

# Which Smart Electricity Service Contracts Will Consumers Accept? The demand for compensation in a platform market

EPRG Working Paper 1616

Cambridge Working Paper in Economics 1632

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**Abstract** This paper analyses the heterogeneity of household consumer preferences for electricity service contracts in a smart grid context. Platform pricing strategies that could incentivise consumers to participate in a two-sided electricity platform market are discussed. The research is based on original data from a discrete choice experiment on electricity service contracts that was conducted with 1,892 electricity consumers in Great Britain in 2015. We estimate a flexible mixed logit model in willingness to pay space and exploit the results in posterior analysis. The findings suggest that while consumers are willing to pay for technical support services, they are likely to demand significant compensation to share their usage and personally identifying data and to participate in automated demand response programs involving remote monitoring and control of electricity usage. Cross-subsidisation of consumers combining appropriate participation payments with sharing of bill savings could incentivise the number of consumers required to provide the optimal level of demand response. We also examine the preference heterogeneity to suggest how, by targeting customers with specific characteristics, smart electricity service providers could significantly reduce their customer acquisition costs.

**Keywords** smart energy services, preference heterogeneity, Discrete Choice Experiment, willingness-to-pay, platform markets

**JEL Classification** C18, C38, D12, L94, Q42, Q55

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Publication                November 2016  
Funding                     EPSRC Autonomic Power System Project