

MARKET BASED TRANSMISSION EXPANSION PLANNING FOR INDIAN POWER SYSTEMS

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ABSTRACT

In this paper a new market Based approach for transmission expansion planning in deregulated power systems is presented. Restructuring and deregulation has exposed transmission planner to new objectives and uncertainties. Therefore, new criteria and approaches are needed for transmission planning in deregulated environments. In this paper we introduced a new method for computing the Locational Marginal Prices and new market-based criteria for transmission expansion planning in deregulated environments. The presented approach is applied to Southern Region (SR) 48-bus Indian System.

KEYWORDS: Competitive electric market, Transmission expansion planning, Uncertainty, Scenario techniques, power transmission planning, price profile, risk analysis, uncertainty.