

**Consultation Workshop on participation of Demand Side Response, Storage
and Embedded Generation in the Capacity Market
21 November 2013**

Summary of key issues raised by stakeholders

Following the publication of the EMR consultation on implementation proposals on 10 October 2013¹, DECC held a workshop on 21 November 2013 specifically focused on the participation of demand side response (DSR), storage and embedded generation in the Capacity Market (CM).

DECC officials presented current provisions on DSR, storage and embedded generation participation in the CM enduring regime, namely with regards to pre-qualification process, performance measurement, metering, and penalties. Proposals on Transitional Arrangements were also discussed.

Stakeholders had the opportunity to ask questions and give their early views on outlined proposals.

The following note records the views expressed by participants during the workshop. A list of the organisations represented at the workshop is attached in the Annex.

Session 1: DSR, storage and embedded generation in the Capacity Market

Volume to contract:

- The volume of DSR currently available may have been underestimated. If the volume of DSR coming forward is too high, this will result in a low clearing price of the auction.

50% guarantee:

- There was agreement that Government should introduce a guarantee to auction 50% of the capacity initially set aside for the year-ahead auction. It was noted that the guarantee is not a ring-fence for DSR.
- The 50% figure may prove to be too high in the long run with increased costs for consumers. This also represents a political risk.

Penalties:

- The penalty regime for DSR and other resources was considered too high. High penalties increase capex and costs for consumers.
- If penalties are to remain as set out, suppliers will receive the cash out and DSR participants will be charged. Therefore the Capacity Market has provided an undeserved profit for suppliers.

¹ <https://www.gov.uk/government/consultations/proposals-for-implementation-of-electricity-market-reform>

- It was argued that the assessment of gaming risks for DSR is not adequate. It relates to the US experience of DSR in areas without Capacity Markets. DECC challenged this interpretation.
- It was noted that the different penalty regime between generators and DSR creates undue discrimination between big and small gas generators, which could be grounds for a judicial review.

De-rating:

- Calculating de-rating factors for different forms of DSR could be complicated. For example, a CHP which has never participated in the balancing services could have operational constraints.

Baseline:

- A variety of methods for baselining is needed, because conditions of sites vary.
- STOR metering cannot be used, because it is not sufficiently robust. Any balancing services metering method should be valid under the Capacity Market even without balancing services contracts, because contract timescales don't align.

Bid bonds:

- The proposal to forfeit the total bid bond in case of failure to deliver was considered as binary. A pro-rata fee was preferred instead.

Session 2: Transitional Arrangements (TAs)

- Transitional arrangements are necessary and welcomed.
- The existence of multiple regimes (new balancing services, TAs, four year ahead and one year ahead CM auctions) will make it difficult for applicants to participate because this design impacts on the investability of projects.
- For example, DSR resources which participate in four year ahead CM auction would need to wait four years before receiving payments, as they cannot participate in the TAs. Also, the year break between TA stage 1 and TA stage 2 will cause a loss of revenue for DSR applicants who still need to get themselves established and cannot participate in the one year ahead CM auction. For these reasons participants might find it difficult to access finance and consequently participate in the Capacity Market. DECC explained that the TA delivery years run into the enduring regime with no gap if participants enter in the T-1 auction.
- There needs to be clarity about the different schemes so that applicants can work out profit and revenue streams.
- Long-term contracts are important for certainty of revenue streams. 15 years was the preferred contract length.

Issues concerning storage and embedded generation

Storage:

- In the current market conditions, storage is too expensive and unlikely to be competitive in the CM auction.

- In the case of recurring stress events, if storage units need to immediately recharge in order not to face penalties for failure to deliver in a second stress event, they would need to do so at a time when electricity prices are high and will make a second stress event more likely.
- Does the four hour warning provide enough flexibility if the event is prolonged?
- The minimum size of resources required will make it difficult for storage to come forward, because there is simply not enough capacity available. Aggregating existing storage resources is complex and the ability to aggregate storage with other generation resources was not certain.

Embedded generation:

- The decision for embedded generation not having to undertake a prequalification test was welcome.
- The most important elements in the CM design from the point of view of embedded generations are: long-term revenue certainty, adequate level of penalties, and a flexible design with a wide range of options for metering and baselining.

Annex

List of stakeholder organisations represented at Consultation Workshop on participation of Demand Side Response, Storage and Embedded Generation in the Capacity Market on 21 November 2013

DONG Energy (UK) Limited
E3G - Third Generation Environmentalism Ltd
EDF Energy
Elexon
Electricity Storage Network
Energy Pool
Energy Services Partnership - An Ameresco Company
Flexitricity Limited
GDF Suez Energy UK
Green Frog Power Ltd
KiWi Power Ltd
Npower
Open Energi
Peak Gen Power Limited
RWE Supply & Trading GmbH
Scottish Power
Statoil (UK) Ltd.
SSE
Sustainability First
UK Demand Response Association
UK Power Reserve Ltd
Waters Wye Associates
Welsh Power Group Limited
Ecuity Consulting LLP
National Grid