عنوان مقاله:

Cournot Equilibrium Analysis for Influence of Wind Power on Genco's Profit Considering Carbon Emission Market

محل انتشار:

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خلاصه مقاله:

the reduction of greenhouse gases (GHGs) emission has become the greatest environmental concern worldwide. This paper analyses the operation of power system which is the major contributor of carbon emission, considering emission market, electricity market and renewable energy policies such as use of wind unit. Each generator is allocated certain amount of emission allowances, which they can use to cover emission during energy generation. Emission allowances are allocated to power producers based on their power outputs and previous levels of emission. In this paper two main policies to reduce greenhouse gases, emission quota trade and renewable energy policy are considered. Weibull probability density function is applied to wind power output probabilities. The strategic model is used to analyze the game between Gencos. The performance of the model has been demonstrated by applying it on a 6 generating units system

کلمات کلیدی:

Cournot model; emission market; Power Market; wind power; Weibull probability density function