Department for
Business, Energy
& Industrial Strategy

DSR EVENT

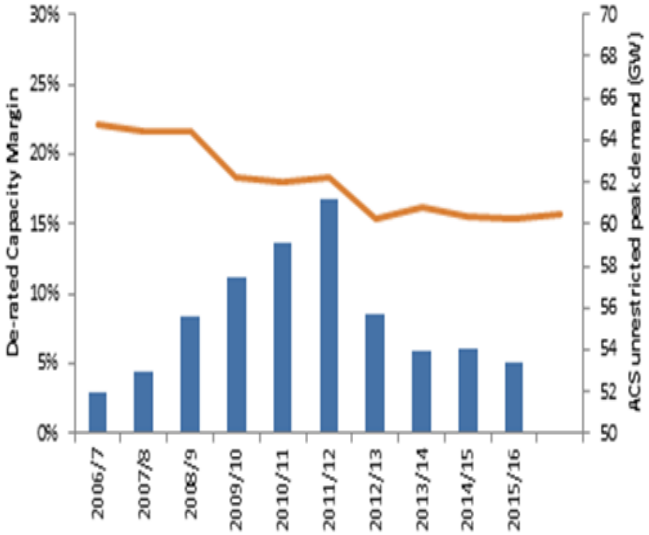
Capacity market changes and opportunities for businesses

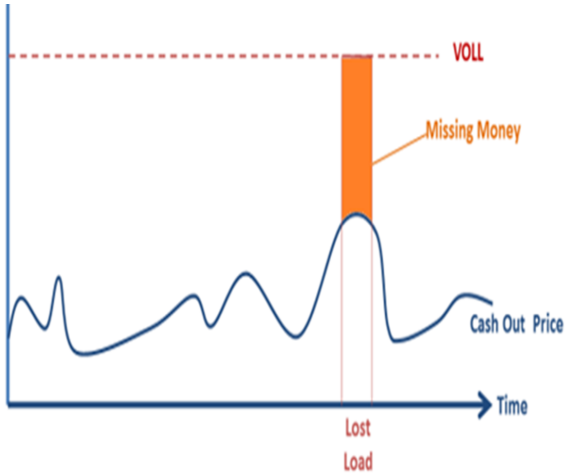
8 September 2016

Department for Business, Energy & Industrial Strategy

Why a Capacity Market?

