CYSENI 2012, May 24-25, Kaunas, Lithuania
ISSN 1822-7554, www.cyseni.com

ANALYSIS OF ELECTRICITY MARKET PRICE FORMATION FACTORS

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ABSTRACT

Liberalization of power sector as extraordinary complex task merging interdisciplinary research and requires involvement governments, regulatory bodies and relevant authorities at international level, furthermore, with active participation of consumers to achieve full benefits of liberalization. Dramatic changes in legislation, pressure created by competitive environment requires different manner of power system operation, however, high level of security and reliability must be still preserved due to the great industrial and social losses during supply disturbances.

Physical design of power systems is since introduction of market principles in energy sector weighty impacted by requirements of the electricity markets.

The paper is focused on analysis of factors which influences formation of electricity prices as a key indicator in liberalized competitive market environment.

Fundamental role has a time and locational dependence of electricity prices determined by stochastic supply and demand in terms of time and space as well as actual configuration of network. Special attention will be paid to economical aspects power production in competitive environment and intermitted power generation and its impacts on electricity market price formation with key study applied in Baltic region.