

PRICE DECREMENTS IN THE CAPACITY MARKET DESCENDING CLOCK AUCTION

Section 1: Scope

1. Under the Capacity Market regulations, Government must decide on an approach for setting the level of price decrement in the Capacity Market auction and give advice accordingly to the System Operator as to how to run the auction.
2. This purpose of this paper is to:
 - i. Address decisions relating to the auction specification that need to be taken soon to allow National Grid to procure a suitable auction system (Section 2).
 - ii. Set out a provisional proposal for how the price schedule should be determined and the role of discretion (Sections 3 and 4).

Section 2: Auction Specification

3. National Grid should specify an auction system where a price schedule is announced in advance of the auction. This schedule should give the range of prices for each round in the auction. The auction system should also allow the System Operator to override the price schedule during the auction.
4. Note that this approach does not allow for prices to be expressed as a function of another variable. Prices should be expressed in absolute terms.
5. The approach outlined above has the virtue of being simple and is consistent with the approach taken in other Capacity Market auctions (e.g. ISO New England). This approach also retains the flexibility to allow the System Operator to use discretion and vary the approach during the auction.

Section 3: Determining Schedule

6. The price schedule should be set so that it is simple but also promotes price discovery and mitigates against gaming risk.
7. A simple approach is to set fixed price decrements. For example, a price decrement of 4 £/kW could be used between each round. Figure 1 below shows what these price decrements could look like for the two price cap options being consulted on.
8. The schedule could be determined so that the total auction should last no more than two days. The size of the price decrements could be set so that the auction must have finished after 12 rounds. Approximately 6 rounds will fit into one day.
9. Each round should use round numbers. For example, the initial round should be between 44.00 and 40.01 £/kW, rather than between 44.37 and 40.82 £/kW.

Figure 1: Illustrative Price decrements

Round	£44 Price Cap	£75 Price Cap
	Prices (£/kW)	Prices (£/kW)
Round 1	44.00 – 40.01	75.00 – 68.01
Round 2	40.00 – 36.01	68.00 – 61.01
Round 3	36.00 – 32.01	61.00 – 54.01
Round 4	32.00 – 28.01	54.00 – 47.01
Round 5	28.00 – 24.01	47.00 – 40.01
Round 6	24.00 – 20.01	40.00 – 33.01
Round 7	20.00 – 16.01	33.00 – 26.01
Round 8	16.00 – 12.01	26.00 – 19.01
Round 9	12.00 – 8.01	19.00 – 12.01
Round 10	8.00 – 4.01	12.00 – 5.01
Round 11	4.00 – 0.00	5.00 – 0.00

10. This proposal should be robust to the adoption of zonal auctions in future. This is because it would be possible to run multiple zonal auctions simultaneously to the same schedule. There would therefore be no need to adjust the size of price decrements or the number of rounds due to whether or not zonal constraints were binding.
11. Under a pure fixed price decrements approach there is a risk that early rounds of the auction will be redundant at prices where there is little chance of the auction clearing. For this reason it may be sensible for an early round to have a large price decrement. This would allow for better price discovery. However, setting a large price decrement in an early round may not be appropriate for the first auction if there is a reasonable likelihood that the clearing price could be close to the price cap. Given uncertainty in the first auction around the true level of Net CONE, it is therefore likely to be reasonable to set equal fixed price decrements in this auction.
12. A large price decrement for an early round could be set in advance of the auction. Alternatively, a large price decrement for an early round could be set during the auction by the system operator.

Section 4: Role of Discretion

13. As suggested above, in some cases it may be desirable for the system operator to set a large price decrement for an early round. It may also be desirable for the System Operator to set a large price decrement in the final round. In all cases, the System Operator should use discretion in consultation with the Auction Monitor. Using discretion to set a large price decrement in the final round is discussed below.
14. Setting a large price decrement could help to ensure the auction finishes on time. It is possible the auction will face technical difficulties which mean the auction process takes longer than expected. If the auction is near closing at the end of a day then the System Operator could set a large price decrement in order to ensure the auction closes.
15. Setting a large price decrement in the final round could mitigate against gaming risk. When excess supply is small there is an increased risk that participants will withhold supply in order to close the auction at a high price. The System Operator can avoid this problem by setting a large price decrement before excess supply becomes too small. The price decrement would need to be large enough in order to ensure the auction closes.

Section 5: Next Steps

16. DECC is looking to invite views on its proposed approach through the Expert Group.
17. Government will look to set the price schedule approach once CONE and the price cap have been decided. This should include deciding whether a larger initial price decrement is desirable.
18. National Grid will be expected to publish the provisional price schedule alongside the auction guidelines.

Section 6: Questions for the Expert Group to consider

19. Do you agree with the approach on auction system specification?
20. Do you agree with the general approach for setting the price schedule?
21. In which circumstances would it be appropriate for National Grid to exercise discretion?