

Abstract Details

Title: A Review on Cross Border Power Trading Model for Deregulated Electricity Markets

Authors: Surender Redhu and Dharam Niwas

Abstract: This paper presents the overview of the concept of Cross border Power Trading Model for Deregulated Electricity Market. In India Power development has been carried out predominantly by the State controlled electricity boards. Almost all the countries are adopting deregulated industry structure for better utilization of the resources and for providing choice & quality service to the consumers at economical prices resulting in transparent price discovery. In this paper the design concept of cross border power trading model in competitive power market has been introduced by taking consideration of major issues faced by present power traders in Indian electricity market. This work focuses on trading arrangements, operation of power exchange and effectiveness of proposed pricing mechanism which is tested on linear demand and supply side bidding scenarios of market model. Suitable mathematical models are developed for calculations of market clearing price (MCP) and matrix laboratory version 7.5 software is used for the MCP simulations. This paper could be guide line for the policy makers, power systems designers and market operators to promote the cross border power trade in South Asian countries with system reliability and security.

Keywords: Gencos, Transcos, Market Clearing Price, Discos, Cross Border Power Trade, Power Pool.