application during the 10 working day window set out in Figure 2, the Delivery Body will assess eligibility.
- 1.5. The Delivery Body will determine whether or not an application made by an eligible generator meets the various eligibility criteria. Eligible applications will be included in the

⁴ <https://www.emrdeliverybody.com/Pages/DocumentDescription.aspx?CID=17>

⁵ <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>, <http://www2.nationalgrid.com/UK/Our-company/Electricity/Electricity-market-reform/>, <https://lowcarboncontracts.uk/>

allocation process which leads to the offer of CFDs. A complete set of detailed requirements are outlined in the Allocation Regulations⁶ and the Allocation Framework⁷.

1.6. A number of frequently asked questions concerning eligibility are answered in our published FAQs⁸.

Figure 1 – CFD Generator Journey

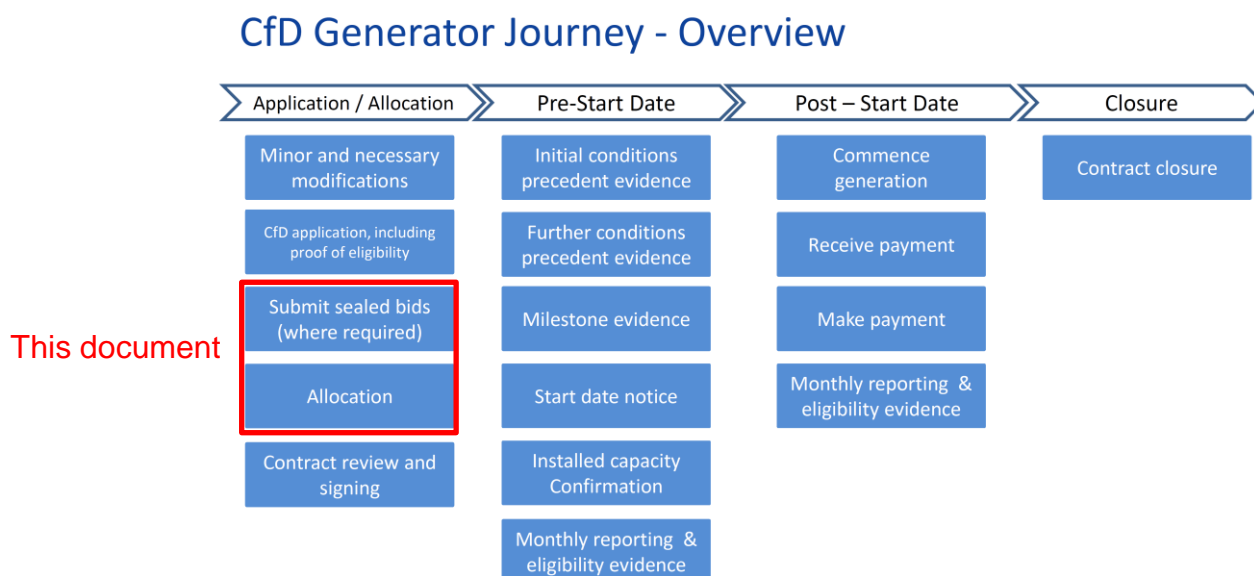


Figure 2 – Provisional Allocation Round Dates

Milestone	Expected date (with no appeals)	Latest expected date (with appeals)
Final budget notice published	30 Sep 2014	30 Sep 2014
Commencement date of the allocation round	14 Oct 2014	14 Oct 2014
Application closing date	28 Oct 2014	28 Oct 2014
Notices of determination	11 Nov 2014	11 Nov 2014
Applicant requests review of a non-qualification determination	n/a	18 Nov 2014
Non-qualification review notification	n/a	03 Dec 2014
Applicant makes appeal in respect of a non-qualification determination	n/a	10 Dec 2014
Ofgem completes appeals	n/a	04 Feb 2015
Auction notice	27 Nov 2014	11 Feb 2015
Sealed bids submission closing date	05 Dec 2014	18 Feb 2015
CfD notifications sent to LCCC	31 Dec 2014	11 Mar 2015
LCCC sends contracts to successful applicants	31 Dec 2014 - 15 Jan 2015	11 - 25 Mar 2015

NB These dates are provisional and may be subject to change

⁶ <http://www.legislation.gov.uk/ukxi/2014/2011/made>

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/349370/Final_Allocation_Framework.pdf

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/353094/Contracts_for_Difference_-_FAQs_FINAL.pdf

