A Literature Review on Dynamic Pricing of Electricity

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ABSTRACT

Revenue management and dynamic pricing are concepts that have immense possibilities for application in the energy sector. Both can be considered as demand-side management tools that can facilitate the offering of different prices at different demand levels. This paper also studies literature on various topics related to the dynamic pricing of electricity and lists future research avenues in pricing policies, consumers’ willingness to pay and market segmentation in this field. Demand and price forecasting play an important role in determining prices and scheduling load in dynamic pricing environments. This allows different forms of dynamic pricing policies to different markets and customers depending on customers’ willingness to pay. Consumers’ willingness to pay for electricity services is also necessary in setting price limits depending on the demand and demand response curve. Market segmentation can enhance the effects of such pricing schemes. Appropriate scheduling of electrical load enhances the consumer response to dynamic tariffs.

Keywords: dynamic prices, demand and price forecasting, demand elasticity, willingness to pay, scheduling of load