

Ofgem – Written evidence (EEH0022)

Summary of key points

- We welcome the framework provided by the Trade and Cooperation Agreement (TCA) in relation to infrastructure, trade and cooperation mechanisms.
- A lot of the detail relating to energy is still to be determined and the success of the TCA will depend on the ability to resolve these points effectively with our European partners.
- Ongoing engagement with our European partners is vital for the development of cross-border infrastructure, trade and offshore renewable energy, effective monitoring of wholesale market abuse and sharing best practices on a range of regulatory issues. Our relationships with Europe will continue to be increasingly important as our level of electricity interconnection is projected to increase to 18GW over the next decade.
- We are committed to working with our European partners, Government and industry stakeholders to seek to maximise outcomes under the TCA.

About Ofgem

- 1.1 Ofgem is the Office of Gas and Electricity Markets. We are a non-ministerial government department and designated Regulatory Authority in accordance with UK legislation. We work effectively with, but are independent of, government, the energy industry and other stakeholders within a legal framework determined by the UK government.
- 1.2 Our principal objective when carrying out our functions is to protect the interests of existing and future electricity and gas consumers. We do this in a variety of ways including; enabling competition and innovation which drive down prices and result in new products and services; protecting consumers, especially the vulnerable, stamping out sharp practice and ensuring fair treatment; decarbonising to deliver a net zero economy at the lowest cost to consumers.

Our response

- 2.1 This response focuses on the issues raised by the Committee that fall within our remit:
 - Functioning of interconnectors
 - Cross-border balancing
 - Cooperation mechanisms (including North Seas Energy Cooperation)
 - Linking of Emissions Trading System (ETS) schemes

Functioning of interconnectors

- 3.1 GB is interconnected to many of our neighbouring countries via both gas and electricity interconnectors. This cross-border energy market allows the system to be used more efficiently, enables competition, enhances security of supply and facilitates decarbonisation.

3.2 GB has gas interconnectors to the island of Ireland, Belgium and the Netherlands with a total entry capacity of 1300 GWh/day and total exit capacity of 1350 GWh/day¹. GB also has electricity interconnectors to the island of Ireland, France, Belgium and the Netherlands (with several other projects under development). There are currently 6GW of electricity interconnectors to connected markets, with a further 3.8GW under construction and more than 8GW of further projects under development.

Implications for electricity cross-border trade

3.3 Since the end of the transition period,² GB is no longer a member of the Internal Energy Market (IEM) which creates two main issues; 1) a loss of efficiency from no longer participating in implicit cross-border trade, and 2) the loss of a single day-ahead price in GB. Both of these were known consequences of leaving the IEM and therefore were not unanticipated.

3.4 Implicit trade is where electrical energy and interconnector capacity are bought at the same time and integrated into one calculation that determines both interconnector flows and market prices. Explicit allocation means that traders must purchase the capacity on the interconnector and the commodity product separately. Implicit allocation is a more efficient form of trade and flows will better reflect the price differences between connected markets. GB no longer has access to implicit single day-ahead coupling (SDAC) and single intraday market coupling (SIDC) arrangements with the EU. This is a form of 'price coupling' where a single centralised system calculates the market prices and traded volumes of electricity at the same time. As a result, GB's electricity interconnectors to continental Europe have switched to less efficient explicit day-ahead trading arrangements. Capacity on GB's interconnectors to the Irish Single Electricity Market (I-SEM) is allocated via implicit intraday auctions only.

3.5 The TCA looks to introduce a new form of implicit coupling in the day-ahead timeframe, in the form of 'Multi Region Loose Volume Coupling'. This is where the volume traded between bidding zones is calculated, then the prices are calculated separately. This new trading solution will be designed by Transmission System Operators (TSOs), with Ofgem having a role in providing formal opinions to the TSOs and the Specialised Committee on the technical proposals.

3.6 Leaving the IEM has removed the legal framework under which GB power exchanges³ shared order books to create a single day-ahead price in GB.⁴ As a result, when margins have been tight in GB this winter, we have seen some significant price divergences between the two GB power exchanges, Epex Spot and Nord Pool Spot, which we are continuing to monitor. This means the same energy product is being sold for different prices on the two power exchanges, which could lead to inefficiencies. This situation may be resolved in the meantime through the new day-ahead trading rules being developed under the TCA.

¹ Both entry and exit capacity figures are approximate.

