<u>Question on Installation of Off-shore Wind Farm</u> <u>in waters off Lamma Island Power Station</u> (Paper IDC 32/2015)

Written reply of Hongkong Electric

The launching of the first commercial scale wind turbine – Lamma Winds in 2006 has not only allowed HK Electric to understand the feasibility of wind power development in Hong Kong, but also allow us to gain local experience in construction, operation and maintenance of wind turbine in the territory. As land resource is scarce, development of offshore wind farm is the only viable option for wider application of wind power generation in Hong Kong.

Works on the proposed offshore wind farm project has been ongoing in the past few years. With granting of the environment permit for the project in 2010, HK Electric has set up a wind monitoring station in March 2012 within the proposed wind farm site for meteorological and oceanographic data collection. The wind resource measured was higher than that estimated during the environmental impact assessment stage as well as that in HK Observatory's weather station at Waglan Island. Analysis of the collected wind data indicates that the proposed site is feasible for offshore wind farm development.

We have discussed with the Environment Bureau in 2013 for including the offshore wind farm project in the 2014-2018 Development Plan. In view that the Government was planning to conduct a Public Consultation on Hong Kong's future fuel mix for power generation in early 2014, the offshore wind farm project was taken out from the said Development Plan.

The Government is currently launching another Public Consultation on the Future Development of the Electricity Market in which further promotion of renewable energy is being explored. HK Electric supports the Consultation and welcomes any views and feedback from the public.

The wind monitoring campaign is still ongoing aiming at collecting additional data for optimizing the offshore wind farm design. Wind power generation is of zero emission and is beneficial to the environment without requiring fossil fuel. As the capital outlay will be amortized over several years, the offshore wind farm project is not expected to cause much impact to the tariff. We will continue to engage general public and the Government to solicit their support for materializing the offshore wind farm project.

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