Auction principles

Constrained Allocation

- 1.7. Once eligibility has been determined, the allocation round proceeds to the valuation stage. In the first allocation round, technologies are grouped into three 'pots', as set out in the Government Response on the Use of Technology Groupings, Minima and Maxima⁹.
- 1.8. The budget available for each pot is set out in the Budget Notice. The Delivery Body will compare the value of the eligible applications at the Administrative Strike Price¹⁰ with the available budgets for each technology pot (and any maxima)¹¹.
- 1.9. If the sum of the budget required to allocate a CfD to all applicants is less than or equal to the budget, under the constraints of any maxima the allocation round is 'unconstrained' and all of the applicants will be offered a CFD at the relevant Administrative Strike Price.
- 1.10. In the event that there is insufficient budget to fund all projects which have applied within a given pot, constrained allocation is triggered¹². An auction will be used to award contracts when constrained allocation is triggered.
- 1.11. Different pots within an allocation round are entirely independent – one pot may be constrained while another is not, the auctions may proceed at different speeds, and budget cannot be transferred between pots within a round.
- 1.12. A high level process map of the allocation process (once eligibility has been determined) is shown in Figure 3.

Payment Rule

- 1.13. The clearing price for each delivery year¹³ is set at the strike price bid of the last accepted (marginal) bid in that year.
- 1.14. The strike price offered to each successful applicant will be equal to the lower of the clearing price for the relevant delivery year, and the relevant Administrative Strike Price.

⁹https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335865/government_response_use_technology_groupings_minima_maxima.pdf

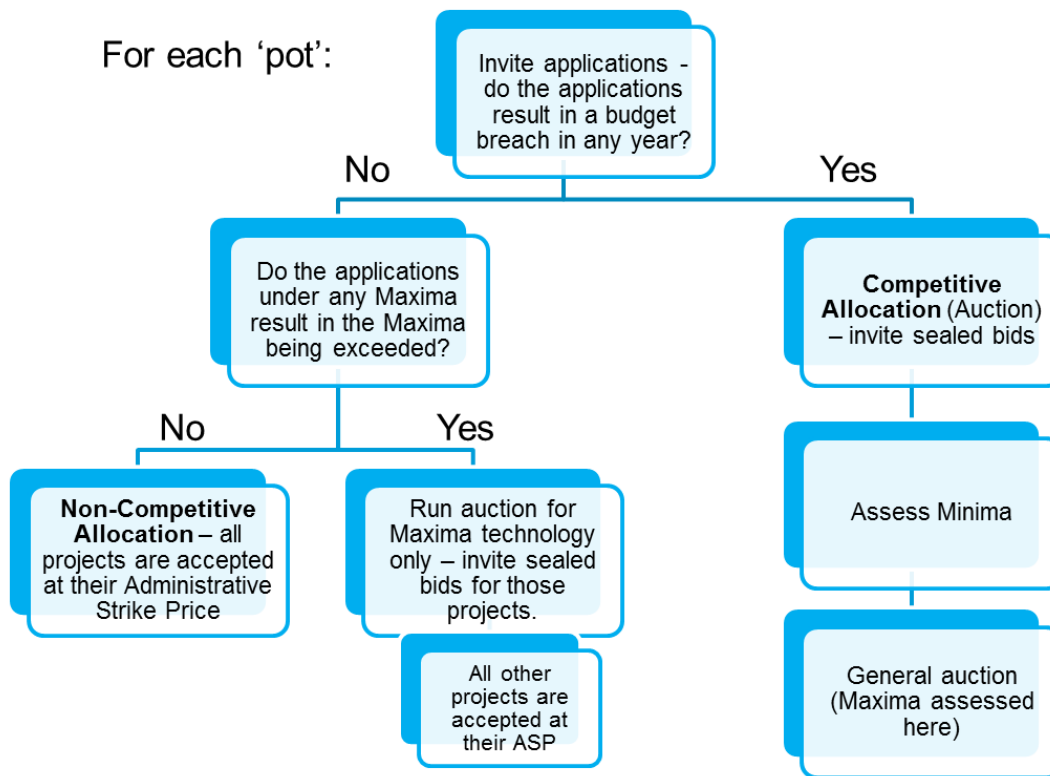
¹⁰ Administrative Strike Prices vary by technology type and delivery year, and are set out at Schedule 2, Appendix 1 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/349370/Final_Allocation_Framework.pdf

¹¹ From this point forward, all reference to applications refers to applications which have been deemed eligible

¹² Auctions are also triggered if Maxima are exceeded. No Maxima are in use for the first Allocation Round, so will not be covered in detail in this document

¹³ Delivery Years run from 1 April to 31 March and refer to the year in which the Target Commissioning Date of the project falls

Figure 3 – Allocation Process Decision Tree



Valuation

- 1.15. When calculating whether constrained allocation is triggered, or whether a project is affordable during an auction, projects will be valued using the valuation formula set out in the Allocation Framework¹⁴. This will give a forecast amount we expect the project to cost in each year.
- 1.16. A “Year One Factor” will be applied to the valuation in a project’s first year, to ensure the project is only valued for the proportion of the year in which it expects to commission i.e. in line with its ‘Target Commissioning Date’¹⁵.
- 1.17. Phased offshore wind projects (as defined in the CFD (Allocation) Regulations) will be valued based on the Target Commissioning Date of each phase and have a single strike price applied across all phases. For example the first phase would be valued from the first Target Commissioning Date, the first and the second phases combined from the second Target Commissioning Date and all three phases from the final Target Commissioning Date.
- 1.18. If the final phase of a phased project commissions in the final year of the budget notice period (20/21), then this phase will be valued at its full annual cost (it will receive a Year One Factor of one, regardless of Target Commissioning Date), to ensure that there will be no overspend in subsequent years.

