Elecxit: The Cost of Bilaterally Uncoupling British-EU Electricity Trade

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Abstract The UK's withdrawal from the European Union could mean that it leaves the EU Single Market for electricity (Elecxit). This paper develops methods to study the longer-term consequences of this electricity market disintegration, and in particular the end of market coupling. Before European electricity markets were coupled, different market closing times forced traders to commit to cross-border trading volumes based on anticipated market prices. Interconnector capacity was often under-used, and power sometimes flowed from high- to low-price areas. A model of these market frictions is developed, empirically verified on 2009 data (before market coupling) and applied to estimate the costs of market uncoupling in 2030. A less efficient market and the abandonment of some planned interconnectors would raise generation costs by $\mathfrak{S}60m$ a year (1.5%) compared to remaining in the Single Electricity Market. Sixty percent ($\mathfrak{S}00m$) of these welfare losses occur in Great Britain.

Keywords Electricity Trading, Market Coupling, Brexit

JEL Classification L94, F13, F15

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