United Kingdom

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1 Policy and law

What is the government policy and legislative framework for the electricity sector?

Government policy

Following the UK's decision on 23 June 2016 to exit the EU a degree of uncertainty in terms of UK electricity sector policy has arisen. The EU referendum was also followed by the consolidation of the Department for Energy and Climate Change (DECC) and the Department for Business and Innovation to create the Department for Business, Energy and Industrial Strategy (BEIS).

Prior to its consolidation, DECC's main objectives were ensuring the UK had a secure and resilient energy system, keeping energy bills low for consumers, securing action on climate change and reducing carbon emissions. The UK's ageing energy infrastructure, combined with the policy to close all unabated coal-fired power stations by 2025 means that security of supply is an increasing concern. It is estimated that up to 200 TWh of new electricity generation will be needed in the 2020s to replace energy generation from retiring coal and nuclear plants and to meet the forecast increases in demand.

The new Secretary of State for Business, Energy and Industrial Strategy announced in July 2016 that BEIS will deliver a 'comprehensive industrial strategy ... delivering affordable, clean energy and tackling climate change'. An inquiry was launched to gather evidence on which policy areas should be prioritised as the UK continues to negotiate its exit from the EU. In January 2017, the government reported three major challenges for energy policy that BEIS's strategy will address: (i) ensuring the shift to a low-carbon economy is done in a way that minimizes cost to UK businesses, taxpayers and consumers; (ii) for the government – working with energy industries and regulators – to manage the changes required to energy networks in the transition to a low-carbon economy; and (iii) to make sure the UK capitalises on its strengths in the energy industry to win a substantial share of global markets.

The Electricity Market Reform (EMR) introduced in the Energy Act 2013 has been at the centre of the government's implementation of UK energy policy. The EMR introduced two significant changes to the electricity wholesale market: (i) contracts for difference to encourage lowcarbon generation (replacing the Renewables Obligation); and (ii) the capacity market which seeks to ensure that there is sufficient capacity available in times of high demand. The EMR also introduced the emissions performance standard (EPS) which limits the amount of carbon dioxide fossil fuel power plants can emit each year and the carbon price floor (CPF). The CPF imposes a tax on fossil fuels used for generation.

Contracts for difference (CfD)

CfDs are private law, long-term, bilateral contracts between a renewable electricity generator and the Low Carbon Contracts Company (LCCC) (a government-owned limited liability company). Under a CfD, the generator sells electricity into the market as usual. If the calculated market reference price is below a pre-agreed 'strike price', the LCCC pays the generator the difference between the market reference price and the strike price. If the market reference price is above the strike price, the generator will be required to pay the difference to the LCCC. This mechanism effectively neutralises price volatility for the duration of the CfD although the generator still needs to sell its power in the market. The costs of CfDs are funded through a levy on electricity suppliers. Any payments received by the LCCC from the generators are ultimately returned to electricity suppliers.

CfDs are allocated through a competitive auction process, with renewable technologies divided into groups, depending on their maturity. The CfD budget is allocated to each technology group and the renewable energy projects compete against other projects within the group for allocation of CfDs. The first CfD auction was held in February 2015.

The second CfD allocation round was held in April 2017 with a budget of £290 million designated for projects with a delivery date set in 2021/22 and 2022/23. Certain renewable technologies, including onshore wind and solar PV, which were previously eligible for CfD support in the first CfD auction, have been excluded from the list of renewable technologies eligible for CfD support and consequently were not eligible to participate in the second CfD allocation round. In the 2016 Budget, it was announced that £730 million will be allocated to CfDs in this parliamentary term, which runs until 2020, although no details of amounts earmarked for individual allocation rounds (other than the second allocation round) are currently available.

In addition, in order to promote availability of power-purchase arrangements for CfD generators, the government introduced an 'offtaker of last resort' (OLR) scheme, which facilitates a 'backstop'/ last-resort power-purchase agreement between a CfD generator and a supplier through a competitive auction process.

Capacity market

The capacity market is the main mechanism by which the government seeks to ensure uninterrupted electricity supply. It offers payments to generators for being available to generate power during times of system stress. The third T-4 capacity auction was held in December 2016 and approximately 52GW of capacity was awarded for delivery in 2020/21. Combined-cycle gas turbine plants were the main beneficiaries, taking 43 per cent of the total capacity awarded. Interconnectors participated in the capacity auction for the second time.

The capacity market also offers payments to demand side response (DSR) providers for reducing demand at times of peak demand. The DSR providers participate in a separate, transitional capacity auction as DSR is seen as too immature a technology at present to compete in the main capacity market auction with other more established technologies.