¹⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/349370/Final_Allocation_Framework.pdf Schedule 2

¹⁵ For example, if a project has a Target Commissioning Date half way through the delivery year, the valuation formula will value the project at half its annual costs for the first year

Sealed bids

Submission of sealed bids

- 1.19. If constrained allocation is triggered and an auction is required, the Delivery Body will invite applicants to submit a sealed bid¹⁶. A sealed bid will contain the strike price bid which an applicant is willing to accept for their project. Additional information on the format of sealed bids is provided in the Delivery Body's CFD User Guide¹⁷.
- 1.20. As set out in Figure 2, if the first allocation round runs to the provisional timeline, we expect a request for sealed bids to be no sooner than 27 November 2014, but may come at any time until 11 February 2015, depending on whether any applicants appeal the outcome of their eligibility assessment.
- 1.21. DECC will not have access to the strike price bids contained within sealed bids, and this information will not be used for any purpose other than determining the allocation of contracts, and independent audits by an independent auditor.
- 1.22. Once a request to submit a sealed bid has been made, an applicant has a five day window in which to respond. If an applicant does not submit a sealed bid in the five day window, and does not choose to withdraw, a bid will be automatically generated for them, at the relevant Administrative Strike Price.

Flexible bids

- 1.23. The auction design allows for developers to submit 'Flexible Bids'. A Flexible Bid is a bid which allows the bidder to vary the capacity, price and/or delivery date of their project from the original application, within certain constraints (see paragraph 1.27 below). This means that if bidders are flexible about when or how much they deliver, they can express this in the auction.
- 1.24. Flexible bids are mutually exclusive – only one bid can be accepted for each application.
- 1.25. For example, if an applicant was happy to build either a 10MW plant or a 7MW version of the plant, they could submit both of these bids, and if there was insufficient budget for the 10MW plant, the 7MW plant may still be considered.
- 1.26. For each application, an applicant may submit up to 10 flexible bids, of which no more than three may be in any given delivery year.
- 1.27. Each flexible bid must
 - Have a different strike price than any other bid from that application;
 - Have a capacity that is no greater than the capacity stated in the original application; and

¹⁶ Please note that the window for submission of sealed bids is five working days, so in practice applicants would need to have done the work to enable them to respond to the request for sealed bids in advance of this date

¹⁷ <https://www.emrdeliverybody.com/Pages/DocumentDescription.aspx?CID=17>

- Have a Target Commissioning Date which is no earlier than the date stated in the original application.

1.28. The flexible bid with the lowest strike price bid will always be considered first, and as such should be the applicant's first choice bid. The first choice bid and the lowest price flexible bid in each delivery year must have a strike price to the nearest 1 pence. If second or third choice bids are included in the same delivery year, they may be submitted to the nearest 0.1 pence. This reduces the risk that higher flexible bids in the same year will be tied with another project.

1.29. For example, a project may submit the following flexible bids:

Strike price bid		Delivery year	Capacity	Preference
£	pence			
100	15	15/16	60MW	First
100	15.1	15/16	50MW	Second
100	15.2	15/16	40MW	Third
105	00	16/17	60MW	Fourth
105	00.1	16/17	50MW	Fifth

1.30. Further information on how flexible bids are treated in the auction is provided in the Auction Clearing chapter of this document, and a worked example is provided in the slide pack published online¹⁸.

¹⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/302725/af_event_9_april_slides.pdf slide 65 onwards

Auction Clearing

Budget Profile

- 1.31. The term 'budget profile' is used to describe the budget released over all delivery years in the auction.
- 1.32. There are two basic shapes of budget profile – 'stepped' and 'flat'. A stepped budget profile is shown in Figure 4 below, and has different amounts of budget in different delivery years. A flat budget profile is shown in Figure 5 below, and has a single budget, which is available across all delivery years.
- 1.33. The auction rules remain identical regardless of the shape of the budget profile. Each delivery year in the auction will have its own clearing price. When a project in a delivery year is unaffordable, the auction will cease considering further projects in that year¹⁹, and that year will be closed. The auction will continue until all delivery years are closed, or no further bids remain.