² The transition period ended at 11pm 31 December 2020.

³ Designated as Nominated Electricity Market Operators under the EU Regulation on Capacity Allocation and Congestion Management (CACM) to perform tasks related to SDAC and SIDC.

⁴ This obligation came from the EU legislation on CACM which has been revoked as a result of leaving the IEM.

3.7 We welcome the framework under the TCA to deliver harmonised, more efficient trading arrangements. The substance of the new day-ahead trading arrangements will be developed in the coming months which will clarify the technical proposals and implications of the proposed arrangements. We are pleased that the TCA encourages the development of capacity calculation processes which ensure the UK and EU TSOs and interconnector flows are treated equally, and shall deliver robust and efficient outcomes for all relevant timeframes.⁵ The TCA also allows for additional harmonisation of trading rules in the long-term and intraday timeframes, which we consider important further developments, and would encourage these to be in place as soon as possible to further enhance today's arrangements. We will work closely with the relevant parties to deliver these arrangements.

3.8 There is a requirement under the TCA for the new trading solution to be in place by April 2022,⁶ which is a challenging timeline. However, we will work closely with the relevant parties to ensure that an economic and efficient trading solution can be delivered as quickly as possible.

Implications for current/future electricity interconnector investment

3.9 Electricity interconnectors will continue to play a key role in GB's future energy mix. The business models for electricity interconnector projects rely on stable and predictable rules that facilitate efficient cross-border trading. The majority of projects are joint ventures between multiple companies, including European TSOs, and all new projects require the cooperation of governments, regulators and grid companies to be developed. At the end of the transition period some of the overarching frameworks to enable investment at EU level fell away. These changes may reduce the options available to developers wanting to develop new projects between GB and the EU.

3.10 Notably, the process for requesting exemptions from EU rules has changed. The TCA does allow for exemption requests from rules relating to third party access and unbundling requirements to be assessed for projects between GB and the EU. These will now be assessed by Ofgem in GB (under retained UK legislation) and separately by regulatory authorities in connecting countries. Previously this assessment and decision-making process would have been joint between Ofgem and the relevant regulatory authority. The TCA also does not provide for exemption requests from rules relating to use of revenues, which would have previously been available prior to the end of the transition period (although this aspect has been retained in UK law under our domestic exemption request process). The TCA does, however, confirm that existing exemption decisions reached prior to the end of the transition period continue to apply.

3.11 GB projects are also no longer able to access the Investment Request process for a Cross-Border Cost Allocation decision, a process that sits under the European TEN-E Regulation. This framework is not contained in the TCA and has also not been retained in the relevant UK legislation. Whilst this was a potential

⁵ The forward market, day-ahead, intraday and balancing.

⁶ Part 2 of 'Annex-ENER4: Allocation of electricity interconnector capacity at the day-ahead timeframe' states that the entry into operation of technical procedures must be implemented within 15 months from when the TCA comes into force.

framework to enable joint decision-making between regulatory authorities, decisions on GB projects have rarely been made using this process.

- 3.12 The TCA sets a clear strategic intention for TSOs, regulators and governments to continue to cooperate to enable the development of new infrastructure.⁷ This will be viewed positively by existing and future interconnector developers. We will need to discuss this further with government and our European counterparts as we work to implement the provisions of the TCA.

Implications for multiple purpose interconnectors (MPIs)

- 3.13 Alongside the ongoing development of point-to-point interconnectors between GB and other European markets, there is also strong political, regulatory and industry interest in the potential development of MPIs, hybrid infrastructure which would enable the combined connection of interconnectors and offshore renewables (most notably offshore wind).
- 3.14 Article ENER.23 sets a clear obligation on UK and EU parties to 'cooperate in the development of offshore renewable energy by sharing best practices and, where appropriate, by facilitating the development of specific projects.' Whilst the TCA lacks detail on the mechanisms or frameworks that might be required, this is a positive signal for MPIs, in particular the commitment to enable the development of specific projects.
- 3.15 The North Seas region is likely to see a vast increase in offshore renewable generation and infrastructure as all countries aim to decarbonise energy supplies, and MPIs will be a key enabler of efficient development. We will continue to work with government, developers and European counterparts to consider the development of MPIs. More information is included in the North Seas Energy Cooperation section, below.

