IWEA response to the CER consultation on the ESB Networks Proposed Electric Vehicle Pilot

25 November 2013

The Irish Wind Energy Association (IWEA) welcomes the opportunity to comment on the CER consultation on the ESB Networks Proposed Electric Vehicle Pilot. IWEA supports the proposed electric vehicle pilot as is required for the delivery of the EU renewable energy targets for Ireland and indeed is compatible with more efficient use of generation, in particular renewable generation in particular at times of low demand.

The electrification of transport has an important role to play in Ireland meeting our renewable energy targets for 2020. Ireland has a target of 10% of the energy used in transport to come from renewables in 2020. As part of the National Energy Efficiency Action Plan, Ireland has set a target to have 10% of passenger cars and light commercial fleet powered electrically by 2020 (approximately 230,000 vehicles). These targets highlight the significant role that electric vehicles will have to play in transport in Ireland going forward.

The move to transport electrification has the potential to deliver significant benefits for electricity customer if managed and planned proactively. EVs have considerable potential to contribute to the demand side management of the electricity system. A large scale managed introduction of EVs into the national fleet can achieve benefits for the electricity customer through increased energy usage at off peak times thereby achieving more optimal usage of the distribution network and lowering average DUoS charges.

In a typical charging environment the majority of EV drivers will charge their cars at night time and in so doing increase the night time load. By increasing the night time demand for electricity, any excess wind could be used efficiently. It is envisaged that most curtailment of wind generation will occur at night time (at times of low demand and high wind). This would also promote more efficient use of generation on the system, and lead to savings as a result of avoided wind curtailment. The inclusion of the EV night time load does not have any impact on the system in terms of generation adequacy and no new generation would be required on the system to serve this EV load.

In order to ensure the rollout of EVs, as required under the targets, public infrastructure is required to meet this demand and it is important that there is leadership in the development of this infrastructure. A coordinated approach through a robust pilot scheme will help identify the most efficient way to promote and support the roll-out of EVs. In order to facilitate adoption of EVs in as short a time as possible (given the relatively short timelines to 2020) the trial should not be constrained exclusively to the technical challenges related to EVs but should consider and trial options to promote and accelerate the adoption of EVs.