

Optimal short-term bidding strategies for a generation company with future contracts.

C. Corchero, F. Javier Heredia

We propose a methodology to take into account the day-ahead market and the daily physical futures contracts in an electricity market. The methodology is based on stochastic mixed-integer programming and gives the optimal power planning production for the futures contracts as long as the day-ahead market bidding for the thermal units of a price-taker generation company. The model we present also takes into account the cost occasioned by the restrictions in the emissions of carbon dioxide introduced by the Kyoto Protocol. Implementation details and first computational experiences are presented.