

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	13
Question date	21/08/18	Answer date	23/08/18
Submission section question relates to		N/A	
Topic	innovative		
Question	P11 – what learning has been taken from WPD's Electric Nation and how is this project distinct from it?		
Notes on question			
Answer	<p>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:</p> <ul style="list-style-type: none">- 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 <p>The main differences between the ConnectMore tool under Method 3 and the NAT are:</p> <ul style="list-style-type: none">- 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		

	<p>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.</p> <ul style="list-style-type: none">- 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.
Attachments	n/a