Market Power in the Capacity Market? The Case of Ireland

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Abstract An electricity market coupled with a capacity market is modelled as a two-stage game that allows for strategic behaviour both in the electricity market and in the capacity market. The model is applied to the Irish electricity market, where a capacity market based on reliability options is established by the end of 2017. As Ireland has one dominant firm in the electricity market, there have been concerns that the new market design provides it an opportunity to abuse market power in these two markets. Using Ireland as an example this article examines the kinds of strategic behaviours that can be expected if a capacity market is implemented in an imperfectly competitive market. It is found that the potential for the abuse of market power in the capacity market is significant for the dominant firm in Ireland and that there is no simple way to mitigate it. The relative amount of procured capacity, the amount and characteristics of potential entrants, and the competitiveness of the electricity market are the main determinants of the possibilities and incentives for abusing market power in the capacity market.

Keywords capacity market, strategic behaviour, competitive benchmark analysis, procurement auction

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