

## Brexit implications for the GB electricity sector

The significant benefits of electricity interconnection with the EU are threatened by the UK's desire for self-determination



### Summary

There is substantial confusion for investors, market participants and electricity consumers regarding what the UK's exit from the European Union (EU), "Brexit", will mean for them. Interconnection and trade generate significant benefits and play a vital role in addressing the trilemma of affordability, sustainability and security of supply in the Great Britain (GB) and EU internal energy markets. Reflecting this, both parties have made explicit statements on the importance of considering the impact of Brexit on energy markets during negotiations. However, both parties' current stated positions have fuelled uncertainty about whether trade can continue in its current form and whether the related benefits will continue to be realised.

## ***Brexit implications for the GB electricity sector***

There is great uncertainty about what Brexit means for the Great Britain (GB) electricity sector, particularly for interconnection and trade with the European Union (EU). The UK's objective of self-determination extends to the energy sector, as evidenced by confirmation of its intention to leave the pan-European nuclear organisation Euratom. However, despite trade offering substantial benefits to both parties, it is not yet clear how trade will be structured post-Brexit and, accordingly, what the impact on GB's electricity sector will be.

### ***Energy sector prioritised in Brexit negotiations***

The UK government has identified energy as an important sector to prioritise in the upcoming Brexit negotiations. In its Brexit White Paper, the government emphasises the interdependence of energy markets in the UK and EU, as well as the critical role they play in enabling the operation and development of both economies. The need to prevent disruption to the all-Ireland electricity market, as well as trade via both existing interconnectors with the EU and those currently under development or consideration, is also acknowledged. However, the government remains firm that while continued trade offers substantial benefits, all options for future relationships with the EU remain open.

This objective of embracing the benefits of interconnection, but not if it inhibits the UK's self-determination, may be further complicated by the EU's recently proposed "Clean Energy for All Europeans" package. This package includes a push for greater control of energy markets at the EU level as part of the movement to fully integrate EU energy markets. To achieve this, the EU is proposing to adapt the role of the Agency for the Cooperation of Energy Regulators from purely coordinating developments between diverse national energy regulators, to providing more "hands-on" regulatory oversight of national regulators.

### ***Interconnection offers significant benefits***

Trade provides an invaluable tool to address the trilemma of balancing sustainability, affordability and security of supply in the electricity market. It enables access to a wider pool of generation to meet demand, manage issues related to increasing penetration of renewable generation (such as intermittency and inertia), and reduces the need for investment in additional generation capacity. As the majority of GB's neighbours are in the EU, the degree to which GB will continue to secure these benefits may be affected by Brexit.

GB currently has 4 GW of interconnection with the EU, connecting it to electricity markets in France, Ireland and the Netherlands. While interconnector capacity was excluded from the initial capacity market auction in 2014, its contribution to security of supply was reflected through its subsequent inclusion in the auctions held in 2015 and 2016. In these auctions interconnectors successfully bid 1.9 GW (0.7% of total capacity auctioned) for delivery in 2019/20 and 2.3 GW (4.5%) for delivery in 2020/21. In addition to concerns regarding maintaining sufficient generation capacity margins for system security, there is growing concern in GB regarding the affordability of electricity. This concern contributed to the energy regulator, Ofgem, referring the energy market for investigation to the Competition and Markets Authority. With wholesale costs contributing around 40% to a domestic consumer's electricity bill, interconnectors can help address these concerns by providing access to a wider range of generation and ensuring the lowest cost source is utilised.

Reflecting these benefits, there is an additional 7.3 GW of interconnector capacity being developed – providing further links with France and Ireland, and introducing direct connections

to Belgium, Denmark and Norway<sup>1</sup>. In addition, the System Operator National Grid forecasts that further interconnection will be developed by 2030 in three of its four potential Future Energy Scenarios (FES). While National Grid reported stakeholder feedback that its assumptions regarding future interconnection may be “unrealistically high” following Brexit, it still plans to consider potential increased interconnection in the 2017 FES update.