Implications for gas interconnectors

- 3.16 The TCA does not lead to a fundamental change in the way GB trades gas with Europe and the island of Ireland. It provides the basis for continued trade in gas with the neighbouring EU Member States. This means that the gas interconnectors remain obliged to ensure that maximum capacity is made available to the market. The interconnectors will continue to allocate capacity in a market-based, transparent and non-discriminatory way. The interconnectors will cooperate with other TSOs on technical matters as necessary.

Cross-border balancing

- 4.1 As it stands, legislation does not block GB participation in the EU standard balancing platforms⁸, but uncertainty over future arrangements is making industry parties unwilling to put resource into continuing development of their systems to be able to participate in them.

⁷ Paragraph 1 of ENER.16: *The Parties shall cooperate to facilitate the timely development and interoperability of energy infrastructure connecting their territories.*

⁸ The Trans European Replacement Reserves Exchange (TERRE) and Manually Activated Reserves Initiative (MARI).

- 4.2 The TCA does not impose requirements on cross-border balancing. However, it may be included on the agenda for future discussions on working arrangements and technical procedures.
- 4.3 The ideal outcome for GB would be to establish working arrangements and technical procedures that provide GB with access to the EU standard balancing platforms. Second to that would be to ensure that the working arrangements establish an efficient methodology for bilateral cross-border balancing between GB and directly connected countries.
- 4.4 In the near term, we would like to see procedures for cross-border balancing feature in the SCE's⁹ guidance on the working arrangements and technical procedures. This would enable TSOs to develop efficient arrangements and could potentially allow for access to standard balancing platforms if the EU does not actively prohibit GB use of them.

Cooperation mechanisms

- 5.1 The TCA calls for ongoing cooperation between public, regulatory and industry stakeholders in important areas like network development, security of supply and market abuse. It further underpins this by calling for formalised frameworks between UK and EU regulatory authorities, and between UK and EU TSOs, for cooperation on technical issues ranging from offshore grid development to gas decarbonisation.
- 5.2 We consider that extensive cooperation in the areas highlighted by the TCA is vital. It is not only essential due to our physical connections to our European counterparts, but also to support important strategic goals, and building better policy through coordination and knowledge-sharing. We are committed to working with colleagues in Europe via the prescribed fora in the TCA and otherwise. However, the extent of cooperation will ultimately depend on what other parties agree to. This will be unknown until specific agreements are in place and operational.

North Seas Energy Cooperation

- 5.3 The North Seas Energy Cooperation is a body for collaboration on the development of offshore renewable energy and related infrastructure. Ofgem was removed as a member when the UK left the EU.
- 5.4 Article ENER.23 of the TCA calls for the creation of a new cooperation forum for government, regulatory and industry stakeholders for technical discussions on topics including (but not limited to): hybrid and joint projects (i.e. MPIs); maritime spatial planning; support framework and finance; best practices on respective onshore and offshore grid planning; sharing of information on new technologies; exchange of best practices in relation to the relevant rules, regulations and technical standards.

⁹ Specialised Committee for Energy.

- 5.5 The UK government's Energy White Paper suggests ambitions to quadruple offshore wind capacity by 2030. Ofgem is working with Government to support further significant deployment of offshore wind, including on the Offshore Transmission Network Review, which considers the longer-term role of MPIs through the combination of offshore wind connections with links to neighbouring markets. We consider cooperation in the North Seas as vital for the development of hybrid and joint projects, and unlocking the potential of the grid.

Agency for the Cooperation of Energy Regulators (ACER)

- 5.6 ACER plays an important role in shaping the detailed rules of the IEM, and has some oversight of its implementation. ACER also has a specific role in implementing aspects of the TCA (eg providing opinion on the technical procedures proposed by UK and EU TSOs for the development of new cross-border electricity trading arrangements). Since the UK left the EU, Ofgem is no longer a member of ACER, and as a result no longer participates in the Board of Regulators nor the technical working groups.
- 5.7 The TCA calls for UK regulators to develop administrative arrangements for ongoing cooperation.¹⁰ Ofgem will work with UREGNI¹¹ to establish a cooperation framework with ACER that allows for a constructive relationship. This is important to deliver benefits to consumers that arise from interconnected energy systems. It will be vital to coordinate on cross-border trading arrangements, market abuse monitoring, and on key topics for the development of the future energy system (eg offshore renewable energy and gas decarbonisation).