Figure 4 – Stepped Budget Profile

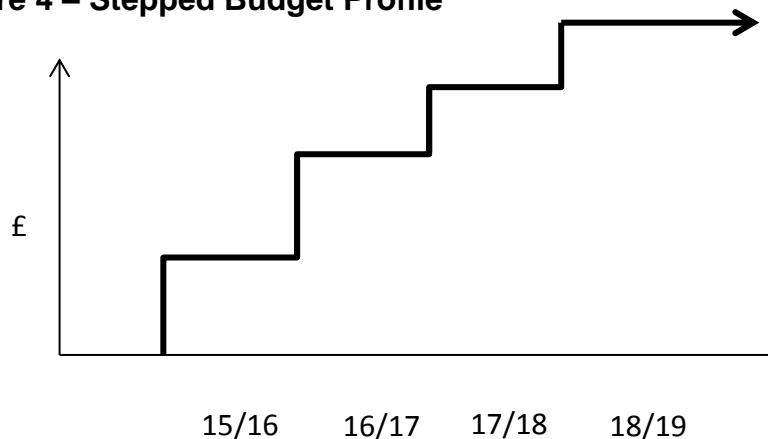
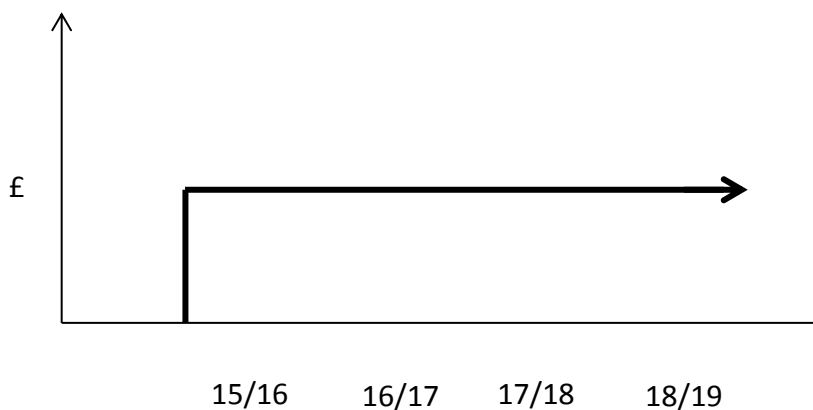