The second transitional capacity auction for delivery of capacity in 2017/18 concluded on 22 March 2017 and procured over 0.3GW of capacity. As a result of tumbling commodity prices and the quickening pace of plant closures in the UK, National Grid ordered an early auction in late 2016 as forecasts for electricity supplies for the 2017/2018 winter season showed tighter supply margins during November and December 2017 than those seen in 2016. The early capacity market auction concluded on 3 February 2017 and procured 54.4GW of capacity for delivery in 2017/18. The government will target 50.1GW of capacity in the next T-4 capacity auction, scheduled to begin 6 February 2018 for delivery of capacity in 2021/22 (commencing 1 October 2021). Additionally, a one-year-ahead capacity auction will commence 30 January 2018 and target 6GW of capacity for delivery in 2018/19 (commencing 1 October 2018).

Legislative framework

The main electricity sector legislation in England, Wales and Scotland includes the Electricity Act 1989 (most recently amended by the

Electricity and Gas (Internal Markets) Regulations 2017 (S.I. 2017/493) that came into force on 24 April 2017), Utilities Act 2000, Energy Act 2004, Energy Act 2008, Energy Act 2010, Energy Act 2011, Energy Act 2013 and Energy Act 2016. The key provisions of the Energy Act 2016 came into force on 1 October 2016 and provide, inter alia, for the closure of the Renewables Obligation Scheme for onshore wind generators. The Climate Change Act 2003, Competition Act 1998, Enterprise and Regulatory Reform Act 2013 and Infrastructure Act 2015 are also applicable to the UK electricity sector.

Key legislation applicable to the electricity sector in Northern Ireland includes the Electricity (Northern Ireland) Order 1992, the Energy (Northern Ireland) Order 2003 and the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007.

Various European Union (EU) legislation also applies to the UK energy sector either as a result of the principle of direct effect or from having been implemented into domestic legislation.

EU Referendum 2016

On 23 June 2016, the UK voted to leave the EU. On 29 March 2017, the UK prime minister served a formal notice under article 50 of the Treaty of Lisbon to commence the exit process, and the UK now has until midnight on 29 March 2019 (unless all member states agree to extend the period, or an agreement is reached sooner which is considered unlikely) to seek to agree the terms of the UK's exit. At the time of writing, there remains significant uncertainty over the future relationship between the UK and the EU.

It is unlikely that the vote to leave the EU will result in an immediate overhaul of UK electricity policy and legislation as the UK will continue to be an EU member state during the transition period. As a result, any EU regulations will continue to have direct effect and any domestic legislation implementing EU legislation will remain in force.

However, the post-Brexit legislative framework is likely to be shaped by the UK's relationship with the EU, and in particular whether the UK remains a member of the European Economic Area (EEA). If the UK remains a member of the EEA, it will still have access to the Internal Energy Market (IEM) and need to comply with EU legislation with EEA relevance. If the UK is outside the EEA, then it may not automatically benefit from the IEM and any amendments or revocations of domestic legislation will be driven by policies of the post-Brexit government, without reference to EU legislation. It is worth noting that the UK's departure from the EU will have implications on certain existing arrangements. For example, if the UK is outside the EEA, then the UK may no longer be able to participate in the EU Emissions Trading System (EU ETS) and transitional arrangements will need to be put in place for any UK participants that have a surplus or shortage of emission allowances.

On 21 June 2017, the Repeal Bill was announced which will repeal the European Communities Act (1972), ending the supremacy of EU law in the UK and transferring EU law onto the UK statute book. The government will convert the 'acquis', the body of European legislation binding on all EU member states, into UK law at the same moment the European Communities Act is repealed, so that the same rules and laws will apply on the day after the UK exits the EU as on the day before. It will then be for the government to decide on any changes to that law, after full parliamentary scrutiny and debate. The Repeal Bill was published under its official title of the European Union (Withdrawal) Bill on 13 July 2017 and is expected to complete its passage through Parliament well before the UK leaves the EU.

2 Organisation of the market What is the organisational structure for the generation, transmission, distribution and sale of power?

