Abstract

This paper proposes a congestion cost allocation method for pool market structure. The congestion cost presented here is the cost of congestion relief. This paper begins with the discussion on the basic concept of pool market. Then congestion cost allocation methods for pool market; uniform pricing and nodal pricing are discussed. The weaknesses of the existing methods are highlighted. As a result, a proposed congestion cost allocation strategy for a pure-pool based electricity market is presented. Case studies using a simple 3-buses and IEEE-14 bus system are presented to test the proposed method. The old uniform pricing in the old England & Wales (E&W) pool market and nodal pricing are used to compare the proposed method.