Figure 5 – Flat Budget Profile

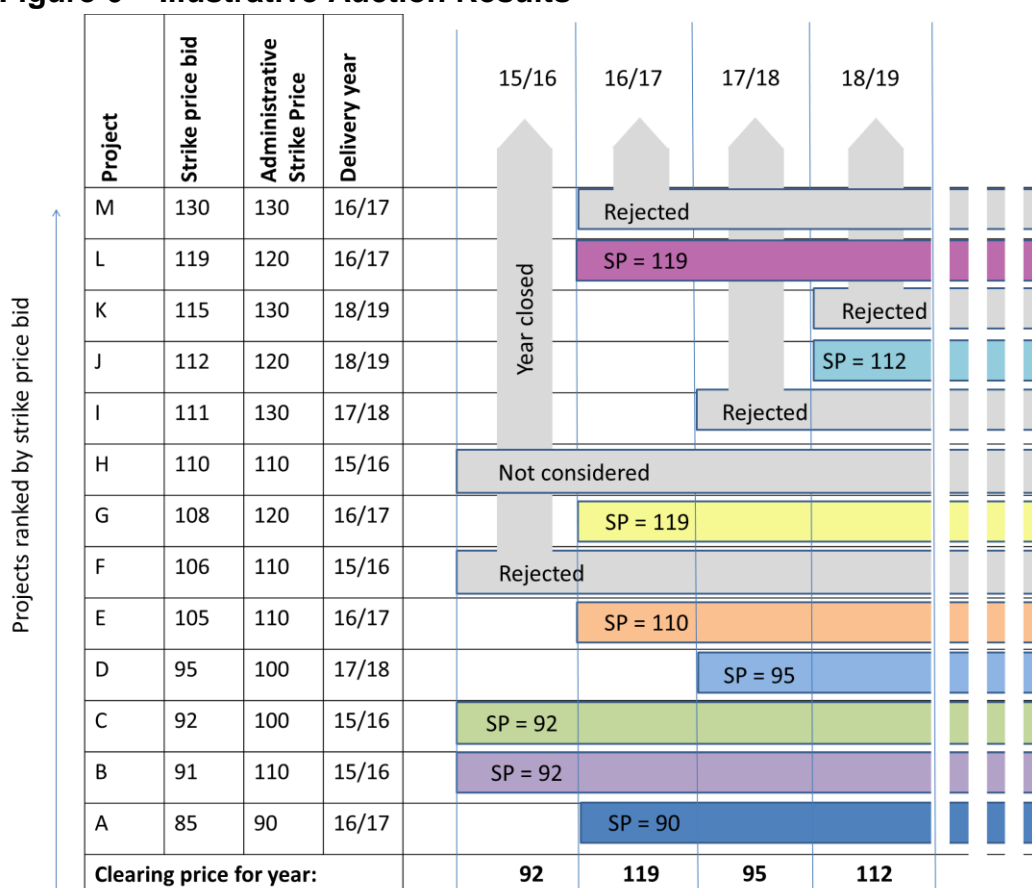


¹⁹ Subject to any flexible bids

Basic auction clearing mechanism

- 1.34. Each project bids into a 'delivery year', which is the year²⁰ in which the Target Commissioning Date of the project falls.
- 1.35. Projects will compete across all delivery years and all technology types (within that pot).
- 1.36. The auction will rank all bids by strike price bid from lowest to highest (regardless of delivery year or technology type), and begin by considering the lowest strike price bid first.
- 1.37. Each delivery year will have its own clearing price, and the clearing price will be that of the highest successful strike price bid in that year.
- 1.38. Any successful project will be paid the clearing price for its delivery year, capped at the relevant Administrative Strike Price. A simplified auction result is demonstrated in Figure 6.

Figure 6 – Illustrative Auction Results



The lowest strike price bid project in any year (project A) is considered first. The highest accepted strike price bid in any year sets the clearing price for that year. The amount paid to any project is capped at its Administrative Strike Price (ASP). For example, the clearing price for 2016/17 is £119/MWh, but project A is capped at £90 (its ASP), and projects E is capped at £110. Once a project has been rejected in a given year, no more projects for that year are considered. For example, project F has been rejected, so project H is not considered. NB. This simplified result does not use real project or strike prices, and is not intended to suggest a given auction outcome. This example assumes that no projects submitted flexible bids.