Under the Electricity Act 1989, a licence from the Gas and Electricity Markets Authority (GEMA) is required for the generation, transmission, distribution or supply of electricity, and for interconnection operation and the provision of smart metering services. GEMA's day-to-day functions are delegated to the Office of Gas and Electricity Markets (Ofgem). Ofgem's main role is to protect the interests of consumers by promoting competition where appropriate. Ofgem issues companies with licences to carry out activities in the electricity sector, sets the levels of return which the monopoly network companies can make and decides on changes to market rules. Applicants for licences must submit a written application and pay the relevant fee to Ofgem, which grants licences to successful applicants and determines the conditions of the licences. Exemptions from the requirement to hold a licence may be available for small-scale generators, distributors and suppliers meeting specific conditions. A supply licence holder, distribution licence holder or a transmission licence holder may supply, distribute or transmit electricity respectively to any area or in an area specified in their licence. There are certain restrictions on the types of licences an entity may hold – for example, one entity cannot hold a distribution and either a generation or supply licence and an interconnector licence holder cannot hold a generation, transmission, distribution or a supply licence.

A licence holder must comply with the conditions of its licence and various industry codes and standards, such as the Balancing and Settlement Code, the Grid Code and the Distribution Code.

Regulation of electricity utilities - power generation

3 Authorisation to construct and operate generation facilities What authorisations are required to construct and operate generation facilities?

The construction or extension of an onshore generation facility (save for wind generation facilities) located in England and Wales with a capacity of over 50MW requires consent from the Secretary of State for Energy and Climate Change under section 36 of the Electricity Act 1989 (s. 36 consent). A s. 36 consent application must be in writing and include a description, by reference to a map of the land on which the generating facility is to be constructed. In addition, the development of an onshore generation facility (save for wind generation facilities) will typically be classified as a 'nationally significant infrastructure project' (NSIP) under the Planning Act 2008. A development consent order (DCO) from the Secretary of State is required for development of a NSIP. Applications for a DCO are examined by the Planning Inspectorate, who will make recommendations to the Secretary of State. A DCO is a combination of various consents required and will include a s. 36 consent and other ancillary consents, such as planning permission - therefore, to the extent that a DCO has been obtained, there is no requirement for the developer to obtain a separate s. 36 consent or planning permission. The policies by which decisions on energy infrastructure projects should be made are stated in the National Policy Statements. Construction of onshore generation facilities in England with a capacity of less than 50MW may require planning permission from the relevant local planning authority under the Town and Country Planning Act 1990. Construction of onshore generation facilities in Wales with a capacity of between 10MW and 50MW are developments of national significance (DNS) and are decided by Welsh Ministers.

The Energy Act 2016 together with the Infrastructure Planning (Onshore Wind Generating Stations) Order 2016 (S.I. 2016/306) removed onshore wind farms of over 50MW in size from the NSIP regime and returned the decision-making powers to local planning authorities, which already have responsibility for granting planning permission for onshore wind farms of 50MW or less. In addition, the Onshore Wind Generating Stations (Exemption) (England and Wales) Order 2016 (S.I. 2016/21) as amended by the Onshore Wind Generating Stations (Exemption) (Order 2016 (S.I. 2016/21) as amended by the Onshore Wind Generating Stations (Exemption) (England and Wales) (Amendment) Order 2016 (S.I. 2016/450) also removed the requirement for a s. 36 consent in relation to onshore wind generation facilities. Onshore wind projects in Wales over 10MW are a DNS and are decided by Welsh Ministers.

The construction or extension of an offshore generation facility with a capacity of over 100MW is also classified as a NSIP and consequently a DCO will be required. Consent from the Marine Management Organisation (MMO) is required for the construction of offshore generating stations with a capacity of more than 1MW but less than or equal to 100MW. A developer may also need to obtain a declaration removing or suspending public rights of navigation that pass through the generating station. Offshore projects in Welsh territorial waters and in the Welsh Zone with a capacity up to and including 350MW will be subject to s. 36 consent from Welsh Ministers once the relevant provisions of the Wales Act 2017 come into force.

For generation facilities located in Scotland with a capacity of over 50MW, an application to the Scottish Ministers (the Energy Consents and Deployment Unit) is required, while consent must be obtained from the relevant local planning authority for generation facilities with a capacity of less than 50MW. A marine licence from Marine Scotland Licensing Operations Team is required for a developer to carry out certain activities in Scottish waters, including marine construction works associated with offshore generating stations.

4 Grid connection policies

What are the policies with respect to connection of generation to the transmission grid?

National Grid Electricity Transmission plc (National Grid) owns and operates the high-voltage electricity transmission network in England and Wales and operates the system in Scotland. In England and Wales, generators with a capacity of at least 100MW may be connected to the transmission system, with smaller plants being connected directly to the lower voltage distribution network. In Scotland smaller generators may be directly connected to the transmission grid.