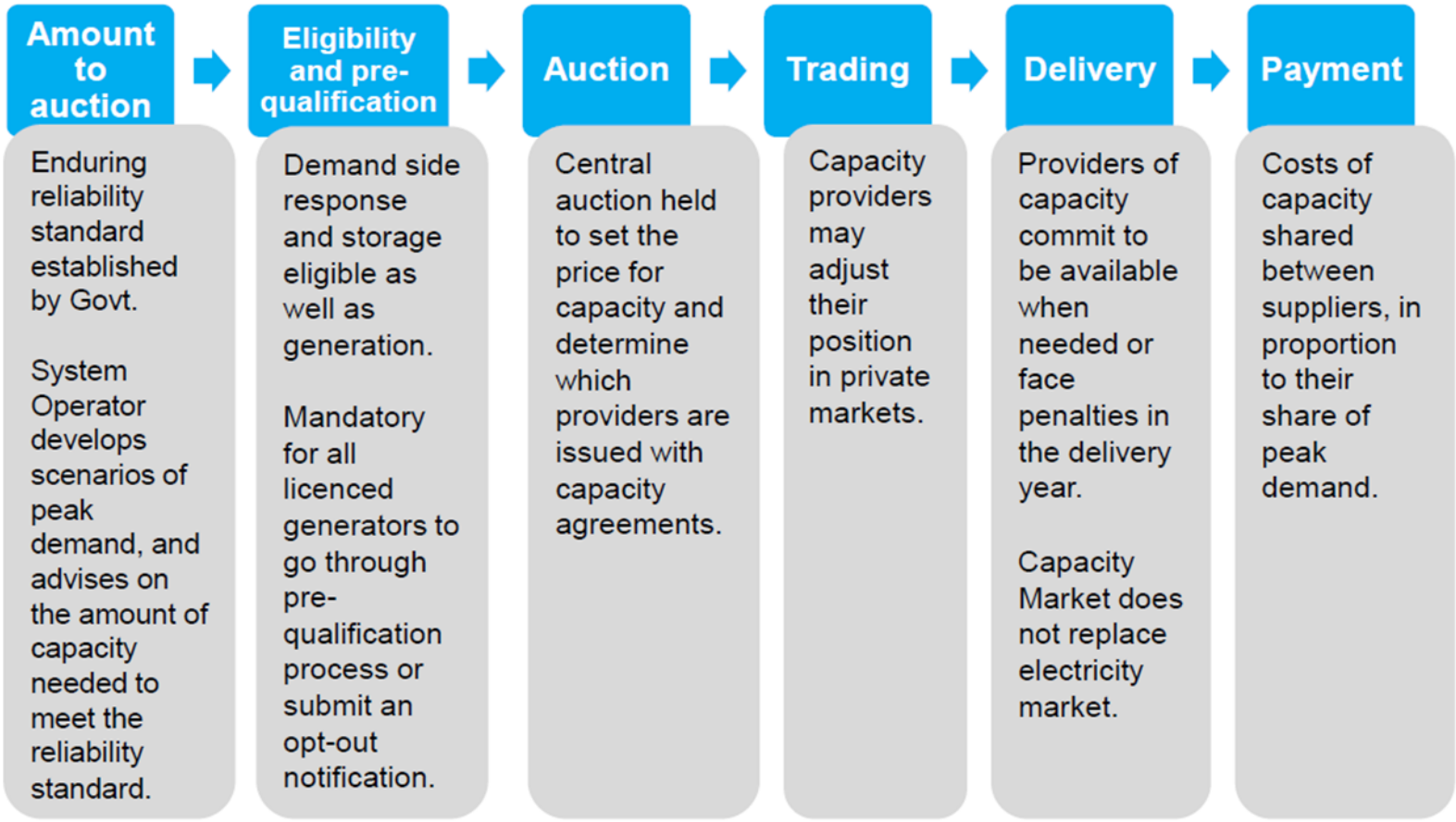
- GB market has historically delivered high levels of security of supply but the market and nature of the supply curve is changing
- Problem of "missing money" - an energy-only market may be failing to send correct signals to encourage investment
- Capacity Market is an enduring market design to ensure sufficient investment in reliable capacity
- Capacity Market does not replace the market or market risks but operates alongside the energy market:
  - provides regular payments to capacity providers
  - capacity must be available and produce energy (or reduce demand) when the system is tight,
  - penalties apply for failure to deliver
- The Capacity Market is our principal tool for ensuring security of supply. Aims to deliver this at least cost to the consumer and avoid unintended consequences.





Department for Business, Energy & Industrial Strategy

Capacity Market annual cycle



Department for Business, Energy & Industrial Strategy

DSR in the Capacity Market

Specific features for DSR in the main auctions

- A low de-minimis threshold of 2MW to encourage smaller providers and widen the DSR portfolio.
- Lower bid bonds for unproven DSR (50% of bid bond for new build CMUs)
- Participation in the auction as price makers.
- The choice of three metering options.
- The choice to participate in either the four year ahead or one year ahead auction.
- Transitional arrangements available for two years exclusively to DSR to help grow the sector ahead of the first T-1 auction.

