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## CHPA response to DSR consultation June 2013

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We welcome the opportunity to respond to Ofgem's consultation *Creating the Right Environment for Demand-side Response*. The Combined Heat and Power Association (CHPA) is a leading advocate of energy services, combined heat and power and district heating, as well as a member of the Smart Grids Forum. Some of our members are already working to provide demand-side response (DSR) services, and many more are interested and have scope to provide DSR services.

The consultation document provides a detailed and thorough overview of the opportunities and barriers for demand-side response. This short response addresses four key points, while also referencing individual consultation questions when relevant.

### **Demand-side generation**

Demand Side Response (DSR) is defined in the consultation document as when a consumer responds to a signal to change the amount of energy they consume. The document notes that this response can sometime consist of generation, and that this additional generation is "arguably unhelpful in terms of environmental impacts".

For many non-domestic customers this view on the impact of additional generation is not always the case. For example, when a highly-efficient gas or renewable combined heat and power (CHP) plant increases electricity production in response to a signal, it displaces potentially more inefficient and carbon-intensive centralised generation. Another example would be when an electric boiler, connected to thermal storage, generates and stores heat when there is significant electrical over-capacity due to intermittent renewable generation.

A functioning DSR market will allow consumers to choose the best way to respond to price signals, whether that is through increased generation or reduced demand. It is important that efforts to facilitate DSR continues to protect the consumer's power to choose how best to respond to that signal.

### **Large commercial and small industrial customers**

The consultation document is focused on supporting domestic and small non-domestic customers. However, in addressing all three preconditions outlined in the consultation document, Ofgem should not lose sight of the important contributions which can be made by larger commercial and small industrial customers.

When examining DSR opportunities, large commercial and small industrial customers represent potential significantly large and accessible value. However, these customers face many of the same challenges as small commercial entities,

including operational capacity and linking the value of smart grid solutions across the value chain. The consultation document cites a 2012 Ofgem survey that while larger commercial customers have a greater capacity to engage with DSR offerings, they can also face similar difficulties. Unfortunately this survey on DSR in the non-domestic sector only considered the non-domestic buildings sector and excluded all other non-domestic areas. More detailed consideration of the opportunity available in the rest of the non-domestic sector may be of value.

The consultation document indicates that larger commercial and small industrial customers can have dedicated energy managers and are more aware of DSR opportunities. While we recognise that domestic and small non-domestic consumers will need more support than larger customers, the exclusion of larger customers from Ofgem's work on DSR risks designing a system which does not capture the breadth of the demand side response opportunity available. This focus on domestic and small non-domestic consumers appears to run through much of Ofgem's DSR work.

Ofgem's future work on DSR appears to largely be steered through the Smart Grids Forum and specifically Work Stream 6. If this is the main driver for Ofgem's development of DSR, then it will be important that the opportunity offered by large commercial and small industrial customers is captured. Work Stream 6's Year 3 work plan is focused on facilitating DNO engagement with domestic and small business customers, which means that it is currently at risk of missing the significantly larger DSR capacity from small and mid-size industrial players.

### **DSR opportunity in the capacity market (Questions 1 and 2)**

We welcome Ofgem's contributions to DECC's design of the capacity market, and agree with Ofgem's assessment that the Government is keen for DSR to play a fair and equivalent role in the capacity market.

The capacity market offers the potential to provide significant value by recognising and rewarding DSR in the electricity system. For example, the major US utility company PJM includes demand side capacity in their capacity market, and DSR is credited with saving PJM's consumers \$11.8 billion USD in a single delivery year<sup>1</sup>.

While the design of the capacity market's transitional arrangements will contain specific features that should help DSR to come forward, the transitional arrangements are scheduled to end in 2018. At that time, DSR will be required to transfer into the main capacity market, known as the 'enduring arrangements', which as currently proposed risks losing DSR participation. It appears that the enduring arrangements are principally designed around centralised generation, and access for DSR consumers risks being a secondary concern.

We recommend these potential risks for DSR in the capacity market continue to be raised by Ofgem in its advice to Government. Ofgem has contributed valuable work to the ongoing development of DSR in the UK, and it will be vital that this work is fed back into DECC policymaking.

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<sup>1</sup> PJM Market Monitor. Analysis of the 2013/2014 RPM Base Residual Auction Revised and Updated, September 2010, p.52

### **Third parties and DSR (Question 8)**

The consultation document states that as the DSR market develops, many customers are likely to need their supplier or a third party to simplify engagement in order for them to participate effectively. While third party aggregators will have an important role to play, a successful DSR market must be able to work without the need for third party intervention. DSR participants should, in the most part, be able to capture that value themselves and third parties must remain 'optional' in both design and practice.

There is a risk that if the DSR market principally relies on aggregators, the system will not be designed in a way that maximises access from individual DSR participants. An expectation that DSR participants will only access the market through third parties will also add additional transaction costs to the market, potentially reducing DSR's value to customers. Therefore it is important that third parties' role is directed at the lowest possible level on the value chain (i.e. at the domestic customer level).

### **Next steps (Questions 9 and 10)**

We welcome Ofgem's work in this area and for the incremental changes to regulatory arrangements it is already considering. We especially welcome the exploratory discussions on what a wider reform of the current arrangements may look like. The exploratory high-level proposal in Figure 4 provides a good ideal for Ofgem to work towards as it makes progress in unlocking the value of the DSR market.

We would strongly encourage Ofgem to actively explore additional changes to regulatory arrangements over and above what is already being done beyond its response in Autumn 2013.

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