Generators applying to connect directly to the transmission system must complete a connection application form, provide technical data and pay the relevant application fee. National Grid is required to make offers to generators requesting connection to the transmission system which if accepted, will result in the parties entering into a bilateral Connection Agreement and the generator will have to comply with various industry codes. Pursuant to the terms of its transmission licence, National Grid must maintain a number of codes to govern the relationship between the electricity industry participants and the transmission grid operator, including:

- the Connection and Use of System Code, which sets out the rights and obligations in relation to connection to and/or use of the transmission system;
- the Balancing and Settlement Code, which contains rules for the electricity balancing mechanism;
- the Grid Code, which contains rules related to planning, operation and use of the electricity transmission network; and
- the System Operator Transmission Owner Code, which sets out the roles and responsibilities of National Grid as the operator of the electricity transmission network and the owners of the transmission assets.

5 Alternative energy sources

Does government policy or legislation encourage power generation based on alternative energy sources such as renewable energies or combined heat and power?

The CfD mechanism aims to encourage and support investment in renewable electricity generation by providing a stable revenue stream for renewable generators. The Renewables Obligation (RO) Scheme, which previously was the main mechanism for incentivising renewable generation is being phased out and will ultimately be replaced by CfDs. Under the Renewables Obligation Closure Order 2014 (S.I. 2014/2388), the RO Scheme (including the Renewables Obligation Scotland (ROS) and the Northern Ireland Renewables Obligation (NIRO)) closed to new generators on 31 March 2017 and will close completely in 2037. The government has introduced early closure of the RO Scheme for certain technologies, including new solar photovoltaic (PV) projects and new onshore wind projects. The closures do not affect capacity with an accreditation date on or before the relevant closure date and generators can gain entry to the RO scheme after these closures for specified amounts of time, if they are eligible to apply for a grace period - the availability of which differs across England and Wales, Scotland and Northern Ireland.

- Other measures to encourage renewable generation include: • feed-in tariffs, which provide financial incentives for small-scale,
- low-carbon electricity generators with a capacity of 5MW or less; and
 renewable heat incentive, which pays a tariff to participants to install eligible renewable technologies to heat buildings.

6 Climate change

What impact will government policy on climate change have on the types of resources that are used to meet electricity demand and on the cost and amount of power that is consumed?

Pursuant to the Climate Change Act 2008 (CCA 2008), the UK government has a legally binding target of an 80 per cent reduction in The UK is currently in the second carbon budget period which requires the UK to reduce emissions by 29 per cent as compared to the 1990 baseline by the end of 2017. On 30 June 2016, the government set the fifth carbon budget of 1,725 million tonnes of carbon dioxide equivalent (equivalent to 56.9 per cent below 1990 levels) for 2028-2032 and the relevant legislation, the Carbon Budget Order 2016 (S.I. 2016/785), came into force on 21 July 2016. If the UK leaves the EU ETS, the fifth carbon budget may be revised upwards in order for the UK to remain on a cost-effective path to meeting its target of an 80 per cent reduction in greenhouse gas emissions by 2050. In addition, the UK is a signatory to the 2015 UN Climate Change Agreement (the Paris Agreement), which requires parties to work together to limit the increase in global average temperature to below 2°C above pre-industrial levels.

Ofgem recognises that electricity system flexibility will play a key role in meeting climate change commitments as well as providing a reliable and uninterrupted supply of electricity. In particular, Ofgem highlighted the following mechanisms for improving electricity system flexibility:

- DSR mechanisms, where consumers receive rewards for changing how and when they use electricity;
- energy storage, eg, batteries; and
- distributed generation where low-carbon electricity is generated locally thereby reducing the costs of transporting power across the transmission system.

7 Storage

Does the regulatory framework support electricity storage including research and development of storage solutions?

Much of the UK's regulatory framework was formulated prior to the development of electricity storage technology. As a result, there are certain features which may deter investment in and deployment of electricity storage in the UK, for example, electricity storage is treated as a form of electricity generation and as such, operation of electricity storage requires a generation licence (unless an exemption applies). Other licensed operators, such as distribution licence holders, are restricted from holding a generation licence and therefore from operating electricity storage. The requirement for electricity storage operators to hold a generation licence imposes an additional administrative burden on such operators as they are required to abide by all the regulations and codes that apply to electricity generators.

