

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	10
Question date	21/08/18	Answer date	23/08/18
Submission section question relates to		N/A	
Topic	n/a		
Question	P9 Flexibility Services – please explain what is envisaged here. It is not clear from 17.2 (not 16.2) what is envisaged for commercial services, and who these commercial services would be between. Please include in your answer what the implications might be if this attempt is unsuccessful.		
Notes on question			
Answer	<p>Ultimately the commercial services would be between the charge point operator or aggregator acting on their behalf and either the DNO / DSO or SO. The potential services which could be utilised are not expected to be paid for by the project, other than the interfacing to the DNO, but will seek to trial from a range of providers should the market respond to the needs identified from Method 1.</p> <p>Flexibility Services is one of the emerging and evolving smart network solutions. It can be used for many network applications, but DNOs are most interested in using flexibility services as an alternative to network reinforcement associated with general load growth. Flexibility Services involve either demand or generation (or storage) increasing or decreasing in response to a "signal" (direct instruction, request or price signal).</p> <p>DNOs are currently exploring the option of procuring flexibility services as an alternative to conventional reinforcement. The approach to date has focused on existing latent potential for example, by engaging with existing embedded generators or by providing locational signals for new entrants. Examples include UKPNs Flexibility First and WPDs Flexible Power; we have also begun our own process of tendering flexibility services.</p> <p>Developing a robust flexibility market for distribution, in addition to the existing transmission ancillary market, will be a key enabler to maximise the benefits of EVs whilst minimising the cost to both the system and consumers. As outlined in the recent Ofgem Future insight publication,</p>		

	<p>Flexible [EV] charging can complement a system with variable renewable generation in two ways: first, by promoting charging when there is excess generation on the system; second, by alleviating network constraints by shifting charging to times when there is also sufficient network capacity</p> <p>If our attempt to use EV charging flexibility as an alternative to network reinforcement is unsuccessful it is likely to be an indication of a market failure of some kind, from which lessons can be learnt for the future. If through the trial we are unable to reach commercial terms which are suitable for service providers and ultimately lower cost for the DNO, then we would need to secure alternative smart or conventional reinforcement solutions.</p>
Attachments	n/a