

Project ID	DIP019		
Long Title	Demonstrating the Functionality of Automated Demand Response		
Short Title	ADR		
Keywords	Small-scale; Non-domestic; Electricity; Power Quality & Grid Integration; Demand Response; Active Network Management; LV Grid Monitoring; Energy Strategy Development;		
Location (Town, Region, Country)	Bracknell	Berkshire	England
Latitude and Longitude	51.42N	0.75W	
OSGB code	SU 870 693		
Status	Complete		
Start Date	2011		
End Date	2012		
Description	<p>Bracknell's primary transformers are already operating at close to capacity, which means they will not be able to accommodate further significant increases in electricity demand without being substantially upgraded. Furthermore, unless effectively managed, the anticipated changes in demand levels and load profiles will trigger network problems including voltage and thermal constraints. In order that Bracknell can continue to reliably supply electricity to it's customers, there is a need for a solution which safely, quickly and sustainably optimises the use of the available capacity on the network.</p> <p>Objectives: This small-scale project aims to demonstrate that the ADR technology proposed can shed peak loads in the proposed buildings.</p> <p>SEPD will run a pilot project of Honeywell's ADR solution to answer the following questions:</p> <ul style="list-style-type: none"> <li>• Can the proposed ADR solution produce an aggregated figure of dispatchable demand?</li> <li>• Can it reduce/shift peak loads in facilities and therefore the network?</li> <li>• What data can be collated and what value is it to a DNO and how will it be securely stored?</li> </ul> <p>This project will demonstrate the feasibility of this solution and will provide valuable learning for all DNO's in GB. The learning from this trial may also feed into SEPD's New Thames Valley Vision Tier 2 LCNF submission.</p> <p>Linked to Thames Valley Vision (TVV) project (precursor).</p>		
Sectors	Grid		
Funding Sources	Low Carbon Network Fund		
Budget £	£260,000		
Partners	SSE, Honeywell Building Solutions, Bracknell Forest Council		

Energy vectors	Electricity
Scale (lab/site/ small/community/region/national)	Small
Technologies demonstrated	LV grid monitoring, smart controls, demand response devices, active network management
Economic models demonstrated	Deferred network investment
Other concepts demonstrated	Demand response, grid constraint mitigation
Industry engagement	Industry led
Consumer engagement	
Project Reports (incl. links)	Closedown report: <a href="https://www.ssepd.co.uk/WorkArea/DownloadAsset.aspx?id=5236">https://www.ssepd.co.uk/WorkArea/DownloadAsset.aspx?id=5236</a>  Library: <a href="http://www.smarternetworks.org/project/sset1004/documents">http://www.smarternetworks.org/project/sset1004/documents</a>
Datasets (incl. links)	
Website/social media	
Information sources	<a href="http://www.smarternetworks.org/project/sset1004">http://www.smarternetworks.org/project/sset1004</a>