



Cost Pass-through in the British Wholesale Electricity Market

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Abstract

Cost pass-through (CPT) rates give a useful perspective of market competition. This article studies how input costs of electricity generation are passed through to the wholesale price in Great Britain between 2015 and 2018. Our empirical results fail to reject the null hypothesis of 100% CPT rates for gas costs and EUA prices (and coal costs for most hours), suggesting a competitive British wholesale electricity market in most hours. We observe a higher CPT rate for coal costs in peak and off-peak periods. This is due to coal plants usually bidding at rates somewhat lower than marginal costs during off-peak periods in order to dispatch at their minimum load to avoid the costs of shutting down and starting back up. Instead, during peak periods the rate of capacity utilisation is high and marginal coal plants tend to exercise their market power, resulting in a higher CPT rate for coal costs. We extend the argument by assessing coal plants' bidding and find evidence of coal plants exercising market power in hours with high residual demand, generating extreme prices.

Keywords Electricity market, Cost pass-through, Competition, Carbon price

JEL Classification L13, Q48, D41, H23, C32

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