

Prospect of Demand Response Technology Under Smart Grid in China

YANG Weidong, YANG Shengchun, YAO Jianguo
State Grid Electric Power Research Institute, Nanjing, China

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Abstract: The outlook and prospects of demand response technology under smart grid in China are analyzed in this paper. Based on the overall survey of DR and DSM, the characteristic of DR in China are summarized from both the macro and micro aspects. Furthermore, five suggestions such as analyzing the potential of settling fluctuations of renewable energy by DR, establishing and consummating the administrative policies concerning with demand response, working out the suitable commercial operation mode, setting up the common benefits fund for DR, propagating and forming the reasonable price and tariff making mechanism, are put forward. Finally, the merits of DR in China are discussed. With the future booming of electric vehicle and as a practical activity of DR, State Grid Corporation of China and China Southern Grid Company have both proposed a commercial mode for electric vehicle of ‘battery swapping first, battery charging second, centralized charging and consolidated distributing’. With this policy, energy efficiency could be promoted comprehensively, and system operating costs and carbon emissions could be reduced greatly in the near future.