²⁰ 1st April – 31st March

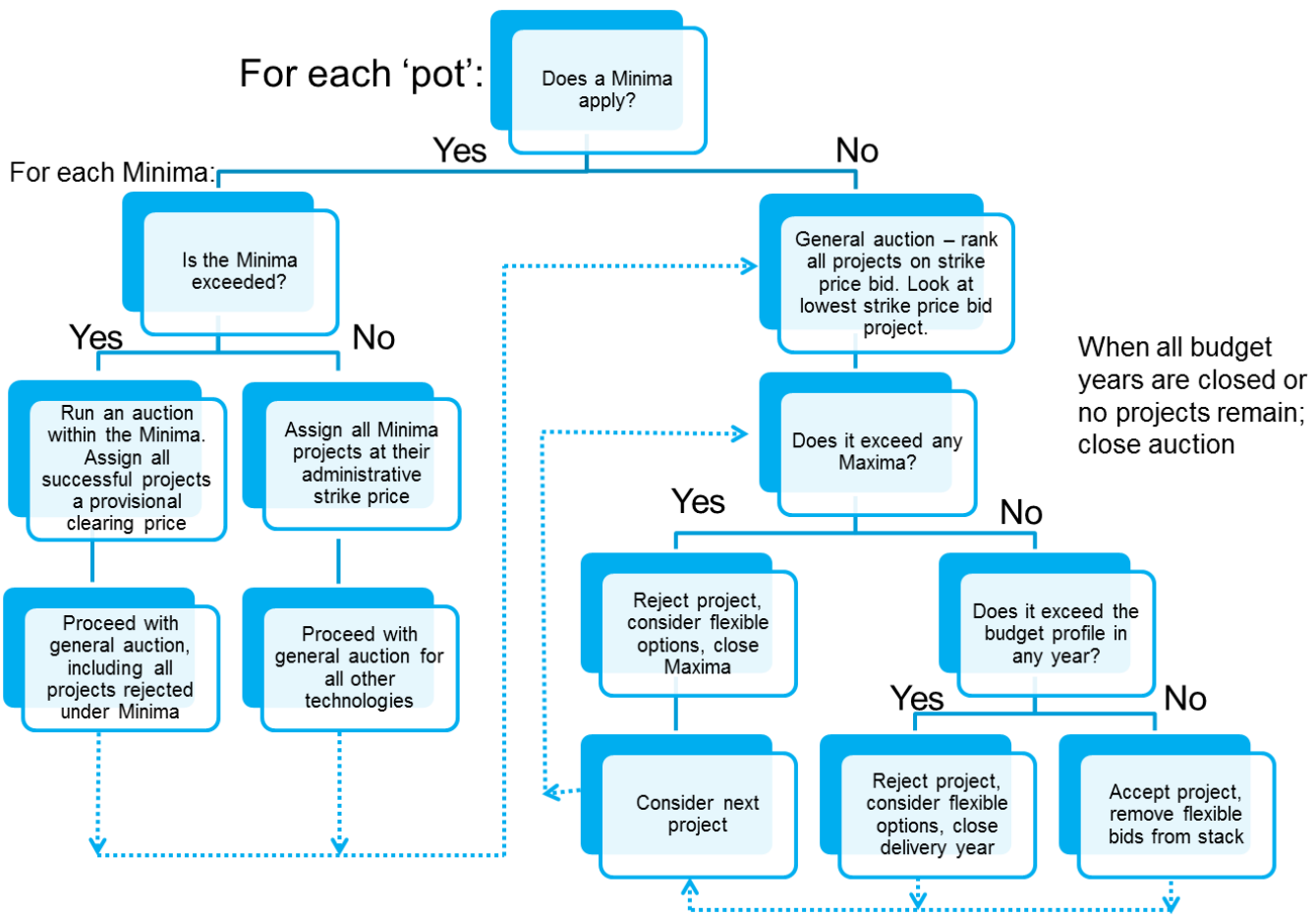
- 1.39. The clearing price for the delivery year will be offered to all the successful projects in that year, and become the strike price on which their contract is based. This value does not change year by year. For example, if the clearing price in 2015/16 was £100 and the clearing price in 2016/17 was £99, a project which was successful 2015/16 would be offered a CFD with a strike price of £100, which it would be paid for the duration of the contract²¹. It would not receive £100 in 2015/16 then £99 in 2016/17.
- 1.40. Whenever a project is being considered in the auction, the valuation of that project takes into account the fact that it may change the clearing price offered to already successful bids.
- 1.41. With the exception of flexible bids (described below), a delivery year will close, and no more bids in that year will be considered, as soon as a project in that year is unaffordable.
- 1.42. The basic auction mechanism operates as follows, and is illustrated by the high level process map in Figure 7²²:
- Request sealed bids
 - Assess Minima (described in Minima and Maxima chapter)
 - Rank all remaining projects by strike price bid, creating a 'stack' of bids
 - Consider the lowest strike price bid
 - Apply valuation formula to bid, and decide if it's affordable from remaining budget
 - If so, accept project, set the clearing price for that delivery year at the strike price bid of the project and move to next bid in the stack
 - If no, consider flexible bids (described in next section), and close delivery year of project under consideration, then move to next bid in the stack
 - Consider the next lowest strike price bid
 - Apply the valuation formula to the bid. Also assess if accepting this bid would affect the clearing price offered to any previously accepted bids, and revalue those bids. Use this calculation to assess if accepting this project is affordable from the remaining budget.
 - If so, accept project, set the clearing price for that delivery year at the strike price bid of the project and move to next bid in the stack
 - If no, consider flexible bids (described in next section), and close delivery year of project under consideration, then move to next bid in the stack
 - Continue this process until all delivery years are closed, or no bids remain.

²¹Subject to inflation indexation as set out in the contract

²² This mechanism is illustrated in the slide pack

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/302725/af_event_9_april_slides.pdf, from page 31 onwards