The current regulatory regime also treats electricity storage operators not only as electricity generators but also as consumers, resulting in increased costs for electricity storage operators as they are charged twice for using the electricity grid (once as a consumer when electricity is taken from the grid for storage and again as a generator when exporting electricity to the grid). Storage operators also face double-charging of various government levies to fund low-carbon incentive schemes, which levies are themselves added to electricity costs.

Various industry bodies have stressed that electricity storage should play a key role in combatting a number of the challenges faced by the UK electricity system. Ofgem recognises the uncertainty surrounding the regulatory treatment of electricity storage and has called for a review of the relevant regulation. The government has also committed to working together with Ofgem to deliver greater regulatory clarity for electricity storage in its response to the National Infrastructure Commission's Report of March 2016. It is expected that any regulatory reforms will be implemented in the second half of 2017.

In July 2017 the government announced that it will invest £246 million in research and innovation in battery storage technology, and BEIS and Ofgem jointly unveiled a new Smart Systems and Flexibility Plan that includes strong policy support for energy storage. The £246 million investment is a substantial injection into the UK's energy storage sector and will help catalyse the scale-up of new energy storage technologies in the UK. It is also a strong statement of intent from the UK government that energy storage will form a core part of UK industrial and energy strategy in the years ahead.

8 Government policy

Does government policy encourage or discourage development of new nuclear power plants? How?

There are no direct public subsidies for the nuclear industry but nuclear generation is potentially eligible for any general measures designed to encourage low-carbon generation, including CfDs. In addition, nuclear power may participate in capacity market auctions. The CfD for the UK's first nuclear power plant since the 1990s, Hinkley Point C nuclear power plant, was signed on 29 September 2016 marking a step towards a new era of nuclear power in the UK. The target is for the new Hinkley Point C plant to be producing electricity by 2025, but development of the nuclear plant continues to be beset with delays. If and when built, the Hinkley Point C plant is expected to provide 7 per cent of the UK's electricity for almost 60 years.

Regulation of electricity utilities - transmission

9 Authorisations to construct and operate transmission networks

What authorisations are required to construct and operate transmission networks?

We note that the same consent regime applies for construction of transmission and distribution assets. The authorisations required to construct transmission or distribution networks depends on the type and location of the transmission or distribution assets.

Under section 37 of the Electricity Act 1989, consent from the Secretary of State (s. 37 consent) is required to install an electric line above ground unless the electric line has a nominal voltage of less than 20kV and is used for supplying a single customer or if the electric line is within the premises either occupied or controlled by the person responsible for installation. An application to the Secretary of State must be in writing and include information such as a description, by reference to a map, the land across which the electricity line is to be constructed, the length and nominal voltage of the proposed line, whether all necessary wayleaves have been agreed and any additional information as directed by the Secretary of State. In addition, if the overhead electric line is to be constructed over, along or across a highway, consent from the relevant highway authority will be required.

In England and Wales, overhead electric lines with a nominal voltage of 132kV or more are considered to be a NSIP and a DCO from the Secretary of State is required, unless certain exemptions apply. A DCO will include the s. 37 consent and other ancillary consents such as planning permission. Consents from the Environment Agency and local drainage boards and other ancillary consents may also be included in an application for a DCO with the agreement of the relevant authorities.

Under the Town and Country Planning (General Permitted Development) Order 1995, certain works on the transmission network (such as installation of underground electricity cables) may be classified as a 'permitted development' and no planning permission is necessary.

In addition to consents from authorities, if the transmission or distribution infrastructure crosses privately owned land, it may be necessary to enter into easement agreements with the relevant landowners.

The MMO, National Assembly Wales, Marine Scotland and the Department of the Environment for Northern Ireland are the relevant planning authorities for territorial waters. A marine licence may be required for laying power cables within UK territorial waters (up to 12 nautical miles). Whilst laying power cables outside UK territorial waters does not require a marine licence, associated works may require one.

A transmission licence is required for the operation of a transmission network. National Grid owns and operates the transmission system in England and Wales and operates the system in Scotland. Northern Ireland Electricity Networks Limited owns the main transmission and distribution system in Northern Ireland.

10 Eligibility to obtain transmission services

Who is eligible to obtain transmission services and what requirements must be met to obtain access?

Generators must have a capacity of at least 100MW to be directly connected to the transmission system in England and Wales. Smaller

generators may be eligible to connect to the transmission system in Scotland. To obtain connection to the transmission grid, a generator must complete a connection application form, provide the relevant technical data, pay an application fee and sign a bilateral Connection Agreement and adhere to the various industry codes including the Connection and Use of System Code, which sets out the contractual framework for connection to and use of transmission services.

