Electricity Prices and Generator Behaviour in Gross Pool Electricity Markets

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Electricity market liberalisation has become common practice internationally. The justification for this process has been to enhance competition in a market traditionally characterised by statutory monopolies in an attempt to reduce costs to end-users. This paper endeavours to see whether a pool market achieves this goal of increasing competition and reducing electricity prices. Here the electricity market is set up as a sealed bid second price auction. Theory predicts that such markets should result with firms bidding their marginal cost, thereby resulting in a cost reflective outcome and lower costs to consumers. The Irish electricity system with a gross pool market experiences among the highest electricity prices in Europe. Thus, we analyse the Irish pool system econometrically in order to test if the high electricity prices seen there are due to participants bidding outside of market rules or out of line with theory. Results indicate that the Irish pool system appears to be working efficiently and that there is no evidence that generators are not bidding their true marginal costs. Thus, the pool element of the market structure does not appear explain the high electricity prices experienced in Ireland.

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