Figure 7 – Auction Mechanism High Level Decision Tree

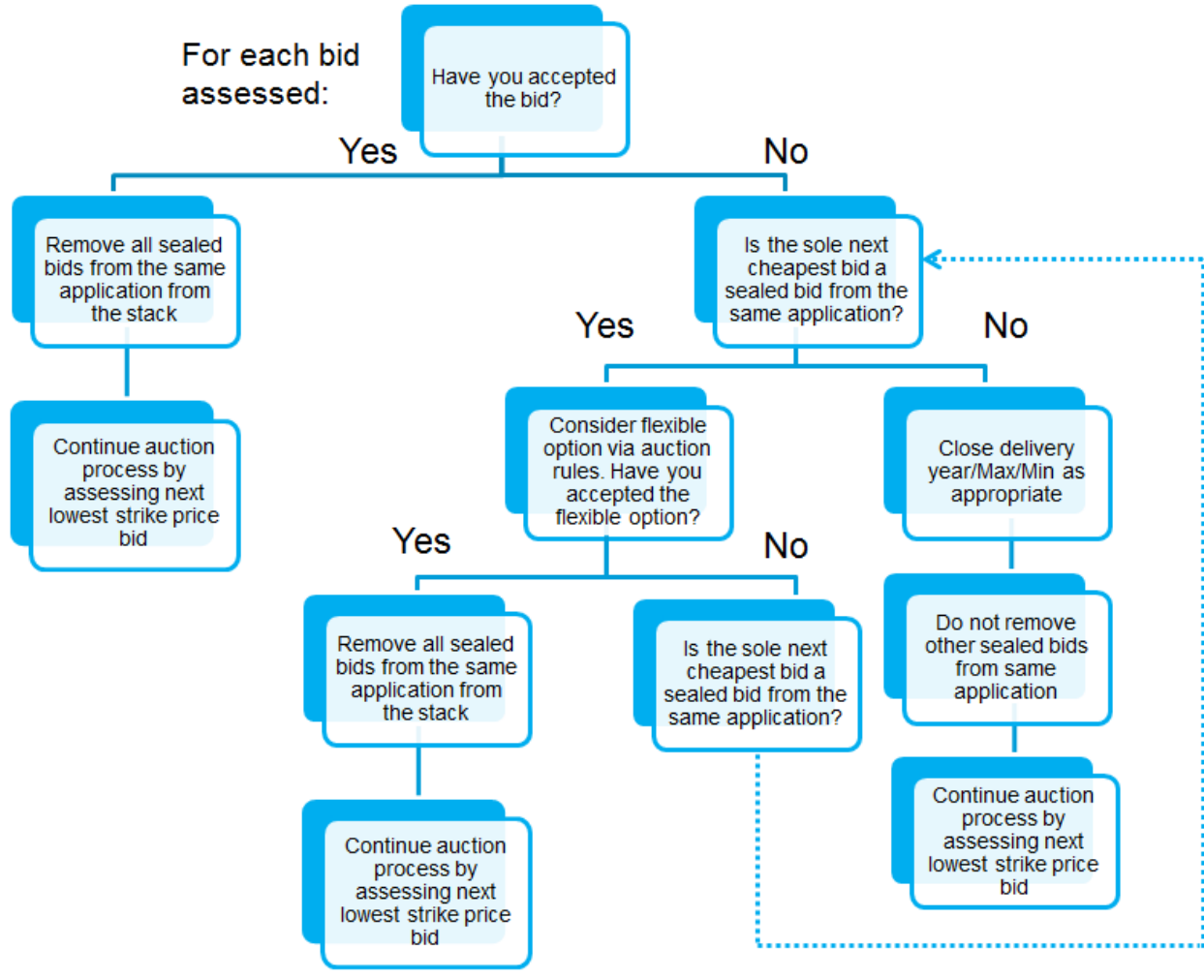


Treatment of flexible bids

- 1.43. The treatment of flexible bids is illustrated in the high level process map at Figure 8.
- 1.44. If a bid from an application is successful, all further bids from that application will be removed from the auction.
- 1.45. If a bid from an application is deemed to be unsuccessful, as it is unaffordable within the budget, the auction will assess whether the application has submitted any flexible bids.
- 1.46. If a flexible bid exists in the same delivery year as the bid which has been rejected, it must be the sole next lowest strike price bid for it to be considered. In this case the auction will assess whether it is affordable.
- 1.47. If it is affordable, that bid will be accepted, all further flexible bids from that application will be removed from the auction and the delivery year will close.
- 1.48. If it is not affordable, that bid will be rejected, and the auction will look to see if another flexible bid exists in the same year, and repeat the process.
- 1.49. As only three bids may be submitted in any given delivery year, this process will only be repeated twice.
- 1.50. If the flexible bid it is not the next lowest strike price bid, or is tied with another bid, it will not be considered. That delivery year will close and the auction will continue as normal.

1.51. If the flexible bids are in a different delivery year, they do not need to be treated specially – the auction will simply close the delivery year as usual, and reach those flexible bids when they are the next lowest strike price bid.

Figure 8 – Flexible Bid High Level Decision Tree



Tie-breaker Rules

- 1.52. Tie breaker rules are in place in the event that two or more projects are exactly tied on the same strike price bid. The first rule will first make best use of the available budget, meaning that whichever project or combination of projects comes closest to fulfilling (but not breaching) the budget in the final delivery year will be accepted.
- 1.53. This is also the case for projects subject to a Minimum or a Maximum – we would accept the project or combination of projects which best fulfils the Minimum or Maximum.
- 1.54. In the unlikely event that a project or combination of projects were tied on both strike price bid and fulfilment of constraint, the auction would select a winner using random allocation.

