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## **Abstract of Presentation**

### **Panel Discussion on “Smart Grid in Asia”, IERE TIS-Asia Meeting 2013**

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Presentation title: **Key Technology and Demonstration for Vehicle-to-Grid in China**

With the expansion of electric vehicles, the power grid will face a number of challenges related to reliability, security and construction investment. Vehicle-to-grid (V2G) technology is proposed to largely relieve the above problems, and achieve bi-directional interaction between electric vehicles and the grid. This presentation firstly analyzes energy flow, information flow and fund flow in interaction systems. Then, the V2G system architecture is formed and several key technologies are identified for study, including intelligent vehicle terminal, interactive coordination control system and charging/discharging service network. The detailed analysis to these technologies is provided to obtain their implementation methods and functional characteristics. Finally, a construction scheme for the demonstration project is proposed to test the V2G system. The objective of the presentation is to largely promote V2G, and boost electric vehicles and smart grid industry.