Proposal for a Capacity Market Rules Change



Reference number(to be completed by Ofgem): CP148

	61140
Name of Organisation(s) / individual(s):	Date Submitted:
Open Energi	15 January 2016
Type of Change:	If applicable, whether you are aware of an
	alternative proposal already submitted which
☐ Amendment	this proposal relates to:
_	The second of the last of the last percentage
	The same proposal has been submitted to DECC's
_	consultation on design of the capacity market (closed December 2015). The same proposal is also
☐ Revoke	being submitted to this Ofgem consultation as part
_	of the wider proposal from the Association for
☐ Substitution	Decentralised Energy (ADE).
What the proposal relates to and if applicable, what current provision of Rules the proposal relates	
to (please state provision number):	
Firm frequency response providers – Rule 13.2.6(a)	
Tilli frequency response providers – Rule 15.2.0(a)	
Description of the issue that the change proposal seeks to address:	
Open Energi is a UK company providing dynamic Firm Frequency response (FFR), a	
demand response service classified as a relevant balancing service eligible to	
participate in the Capacity Market. However, a dynamic FFR provider cannot carry	
out the DSR test as it is currently stipulated in the rules and regulations and	
therefore cannot participate in pre-qualification for a capacity market auction	
Dynamic FFR is deemed eligible under Schedule 4: Relevant Balancing Services and	
is accounted for in Chapter 8: Obligations of Capacity Providers and System Stress	

a) a measurable baseline demand and,

settlement periods which demonstrate:

b) a positive DSR volume over each settlement period.

These two forms of evidence are not possible in the provision of FFR which responds to frequency and is thus dynamic. This distinction is detailed in Figure 1.

Events. Prequalification requires passing a DSR test that identifies three separate

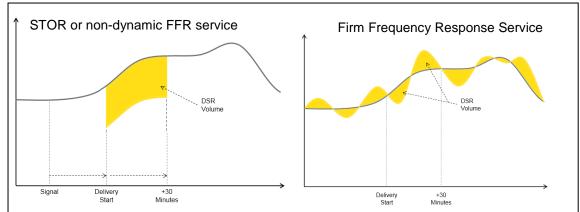


Figure 1: Typical Reserve response vs. firm frequency response in a system stress event

In Figure 1, the reserve service is responding to a signal for at least 30 minutes in duration. In contrast, frequency 'events' in dynamic FFR react within 2 seconds and are not 30 minutes in duration. Instead the length of response is defined by the length of a frequency 'event' which can be seconds in duration. In addition, typical reserve is 'off only', meaning assets are switched off to make capacity available. Dynamic frequency response calls for 'up' as well as 'down' regulation. Over a half hour period, the service may call for demand to be increased and this is detailed in Schedule 4 as 'declared availability' for Dynamic Frequency Response.

If applicable, please state the proposed revised drafting (please highlight the change):

No changes are proposed for Schedule 4: Relevant Balancing Services or Chapter 8: Obligations of Capacity Providers and System Stress, both of which account for the participation of dynamic FFR. Open Energi propose to add an alternative category of evidence to the prescription for the DSR test in 13.2.6. This would use contracted output as evidence of service delivery, consistent with the capacity obligation as defined in Chapter 8 as 'Adjusted Load Following Capacity Obligation' (ALFCO). At present, there are two categories of evidence prescribed. The addition of this alternative methodology to Section 13.2.6 (a) would read as follows;

"Non-zero Contracted Output can be calculated for each DSR CMU Component of the DSR CMU to show a positive DSR volume"

Analysis and evidence on the impact on industry and/or consumers including any risks to note when making the revision - including, any potential implications for industry codes:

This proposed rule change to 13.2.6:

- will allow dynamic FFR providers to participate in future capacity market auctions, in line with the technology neutral nature of the capacity mechanism
- corrects a misalignment within the rules and regulations, between Chapter 8; which accounts for the ability of dynamic FFR to meet the capacity obligation in the case of a live system stress event, and Chapter 13; which tests for the capability to meet this obligation.
- accounts for Dynamic FFR and potentially future services from batteries or other sources of fast responding flexibility which free up system capacity

The participation of dynamic FFR spurs a more competitive capacity market. NERA estimate that increased participation of demand response in the capacity market could benefit consumer bills by £359 million per year.

Risk mitigations with this approach:

- The DSR test was introduced to ensure a 'real' capacity service can be delivered from the resource. Open Energi have asked for a 'non-zero' Contracted Output to ensure this is still the case.
- The proposed change only impacts DSR as limited to Chapter 13. There is no impact to 'live' delivery of capacity as this only impacts testing.

Details of Proposer (please include name, telephone number, email and organisation):

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