The Transitional Arrangements (TA) auctions:

The Same

1. Annual cycle: summer-autumn pre-qual, autumn auction, delivery year
2. Descending Auction format
3. Stack revenues from balancing services
4. New and existing resources permitted
5. Penalties and over-delivery payments

Different

1. Only turn down DSR CMU
2. Lower de minimus (500kW)
3. Lower bid bonds for unproven DSR (5% of main CM - £500/MW)
4. Two products – load following and time banded
5. One-year agreements for all resources
6. Simulated stress events
7. Testing regime
8. No secondary trading

Department for Business, Energy & Industrial Strategy

The CM in numbers

Auction	Capacity secured / *targeted*	Clearing price	DSR performance
2014 T-4	49.3GW	£19.40/kw	• Over 1GW prequalified • 600MW entered the auction • 174MW won agreements
2015 T-4	46.3GW	£18/kw	• 673MW prequalified and entered the auction • 456.4MW won agreements
2015 TA	803MW	£27.50/kw	• Over 1 GW prequalified • 621MW entered the auction • 475MW won agreements
2016 T-4	*52GW*	*?*	*?*
2016 'early' T-1	*53.8GW*	*?*	*?*
2016 TA	*300MW*	*?*	*?*
2017 T-1	*7.3GW*	*?*	*?*

Department for Business, Energy & Industrial Strategy

DSR schemes in GB

National Grid

- Short Term Operating Reserve (STOR)
- STOR Runway – a new product to support smaller providers
- Firm Frequency Response
- FFR Bridging - a new product to support smaller providers
- Frequency Control by Demand Management
- Fast Reserve
- Enhanced Frequency Response
- Demand turn up

Triad avoidance (TNUoS)

- Triad Avoidance - Energy suppliers are charged for the costs of the Transmission system according to their share of demand at peak times in winter.
- They can reduce their share of these costs by contracting with DSR and embedded generation to reduce energy use or generate at peak times.
- The process of avoiding these high costs is called Triad avoidance.

Distribution Network Operators (DNOs) constraint management

- Providers are paid to help the DNO manage infrequent localised constraint on the network.

(DUoS) Charge Avoidance

- Duos shifting involves avoiding energy consumption at certain times of day, every weekday, from April to October to avoid distribution network charging.

Distribution Network Operators (DNOs) schemes

- A number of DNOs are trialling DSR schemes funded by OFGEM.

Static Time of Use Tariffs

- Suppliers incentivise customers to reduce demand at peak times by offering cheaper charges at non-peak times e.g. economy7

Department for Business, Energy & Industrial Strategy

Recent and upcoming changes

CM Review (early 2016) concluded:

- CM fundamentally retains investor confidence as a mechanism
- But need to buy more capacity and earlier to provide greater resilience against increased capacity risks
- Tighten penalties for failing to honour agreements won
- Bring CM delivery/revenues forward via a new 'early' auction for delivery in 2017/18
- TA auction – restricted to turn-down DSR only and threshold reduced to 500MW

Next steps

- Prequalification: 1 August – 26 August
- Revise parameters post-prequalification – October
- State Aid approval for the 'early' auction – ?October
- Auctions held – December 2016, January & March 2017
- Aggregators will be in the market for DSR capacity

In parallel

- BEIS consultation on confirming coal off the system by 2025 – timing tbd
- Ofgem statement on review of embedded benefits – July
- Defra consultation on small plant emissions – autumn

Longer term

- 5-yearly review of the CM – reporting in 2019

Department for Business, Energy & Industrial Strategy

Challenges for DSR

- Nearly 1GW of DSR capacity secured agreements in last year's auctions
- Stakeholders have called for changes to improve DSR participation:
  - DSR should be eligible for longer term agreements
  - Set a minimum procurement level for every T-1 auction
  - Reduce the level of bid bonds
  - Simplify the testing and metering provisions
  - Allow a form of DSR asset reallocation
  - Introduce time-banded products in the main auction
  - Split auctions / additional TAs
- Always open to suggestions – want to ensure there are no unnecessary barriers to participation
- But any changes must not undermine key objectives and principles – ensuring security of supply, minimising costs to consumers and technology neutrality
- Call for evidence on Smart – to be published soon – asks:

What changes to CM application/verification processes could reduce barriers to flexibility and what longer term evolutions within/alongside the CM might be needed to enable newer forms of flexibility (such as storage and DSR) to contribute in light of future smart system developments?

Department for
Business, Energy
& Industrial Strategy

Thank you