11 Government transmission policy

Are there any government measures to encourage or otherwise require the expansion of the transmission grid?

DECC and Ofgem created a Smart Grid Forum to identify the future challenges for electricity networks and to encourage the development of smart grids to facilitate low-carbon generation.

The UK government has also established a competitive offshore transmission regulatory regime administered by Ofgem, under which licences to operate offshore transmission infrastructure are granted following a competitive tender process.

Ofgem plans to build on the competitive tender for offshore transmission assets and introduce a competitive tender process for new, high value onshore transmission assets to further reduce costs and encourage innovation. As legislation related to the UK's exit of the EU looks set to dominate the parliamentary timetable, Ofgem believes an opportunity to implement legislation underpinning the competitive tender process in the immediate future is unlikely. It is anticipated that Ofgem will take forward further development of the onshore competitive tendering process once there is greater clarity on timing of enabling legislation.

Owners of transmission assets have a duty to develop and maintain an efficient transmission network and there are limits on the maximum revenue that a transmission system operator can recover. To ensure that the limits on revenue do not hinder investment in new projects, Ofgem has various schemes in place - for example, the Strategic Wider Works (SWW) programme which allows owners of transmission assets to bring forward additional large investment projects. Ofgem reviews any proposals for SWW and determines whether there is a need for reinforcement works and if the plans are likely to deliver long term value for money for customers. Ofgem has approved funding for three SWW projects since April 2013. In addition, Network Innovation Allowance provides funding to RIIO (Revenue = Incentives + Innovation + Outputs) network licensees for the annual Electricity Network Innovation Competition, which is administered by Ofgem and encourages electricity network companies to compete for funding for development of innovative grid improvement projects.

12 Rates and terms for transmission services

Who determines the rates and terms for the provision of transmission services and what legal standard does that entity apply?

There are three types of charges payable to National Grid by users of transmission systems:

- connection charges (charges to cover the costs of providing and maintaining connection assets which are required to connect an individual user to the transmission system);
- transmission network use of system charges (charges reflecting the cost of building, operating and maintaining shared electricity transmission assets); and
- balancing services use of system charges (relates to the costs of day-to-day operation of the transmission system, including costs related to balancing of the electricity system and constraining generation).

Pursuant to the conditions of its licence, National Grid is required to prepare the charging methodologies which themselves must be approved by Ofgem. The charging methodologies are set out in the Connection and Use of System Code. The charges are calculated according to the relevant methodology and are updated regularly and publicised in a charging statement. National Grid is responsible under its transmission licence to ensure that the charging methodologies are up to date. The charging methodologies are designed to enhance stability and predictability of the transmission charges, to encourage competition in the electricity sector and to reflect costs of operating the grid.

Ofgem is responsible for setting price controls for transmission companies and uses a performance-based framework - the current price control, RIIO-T1 (Revenue = Incentives + Innovation + Outputs), is in place until 2021 and is designed to encourage efficient investment and innovation to reduce network costs. On 12 July 2017, Ofgem issued an open letter on the RIIO-2 framework, marking the beginning of the process to develop new and tougher price controls. Ofgem stated in the letter that the overarching objective for RIIO-2 will be to 'ensure regulated network companies deliver the value for money services that consumers want and need'. Stakeholders were requested to submit their views on the proposals for the RIIO-2 framework as set out in the open letter by 4 September 2017, and Ofgem is expected to issue a consultation document on the proposed new price control structure in Q1 2018 and publish its final decision on the RIIO-2 framework in Q2 2018. Currently it is anticipated that the RIIO-2 price control framework, as it applies to electricity transmission networks, will come into force when the current set of price controls for electricity transmission networks ends on 31 March 2021.

13 Entities responsible for grid reliability Which entities are responsible for the reliability of the transmission grid and what are their powers and responsibilities?

Ofgem can use its powers to regulate the activities of transmission grid operators and set price controls. A transmission licence holder has a statutory obligation to develop and maintain an efficient, coordinated and economical system of electrical transmission and to facilitate competition in the supply and generation of electricity. In addition, both offshore and onshore transmission licensees must abide by the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS), which is a set of standards to be used when planning and operating the transmission system. National Grid and Ofgem have the power to grant derogations from the obligation to comply with certain requirements under the NETS SQSS.

Regulation of electricity utilities - distribution

14 Authorisation to construct and operate distribution networks

What authorisations are required to construct and operate distribution networks?

Authorisations required to construct distribution networks are discussed in question 9.

