The UK Capacity Market: state of play and observations

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Accompanying Remarks to
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Fixed, system-wide auctioned payments for firm capacity
Lots of bids, low prices, new options, lots of angst ...

**First main capacity auction (Dec 2014)**
- Almost 50GW awarded, clearing price **19.40/kW/year**
- Mix of 1-year, 3-year (refurbishment) and 15 year (2.5GW of new build out of 10GW bid) contracts
- Mainly existing nuclear, gas and coal generators
- One new big gas plant wins agreement – but cancelled
- V. Little demand side response

**Second main capacity auction (Dec 2015)**
- Clearing price **£18.00/kW/year**
- 46.35GW awarded – new options replace retiring coal
- Interconnectors, 1GW of small reciprocating engine
- Concern about diesel

**Third main capacity auction (Dec 2016)**
- Clearing price **£22.50/kW/year**
- 52.43GW awarded, inc 3.4 GW new capacity – over 500MW batteries
- New diesel largely excluded, but wider concern about ‘embedded benefit’ exemptions from transmission

Jan 2018: Reformed system yields **even lower price - £8/kW/yr**

Future system could involve multiple markets (- with managed competition between them?)

- Distributed Service Providers
- Capacity market
- kWh Spot market
- Low-carbon contracts market?
- Competition for bulk electricity
- Competition for peak load capability
- Balancing and short-term storage
- Heat integration and long-term storage