

Electricity transmission pricing and performance-based regulation

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Abstract

Performance-based regulation (PBR) is influenced by the Bayesian and non-Bayesian incentive mechanisms. While Bayesian incentives are impractical, the insights from their properties can be combined with practical non-Bayesian mechanisms for application to transmission pricing. This combination suggests an approach based on the distinction between ultra-short, short and long periods. Ultra-short periods are marked by real-time pricing of point-to-point transmission services. Pricing in short periods involves fixed fees and adjustments via price-cap formulas or profit sharing. Productivity-enhancing incentives have to be tempered by long-term commitment considerations, so that profit sharing may dominate pure price caps. Investment incentives require long-term adjustments based on rate-of-return regulation with a “used and useful” criterion.