



# CARBON BITES

From the CIBSE ENERGY PERFORMANCE GROUP

## Demand Side Response

### What is Demand Side Response (DSR)

Demand side response (DSR) strategies enable businesses and consumers to modulate demand in real-time, to help ensure that the electricity system operates in balance, reliably and affordably.

Of a particular concern for urban areas and commercial and industrial places where operations are clustered, the electricity grid must respond quickly to any flexible load or generation connected to the distribution network. In order for National Grid to be able to offer a balanced service, they have allowed for third parties to either generate electricity, or reduce their demand according to the requirements.

Customers can either use commercial aggregators or bid for services directly with National Grid. Some DSR strategies can be supported by installation of energy control devices with communications to trigger pre-arranged load shedding when requested by the Distribution Network Operator. This would be audited to the UK and Europe's standard BS EN 15232:2012 for energy performance classifications in buildings through energy efficiency and dynamic load management.

Serena Favatello, Hilson Moran, May 2017

### DSR From a Client Perspective

Being able to respond to National Grid's requirements has been part of our focus in the past few years. We have worked with our key suppliers to upgrade our on-site generation systems (mainly generators) and their controls so that we can easily respond to requests. This has allowed us to generate extra revenue for the business, avoid some TRIAD charges, as well as providing us with an unexpected benefit; we are now more confident that our generators are well maintained and refuelled to support our buildings in the event of a power cut. This has been well received from our business continuity colleagues.

Dr Maria Spyrou, Marks and Spencer, May 2017

### Key Issues

- Ensure the electricity system operates in balance, reliably, and affordably.
- Help control costs of balancing the system
- Potential source of revenue for businesses
- Improves reliability of key equipment

### Links

- [Demand Side Response by National Grid](#)
- LEED Reference Guide for Building Design + Construction Guide
- [http://www.smarternetworks.org/NIA\\_PEA\\_PDF/NIA\\_SPEN0001\\_2607.pdf](http://www.smarternetworks.org/NIA_PEA_PDF/NIA_SPEN0001_2607.pdf)
- <http://powerresponsive.com/>