

Kathyann Purcell

From: Margaret O'Mahony <Margaret.OMahony@tcd.ie>
Sent: 22 November 2013 10:17
To: Deirdre Bell
Cc: John Brady
Subject: TRIM: Response to ESB Networks Proposed Electric Vehicle Pilot

Dear Ms Bell

We are responding to the call for submissions as part of your consultation on the ESB Networks Proposed Electric Vehicle Pilot.

From our experience in the field of transport, we expect that electric vehicles will have a significant role to play in delivering mobility needs in Ireland in the future. However, we believe that the mass market penetration of electric vehicles will present unknown challenges and impacts on the electricity distribution network. We welcome the opportunity to expand the available knowledge and information base through an electric vehicle pilot. The monitoring and analysis of electric vehicle and charge point usage would provide the means to understand and predict the energy demands of an electric vehicle fleet and the potential effects on the network. The large amount of data that would be captured from a pilot would form a substantial and comprehensive database. It is critical that charging data from a variety of installation types and locations is collected. The timing of charging events and energy consumption can vary greatly between locations (i.e. public, workplace and home), time of day and charging point types (i.e. different rated powers). It is our view that this user behaviour needs to be fully understood so that electric vehicles do not have a negative impact on the security and reliability of the network in the future. In addition, understanding such behaviour would facilitate the development of policies and incentives to increase demand side participation. This could allow electric vehicles to provide power system services in the future.

Yours sincerely

Prof Margaret O'Mahony and Dr John Brady
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