عنوان مقاله:

Transmission Planning in Deregulated Environments

نویسندگان:

M. Shahidehpour - *Electerical Engineering, Illinois Institute of Technology*

.H. M. Shanechi - *Electerical Engineering, New Mexico Univ*

M. Oloomi Buygi - *, Ferdowsi University of Mashhad*

خلاصه مقاله:

A new market based approach for transmission expansion planning in deregulated environments is presented in this paper. In this approach, transmission-planning decisions are made based on the electric power market conditions. The main contribution of this research is ۱) Introducing a new probabilistic tool for analyzing the electric market conditions, ۲) Defining new criteria for ranking transmission expansion plans according to their effects on improving the competition and facilitating fairly access to cheap generation, and ۳) Presenting a new algorithm for transmission expansion planning in deregulated environments using the above tool and criteria. The characteristics of this approach are ۱) It encourages competition and provides fairly access to cheap generation, ۲) It considers the uncertainties including uncertainty in loads, uncertainty in bid of generators, uncertainty in availability of IPPs, and uncertainty in wheeling transactions, ۳) It is a value based approach instead of cost based.

کلمات کلیدی:

Transmission expansion planning, Deregulation, Market Based Planning, Monte Carlo simulation

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1415758