Study on optimal dispatching of clean energy heating considering customer satisfaction

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Abstract

Abstract: The consumption of coal in winter heating period in northern China is large, and the combustion generates greenhouse gases that pollute the environment. At the same time, wind abandonment is widespread in northern China, causing waste of energy. In order to solve these problems, this paper proposes to apply clean energy heating and waste wind power generation for heating, and build a multi-objective optimal dispatching model under the goal of considering Customer satisfaction and operating costs. Finally, taking a region in the north of China as an example, the improved genetic algorithm is used to solve the model. The example results verify that the use of clean energy heating can increase the wind power consumption space and reduce the heating cost in winter.

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