



Department  
of Energy &  
Climate Change

# Baseload Reference Price

## CfD Expert Group

Monday 15 April



## The reference price is a proxy for the market price

- But the market trades at different points, in different volumes and prices and in different ways – so have to choose which is most appropriate.
- This choice we make is important, as the reference price is used to calculate CfD payments so is fundamental to the CfD mechanism.
- We also need to be mindful of the impact of the choice on the wider market e.g. through driving liquidity to particular segments.

## Reliable and robust against gaming

- Adequate liquidity is a pre-requisite; and
- Transparency is important

## Accessible and achievable

- So generators can get a reasonable approximation of the price

## Avoids distorting market incentives

- So generators remain incentivised to operate reliably and schedule maintenance efficiently
- Generators are best placed to manage performance risks etc.

## Predictable / manageable for the System Operator and suppliers

- May point towards maintaining current trading segments (primarily forward-based for baseload)

## Historic prices

- Known ahead of delivery – generator can choose how to trade against it, more predictable for suppliers, simple to administer.
- Likely misalignment between historic and current market prices, due to changes in supply and demand – potentially uncertain cashflows.

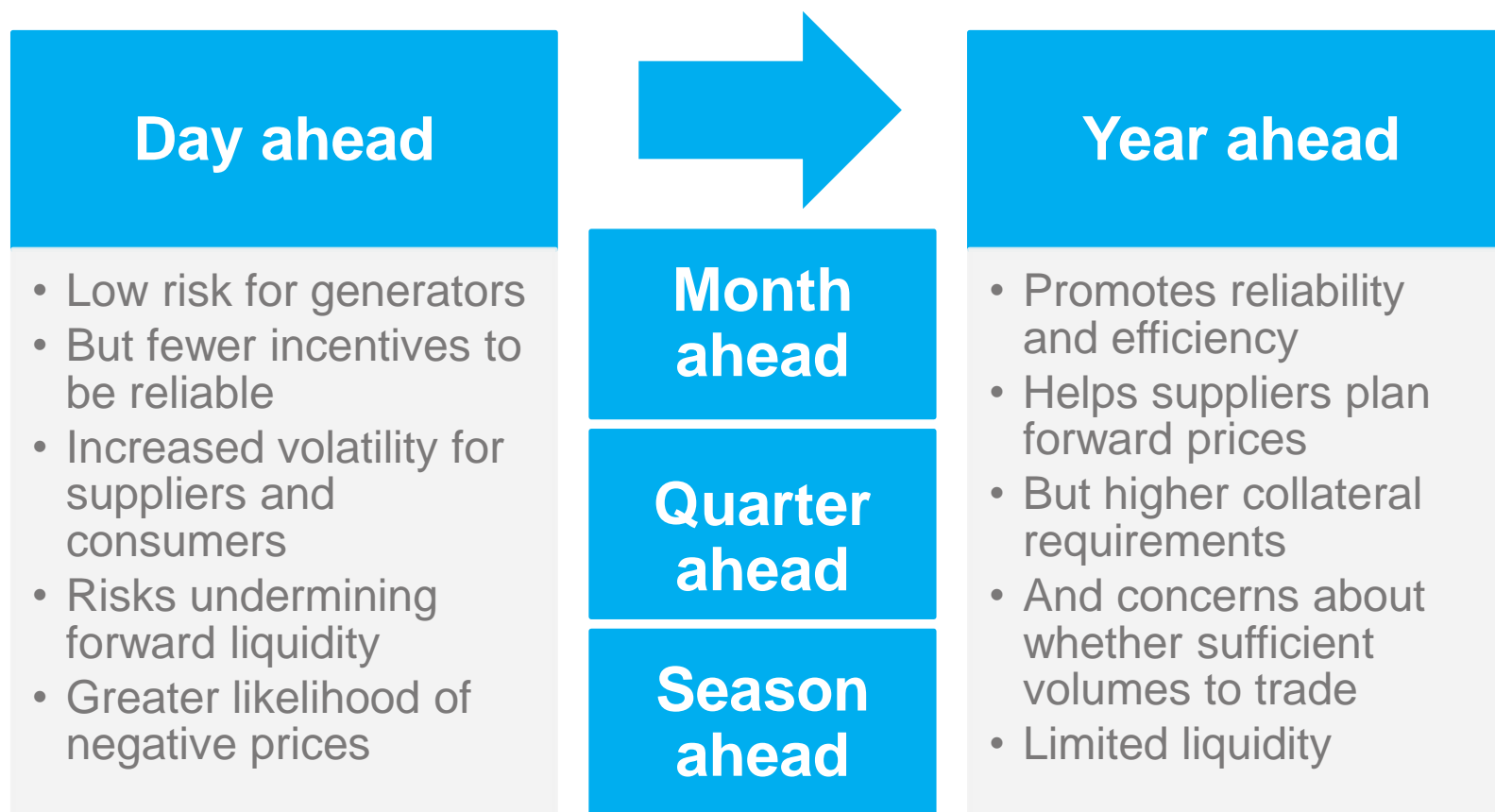
## Forward prices

- Generators are able to trade their power in the same period from which the reference price is drawn.

# Spectrum of options for market segment



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## Basket of indices

- More adaptable
- May be a better match to current trading
- Reduces collateral requirements relative to a solely year ahead reference price
- Potentially increases robustness against gaming
- But complex to administer and to achieve

## Averaging

- Should the price be drawn from a single point, or averaged over a period?

## Trading period

- Should the price be constructed from trades carried out in a particular “liquidity window” (e.g. day of week / time of day)?

# Options for price source



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Exchange e.g. N2EX, APX	Index of OTC Trades e.g. LEBA	Price Reporters / Aggregators	Regulatory intervention
<ul style="list-style-type: none"><li>• Accessible</li><li>• Transparent</li><li>• Increasing volumes</li><li>• Primarily short-term products</li></ul>	<ul style="list-style-type: none"><li>• Greater forward volumes</li><li>• Not as accessible</li><li>• Increasing scrutiny through REMIT?</li></ul>	<ul style="list-style-type: none"><li>• Assessment so risk of gaming</li><li>• Only provides a snapshot</li><li>• Difficult to achieve</li></ul>	<ul style="list-style-type: none"><li>• E.g. market maker or mandatory auction</li><li>• May impact choice of reference price</li><li>• Unclear if action will be taken</li></ul>

## Clip size risk

- Not being able to trade in sufficient volumes or frequently enough to match the index

## Index risk

- Not being able to sell at the price due to volatility

## Performance risk

- Unplanned outage forcing a generator to buy back power

## Credit risk

- Premium to cover risk of default

## Transaction costs

- Cost of buying or selling when bid / offer spread differs

Modelling shows costs of managing these risks increase with forward products, but need to set against other system costs—work under way



## Need to change the price if rendered invalid by

- Changes to trading arrangements / definitions
- Changes to market liquidity or trading platforms

## Independent expert role

- Could establish a “market oversight committee”
- Or address through dispute resolution procedures

## Need to keep a consistent reference price

- Otherwise too difficult to administrate
- May require some form of “common terms” agreement

## Considerations in reviewing the price

- Ensure price is best reflection of deals across market
- Timing / frequency: regular review or specific triggers