Cross-border market monitoring and surveillance

- 5.8 The large amount of physical gas and electricity interconnection between GB and the EU means significant interaction between GB and EU wholesale energy markets. Therefore, it is in both our interests to cooperate on monitoring, and sharing, information regarding market manipulation and insider trading which are prohibited behaviours under REMIT.¹² Ofgem has enforcement powers, both civil and criminal, regarding breaches of this legislation.
- 5.9 Previously there was a clear framework for cooperation within REMIT where national regulatory authorities were obliged to share information regarding breaches in other markets via ACER. Cases into potential breaches of the legislation where multiple national markets were affected were coordinated via a case management tool hosted by ACER.
- 5.10 Since the UK ceased to be subject to EU law this framework for cooperation and information sharing no longer exists. The TCA with the EU contains 'Article ENER.20: Cooperation between regulatory authorities', which says that Ofgem and ACER should develop contacts and enter into administrative arrangements as soon as possible to facilitate cooperation, including on 'prevention of market

¹⁰ Article ENER.20. states this must at least cover electricity and gas markets; access to networks; prevention of market abuse on wholesale markets; security of supply; infrastructure planning; offshore energy; efficient use of interconnectors; cooperation between TSOs; and gas decarbonisation and gas quality.

¹¹ The Utility Regulator in Northern Ireland

¹² Regulation for Energy Market Integrity and Transparency; an EU regulation which has been retained in UK law

abuse on wholesale electricity and gas markets'. Ofgem would like these arrangements to be as comprehensive as possible.

- 5.11 Ofgem is currently looking in detail at possible legal barriers that may affect our ability to share information with ACER or other national regulators, and specifically whether legislation change may be advisable to help facilitate this.

ENTSO-E & ENTSOG

- 5.12 ENTSO-E¹³ and ENTSOG are the respective bodies for electricity and gas TSOs. The ENTSOs play a key role in facilitating technical cooperation between TSOs, as well as in relation to European network codes, and developing innovation.
- 5.13 The TCA requires that TSOs develop working arrangements to support what is required of them, such as the preparation of technical procedures for the new model for electricity trading. This includes devising a cooperation framework¹⁴ between UK TSOs and the ENTSOs.¹⁵ This framework will not constitute ENTSO-E or ENTSOG membership for UK TSOs.
- 5.14 Cooperation via the ENTSOs will facilitate the role of TSOs in further development of important infrastructure and offshore energy, and in developing the most efficient cross-border trading arrangements possible, as well as for underpinning our partnership with the EU in relation to security of supply.

Linking of emissions trading system (ETS) schemes

- 6.1 Ofgem is committed to the transition towards a net-zero economy at the lowest cost to our customers. Although our role does not come with decision-making power on carbon policies including the new UK ETS, we take a keen interest in the development of the UK ETS as it plays a key role in delivering the UK's emission reduction targets and impacts the development of GB's gas and electricity markets.
- 6.2 A UK-only ETS scheme allows the UK to set its own allowances that can be aligned with the net-zero target. However, there are several risks the UK ETS could pose to electricity generators in GB in the short-term. Due to the much smaller size of the UK ETS compared to emissions covered by the EU ETS, market participants have expressed concerns over market liquidity.¹⁶ Conversely, a UK-only ETS gives the UK more ability to set the overall cap level and make it compatible with net zero.
- 6.3 The UK government is currently assessing options to link the UK ETS with international schemes, including the EU ETS. Under such an arrangement, allowances are recognised across markets to enable trading. This will result in

¹³ ENTSO is the European Network of Transmission System Operators.

¹⁴ The cooperation framework should cover, but is not limited to, electricity and gas markets, access to networks, security of supply, offshore energy, infrastructure planning, efficient use of interconnectors, gas decarbonisation and gas quality.

¹⁵ As required under Article ENER.19

¹⁶ Theoretically, the bigger the pool of participants, the bigger the potential for emission reductions and so the greater the chance of finding the cheapest carbon abatement route.

equalisation of carbon prices, which will likely be determined by the EU ETS scheme due to its volume. The UK cap would need to consider the EU market, potentially limiting UK's ability to quickly decarbonise. It is therefore important that the UK continues to engage with the EU regarding decarbonisation policies to ensure the UK ETS delivers the decarbonisation of the power sector securely and at low cost under all scenarios. In principle, we support linking with other ETS schemes, as long as they have an emissions cap determined by a pathway to net zero.