A distribution licence is required for the operation and maintenance of a distribution network.

15 Access to the distribution grid

Who is eligible to obtain access to the distribution network and what requirements must be met to obtain access?

Section 16 of the Electricity Act 1989 provides that an electricity distributor must make a connection between the distribution grid and any premises (including providing the electric lines as necessary to enable the connection), when required by the owner or occupier of such premises or an authorised supplier acting with consent of the owner or occupier. Transmission system operators and distribution system operators must, in accordance with their respective licence conditions, provide equal access to third parties.

The Electricity (Connection Charges) Regulations 2017 (S.I. 2017/106) came into force on 6 April 2017 and regulate the costs of electrical connections where a person (a 'second comer') obtains a connection to premises or a distribution system which makes use of electric lines or electrical plant previously provided for the purpose of giving a connection to other premises or another distribution system. In cases where all or part of the cost of the first connection has been paid for by other persons, the Regulations require the relevant electricity distributor to recover an amount from the second comer and to apply that amount, less administrative expenses, to reimburse the persons who paid for the first connection. The obligation to make a reimbursement payment applies in cases where a first connection was made on or after 6 April 2017.

16 Government distribution network policy

Are there any governmental measures to encourage or otherwise require the expansion of the distribution network?

Distribution licence holders are under a statutory duty to develop and maintain an efficient, coordinated and economical system of electricity distribution and to facilitate competition in the supply and generation of electricity.

Electricity distributors can participate in the annual Electricity Network Innovation Competition administered by Ofgem, where electricity network companies compete for funding for development projects that improve the electricity network. Distribution Network Operators (DNOs) also operate under a price control framework.

17 Rates and terms for distribution services

Who determines the rates or terms for the provision of distribution services and what legal standard does that entity apply?

Ofgem operates a price control regime for distribution network operators. The current price control framework for DNOs, RIIO-ED1, is based on the RIIO model and limits the revenues DNOs can collect until 31 March 2023. Currently it is anticipated that the new RIIO-2 price-control framework, as it applies to electricity distribution networks, will come into force when the current set of price controls for electricity distribution networks ends on 31 March 2023.

Regulation of electricity utilities - sales of power

18 Approval to sell power

What authorisations are required for the sale of power to customers and which authorities grant such approvals?

An electricity supplier must hold a supply licence from Ofgem prior to the sale of power to customers. A supply licensee must, among other things, adhere to various industry codes (such as the Balancing and Settlement Code and the Smart Energy Code). Suppliers must also enter into a Master Registration Agreement with electricity distribution companies which governs the process for the transfer of customers between suppliers.

19 Power sales tariffs

Is there any tariff or other regulation regarding power sales?

Electricity prices are set by electricity suppliers although there are provisions in the Energy Act 2013 that allow the Secretary of State to modify conditions of supply licences to ensure consumers obtain the cheapest tariffs from their electricity supplier – for example, the Secretary of State may require the supply licensee to adopt one or more standard domestic tariffs, or restrict the number of domestic tariffs (or domestic tariffs of a particular category) that a supply licensee may adopt.

On 26 June 2014, GEMA referred the energy market in Great Britain to the Competition and Markets Authority (CMA) following a review of competition in the retail energy market. The CMA's investigations concluded on 24 June 2016. It found that limitations on suppliers' tariffs (such as a ban on complex tariff structures and restrictions on discounts suppliers can offer) are hindering competition and recommended that Ofgem remove the relevant conditions in the electricity supply licences. The CMA called for electricity suppliers to provide details of domestic customers who have been on a default tariff for over three years to create an Ofgem-controlled database that can be disclosed to rival suppliers, who will be able to contact such customers to offer cheaper rates tailored to their individual energy usage. Domestic customers would have the option to opt out at any time. Ofgem will oversee access to information, including compliance with data protection legislation, to ensure that consumers benefit from better tariffs and increased competition.

Ofgem is currently considering a tariff cap or 'safeguard tariff' of sorts to offer extra protection for customers on the poorest-value tariffs in the UK. At the time of writing it is not clear whether or not this will take the form of an extension of the price cap currently in place for customers on pre-payment meters, which was implemented following the conclusion of the CMA's investigation in 2016, as discussions are ongoing; however Ofgem have stated that there is a 'strong possibility' that this will be the form of the new energy price cap.

20 Rates for wholesale of power

Who determines the rates for sales of wholesale power and what standard does that entity apply?

Rates for sale of wholesale power are determined by market forces.

