CSG's Electric Vehicle Charging Stations in Shenzhen

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Abstract

In comparison with the fossil fuel vehicles, electric vehicles(EV) have many great advantages such as energy-saving and emission reduction, peak-load-shifting and comprehensive utilization of multi-energy resources. With the gradual implementation of China's low-carbon economy and the rapid development of the domestic electric vehicles industry, electric vehicles are bound to be widely used and the EV charging stations will also be spread to every corner of the city. As the Special Administrative Region (SAR) of China and the administrative service area of China Southern Power Grid Co. (hereinafter referred to as CSG), Shenzhen has drawn up the corresponding electric vehicle development plans with the combination of areal electric car industry base. It looks forward to the future in 2012 that there will be 24,000 electric vehicles put into the Shenzhen city. In 2015, the number of electric vehicles will be up to 100 thousands. In 2009, CSG constructed the first electric vehicle charging stations (points) in Longgang district, Shenzhen, including two charging stations and 134 charging points, the total charging capacity reaches 2480kVA. The EV charging station implemented the quick chargers, which can provide the charging services to taxis, cars, and buses. EV Charging stations not only charge electric vehicles' traction batteries, they also function as an interface between vehicles and the power grid. In this paper, an introduction of CSG's EV charging station's construction and development in Shenzhen is given in terms of CSG's EV charging station's features and facilities, the standardization of CSG's EV charging station as well as the status of EV charging stations at home and abroad.

Key words: electric vehicle;   EV charging station ; station construction; the standardization of the EV charging station;