A New Forecasting Method for System Marginal Prices Based on Power Supply and Demand

<u>이기준</u>, 조현준, 여영구* 한양대학교 (ykyeo@hanyang.ac.kr*)

This paper presents a new forecasting scheme of short-term system marginal price (SMP) using past data on power supply and demand as well as past cost data. The forecasting of SMP is one of the most significant factors in an electricity market in which power is produced by generators, transmitted by transmission companies, and distributed by suppliers according to new trading agreements. The accurate forecasting of SMP can influence significantly on the profit of market participants. In this paper, a new methodology for day-ahead SMP forecasting is proposed using the law of supply and demand on power. The salient feature of the proposed approach is that it exhibits excellent predicting performance in short-term forecasting.