

Electricity Network Innovation Competition Full Submission
Supplementary Answer Form

Project: Optimise Prime

Tick if this answer has been provided verbally: ☐

Project code	UKPNEN03	Question Number	Q24
Question date	13/09/2018	Answer date	17/09/2018
Submission section question relates to	-		
Topic	a) Low carbon/environment and net financial benefits		
Question	Is there a risk that home charging by commercial fleets will not react to ToU/smart metering? UK Power Networks study of 5,000 London households showed prices had to increase 7 times to encourage significant uptake of ToU tariffs.		
Notes on question	We believe this is referring to the Low Carbon London trials (1,100 dTOU trials with 4,500 smart metered control group) with reports published here: http://innovation.ukpowernetworks.co.uk/innovation/en/Projects/tier-2-projects/Low-Carbon-London-(LCL)/		
Answer	<p>Yes, there is a risk, although we believe that commercial fleets (controlled centrally by the fleet owner) are more likely to respond to price signals than individually controlled vehicles.</p> <p>Many businesses are already half hourly metered and are familiar with variable Use of System charges and energy pricing. With examples such as the Super Red DUoS tariffs¹ and National Grid Triads² the variable pricing is sometimes extreme. For example Eastern Power Networks half hourly metered LV connected super red DUoS is 9.710 p/kWh while amber is 0.227 p/kWh (almost 43 times less).</p> <p>On a per property basis the absolute value is still extremely low, but when this is aggregated across hundreds or thousands of vehicles (for example British Gas have 13,500 vans and Royal Mail have 41,000 vans across the UK) the benefit can be significant.</p>		

¹ 2018 tariffs for EPN: <https://www.ukpowernetworks.co.uk/internet/en/about-us/documents/2018/eastern/Eastern%20Power%20Networks%20LC14%20Statement%202018%20V3.1.pdf>

² <https://www.nationalgrid.com/sites/default/files/documents/44940-Triads%20Information.pdf>

	<p>Furthermore, it should be noted that the focus of the Low Carbon London trials was not to identify the monetary value that would trigger a customer to change their energy use. It was to prove that it could be done and could produce a measurable beneficial impact on the electricity network.</p> <p>Optimise Prime is going to produce learning, amongst other things, on the responsiveness of fleets to flexibility pricing signals by varying a number of different parameters including costs. The learning aim therefore of Optimise Prime is different to that of Low Carbon London.</p>
Attachments	