Electricity Network Innovation Competition Full Submission

Supplementary Answer Form

Project: Charge: Refuelling Tomorrow's Electrified Transport

Tick if this answer has been provided verbally: ☐

Project code	SPMV1	Question Number	30
Question date	23/08/18	Answer date	28/08/18
Submission section question relates to		N/A	
Topic	d) Is innovative		
Question	Your proposal states that some of the methods are similar to those in WPD's Electric Nation. What are the differences? OPenLV will give LEPs the ability to drive some of the timed and staggered approaches themselves. Has there been any progress on that trial. Why not use the OpenLV platform rather the SGS' ANM Strata?		
Notes on question			
Answer	• The differences of Charge to Electric Nation have been addressed in Q13 The learning that will be taken from WPD's Electric Nation is from the Network Assessment Tool (NAT) aspect of that project. The NAT is a software tool in the latter stages of development which will help DNO designers and planners to understand the effects of EV uptake on low voltage (LV) networks. The project has involved the processing of all of WPD's LV data to build up a picture of LV network capability to cope with EV demand at street-by-street granularity. Specifically, the learning that will be beneficial to the Charge project is: - Techniques for the mass processing of network asset data - Methods of handling and correcting data errors - How to run network assessments as automated background batch processes (essential for the offline assessment of hundreds of thousands of feeders) - The integration of GIS tools and spatial databases with web frontend development The main differences between the ConnectMore tool under Method 3 and the NAT are: - The ConnectMore scope includes HV assets, vastly widening the use cases that the tool can be used for, from connection of small scale charger installations to dozens of rapid chargers		

	- As a result of including HV connections in the scope, there is a need to consider the operational state of the HV network, which is a large innovative step from all existing commercial software offerings - The ConnectMore user interface will be geared towards end-customer use, not solely for use by a trained/experienced engineer, which dramatically increases the need to pre-process calculations and build-in "engineering judgement" that is blind to the user. The NAT is not a connections tool and is not intended, nor suitable, for direct customer use. - The ConnectMore tool will have innovative features to allow customers to better choose their connection parameters (e.g. location, size of load, flexible options etc.). The NAT does not contain any such features. • OpenLV is trialling several different Applications, providing visibility to customers, however there are no Apps under development in that project for EV control. • The OpenLV platform (LV-CAP) is an alternative that could be used for some of the trials, particularly for those focused on LV connections.
Attachments	n/a