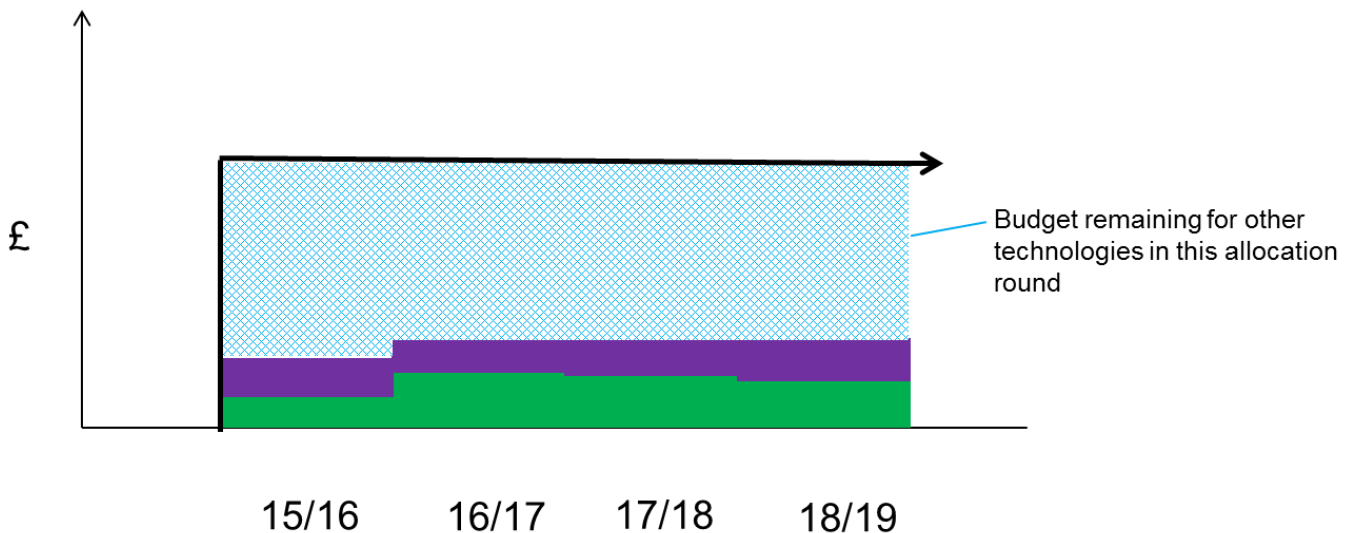
Minima and Maxima

Minima and Maxima are tools available to us within the auction to set minimum and maximum thresholds for given technologies.

Minima

- 1.55. As set out in the Government Response on the Use of Technology Groupings, Minima and Maxima²³, there is one Minimum threshold of 100MW for wave and tidal stream across both the RO/CFD schemes and for the duration of the Delivery Plan period. Of this, we have proposed that 10MW will be available in the first allocation round, as set out in the Draft Budget Notice²⁴.
- 1.56. The Minimum allows wave and tidal stream projects (totalling up to 10MW) first access to the budget in pot 2, protected from competition. However, if wave and tidal stream projects do not come forward in this allocation round, the full budget in that pot will be available to other technologies.
- 1.57. For example, Figure 8 shows two Minima projects (in green and purple), and their impact on the budget. The remaining budget is available for all other projects in the pot.

Figure 8 – Illustrative Impact of Minima on Budget



²³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335865/government_response_use_technology_groupings_minima_maxima.pdf

²⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/336101/draft_cfd_budget_notice.pdf
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/336107/explanatory_note_draft_cfd_budget_notice.pdf

- 1.58. Any Minima which is unassigned will be available in a future allocation round. For example, if 8MW of wave and tidal stream came forward in this round, there would be 92MW remaining to be assigned across the Delivery Plan period²⁵.
- 1.59. If pot 2 is constrained, all projects within that pot (including those subject to a Minima) will be required to submit sealed bids.
- 1.60. The Delivery Body will then assess the Minimum, and if the Minimum is not exceeded, strike price bids submitted by wave and tidal stream projects will be disregarded, and applicants will be offered their Administrative Strike Price.
- 1.61. If the Minimum is exceeded²⁶, a Minima auction will be run. A Minima auction follows the same principles as the general auction process described above.
- 1.62. The projects subject to the Minimum will be ranked on the basis of their strike price bids. They will then be accepted up to, but not including the project which would cause the Minimum to be exceeded²⁷.
- 1.63. All successful projects will be assigned a provisional clearing price equal to the highest accepted clearing price for any Minima project in that delivery year (capped at its Administrative Strike Price).
- 1.64. If the clearing price of the general auction exceeds the provisional clearing price set by the Minima auction in any given delivery year, the successful Minima projects in that delivery year will be offered the higher clearing price²⁸.
- 1.65. Any projects which are not successful in the Minima auction will be considered in the general auction, along with all projects which were not subject to the Minima

Maxima

There are no Maxima in place for the first Allocation Round. Any references to Maxima in the Allocation Framework can be disregarded for this round.

²⁵ Subject to any capacity offered to wave and tidal stream projects through the RO or other support mechanisms

²⁶ And the Pot is constrained – if the Pot is unconstrained, all projects will be awarded the Administrative Strike Price regardless of whether the Minimum is exceeded

²⁷ Projects will also be valued, to check that they are affordable within the budget. However, with the proposed budget and Minima levels, the full Minima could be fulfilled without exceeding the budget.

²⁸ This ensures that Minima projects are not disadvantaged by being subject to a Minima