### *What happens next is far from certain*

There is no clear indication what Brexit will mean for the GB electricity sector, nor for trade with the EU. At this stage, literally anything appears possible. The Chief Negotiator for the EU has asserted that the UK will not be able to cherry pick freedoms, that it must accept freedom of movement of EU citizens, services, capital and goods to remain in the single market. The UK Prime Minister acknowledged this stance by suggesting that the UK may need to exit the single market and customs union in her speech at Lancaster House earlier this year. This political and regulatory uncertainty could prevent or delay the development of further mutually advantageous interconnector projects. Also, interconnectors operate on the basis of price differentials between markets creating arbitrage opportunities, and hence an incentive to trade and transport electricity. With Brexit creating ambiguity regarding a number of key variables driving these relative prices, such as the carbon price floor and EU ETS, as well as the potential imposition of tariffs on electricity trade, the commercial considerations for the operation and utilisation of interconnectors are unpredictable.

It is easier to explore which options are currently less likely to arise than to identify the future framework for trade between GB and EU energy markets. For example, by prioritising independence, the UK effectively discounted arrangements like those between the EU and Norway or EU and the Energy Community as these arrangements are predicated on the counterparties accepting and implementing EU regulations and directives. Also, the EU has been clear that it is expecting the negotiations to result in a single agreement; that a sector by sector approach to negotiations is inconsistent with conserving the integrity of the single market so nothing will be agreed till everything is settled. This discounts the possibility of replicating the relationship between the EU and Switzerland which involves a series of sectoral agreements. However, both positions could be subject to change as the negotiations evolve.

There is also a risk that no deal is reached in which case trade relations between the EU and GB will suffer from the introduction of customs restrictions and the imposition of tariffs that will have an adverse effect on both economies. This is required by their membership in the World Trade Organisation – if there is no Free Trade Agreement then both parties must treat the other as they would any other country to avoid discrimination.

### *Hope for the future*

In the short-term, from a position outside the EU, GB could trade with the EU, most likely under the latter’s rules but would not be able to influence those rules. This means GB’s ability to trade to help balance the trilemma of affordability, sustainability and security of supply will be affected by its willingness to accept EU Directives and Regulations. In the medium-term, however, the UK could collaborate with Norway and Switzerland and try to establish a pan-European regulatory framework similar to that of ENTSO-E and ENTSO-G, reflecting the wider European energy community. If successful, GB would then regain its ability to influence and guide the development and regulation of the European energy market.

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<sup>1</sup> While Norway is not an EU Member State it is part of the EEA and accordingly abides by the requirements of participation in the EU Energy Market.

### *How can we help?*

IPA Advisory is well placed to advise clients on the implications of policy and regulatory developments across the full energy value chain in UK and EU energy markets. We have extensive expertise creating tailored, informed insight into policy and regulatory developments for a range of clients, including international institutions, energy ministries and government departments, sector regulators and competition authorities, market participants, investors and financiers.

We are intimately familiar with the dynamics of UK energy markets. Our staff have deep industry, policy and regulatory expertise with extensive experience combining our policy and regulatory risk analysis, mitigation strategy development, and expert energy system modelling. We have extensive experience modelling the evolution of energy markets to inform governments and policy makers and assist national sector regulators with assessments of the efficiency and effectiveness of current market arrangements. In addition, for over twenty five years, IPA has designed and developed bespoke market simulations for investors seeking to enter new markets and value investment opportunities in merchant, contracted and mixed markets.

### *What services have we recently provided in the UK?*

- Delivering analysis exploring potential routes to further EU market integration, as well as policies to harness the identified opportunities and mitigate associated risks. This involved particular emphasis on the role of interconnectors and demand side management;
- Examining the distributional impact of time of use tariffs enabled by the smart meter rollout, exploring opportunities for mitigating adverse impacts, and assessing international experience to inform consideration of potential policy gaps; and
- Providing due diligence on a new CCGT in the UK by modelling the electricity market to 2060, examining the sensitivity of the results to various uncertainties, and detailing the sector and regulatory outlook, including the implications of the UK's exit from the EU.

### *Who have we recently worked with?*

- Agency for the Co-operation of Energy Regulators
- Department of Energy and Climate Change (now the Department for Business, Energy and Industrial Strategy)
- Office of Gas and Electricity Markets
- WMR JV Investco (subsidiary of Marubeni)

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