

LCNF Full Submission

Supplementary Answer Form

DNO Name:	WPD	Question Number:	WPD004
Question Date:	16 th Sept 2010	Answer Date:	17 th Sept 2010
Question Topic:			

Original Question No:		Original Answer Date:	
Original Question:			
Original Answer:			

Question:	The measures being trialled appear to focus on microgeneration; Please confirm the scope of the trials with respect to other low carbon technologies and DSM
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Answer:	<p>The primary thrust of the project is to establish what "headroom" exists both from thermal loading, statutory voltage and BS EN 50160 voltage limits, and whether these can be matched in a statistically valid way to particular network "templates". This work underpins the identification of ability of networks to accommodate low carbon technologies including electric vehicles, electrification of heating and low voltage distributed generation such as photo-voltaics.</p> <p>In undertaking this work we will monitor load and voltage parameters at HV / LV substations and voltages at LV feeder ends.</p> <p>This work further benefits from the ability to monitor parts of network that will be subject to new low carbon stresses under Welsh Assembly Government (WAG) "Arbed", measures and contrast these with adjacent parts of the network that are not. WAG have provided WPD with details on over 7,000 individual installations, and some 3,000 of these will be captured in the WPD project. Those installations incorporate a wide range of</p>
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	<p>low carbon technologies, including PV generation (just under 1,000 installs), heat pumps, fuel switching, solar water heating, solid, cavity and roof insulation. Some of these (PV and HPs) will stress the network and provide valuable data on impacts at network level, whilst others should de-stress the network by reducing demand / timing of demand. Both are important in understanding the impacts of such low carbon technologies on the available "headroom" both in terms of quantification (% loading and voltage limits) but also time of day.</p> <p>The project additionally tests the ability to deliver real time aggregation of running low voltage distributed generation, by class, to National Grid via the DNO Enmac SCADA system, and the % level of sensor penetration necessary to provide this.</p> <p>The submission included from Bath University in Appendix 1 provides some further amplification on analysis and Appendix 6 shows, in location anonymised form, 79 example lines of ther 7,000 lines already provided by WAG</p>
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Attachments:	
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