21 Public service obligations

To what extent are electricity utilities that sell power subject to public service obligations?

The Energy Companies Obligation (ECO) is a government scheme administered by Ofgem E-Serve and is aimed at helping to reduce carbon emissions and fight fuel poverty. Very broadly, the ECO requires supply licensees with over 250,000 domestic customers to deliver energy efficiency measures to domestic premises according to their relative share of the gas and electricity market. Such measures will include, for example, installing home insulation, promoting connections to district heating systems in areas of low income and making it easier for low income households to heat their homes. The ECO scheme began in 2013 and was most recently amended in 2017 to create a more simplified and targeted scheme (ECO2t) that applies to measures installed between 1 April 2017 and 30 September 2018.

In addition, if an electricity supplier fails and Ofgem revokes the relevant supply licence, Ofgem may direct any other electricity supplier to take over the failed supplier's customers as a supplier of last resort.

Regulatory authorities

22 Policy setting

Which authorities determine regulatory policy with respect to the electricity sector?

DECC was formed in 2008 to focus on setting policies and implementing legislation with respect to energy and climate change. In July 2016, DECC's functions were transferred to the newly created BEIS with the Secretary of State for Business, Energy and Industrial Strategy overseeing BEIS' functions.

The Department for Economy is responsible for energy policy in Northern Ireland in relation to certain devolved matters concerning energy.

GEMA is an independent body with primary responsibility for regulation of the energy sector – its members are appointed by the Secretary of State. It can determine regulatory policy within the boundaries set out in various enabling legislation. The Energy Act 2013 includes powers for the Secretary of State to prepare a strategy and policy statement, setting out matters such as strategic priorities of the government when determining energy policy and the roles and responsibilities of persons who are involved in the implementation of the policy. GEMA is required to consider these strategic priorities when carrying out its regulatory functions.

GEMA's day-to-day functions are delegated to Ofgem and GEMA oversees Ofgem's work and provides strategic direction. The Utility Regulator for Northern Ireland is Ofgem's counterpart in Northern Ireland.

23 Scope of authority

What is the scope of each regulator's authority?

The Electricity Act 1989 sets out the principal objective and general duties of GEMA. GEMA's powers are largely set out in statute, such as the Competition Act 1998, Utilities Act 2000, Enterprise Act 2002 and Energy Acts 2004, 2008, 2010, 2011 and 2013. It also has powers under directly effective EU legislation and it is required to carry out its functions in a manner compliant with any binding decisions of the Agency for the Cooperation of Energy Regulators and of the European Commission.

Subject to the Enforcement Guidelines, GEMA can conduct investigations into breach of licence conditions and/or legislation. GEMA also has the power to require disclosure of information and impose fines and enforcement orders.

24 Establishment of regulators

How is each regulator established and to what extent is it considered to be independent of the regulated business and of governmental officials?

GEMA was established under section 1 of the Utilities Act 2000 to regulate the UK's gas and electricity markets. GEMA delegates its functions to Ofgem, which operates independently from the government and participants in the electricity sector.

The CMA was established under the Enterprise and Regulatory Reform Act 2013 (ERRA 2013). It is an independent non-ministerial department which promotes competition for the benefit of consumers within and outside the UK.

The Office for Nuclear Regulation is an independent statutory body, which was created by the Energy Act 2013. It is responsible for ensuring nuclear safety in the UK.

25 Challenge and appeal of decisions

To what extent can decisions of the regulator be challenged or appealed, and to whom? What are the grounds and procedures for appeal?

It is possible to challenge or appeal GEMA's decisions. The route for challenge will depend on the nature of the decision but some of the main routes are as follows:

- Section 11C of the Electricity Act 1989 allows a licence holder to appeal to the CMA against GEMA's decision to modify licence conditions - the licence holder will need to obtain permission from the CMA in order to bring an appeal. Depending on the nature of the decision that is the subject of the appeal, the CMA may, among other things, quash the decision or require GEMA to reconsider the matter in accordance with any directions from the CMA.
- A licence holder may challenge a provisional or final decision of GEMA on the grounds that such decision was not within the powers conferred on GEMA under the Electricity Act 1989 or that relevant procedural requirements have not been followed. Such a challenge is brought by making an application to the High Court (or the Court of Session in Scotland) under section 27(1) of the Electricity Act 1989 within 42 days of the date of service of the decision.
- A licence holder aggrieved by GEMA's decision to impose a penalty (including the amount of the penalty or the deadline for payment) may make an application to the High Court (or the Court of Session in Scotland) under section 27E of the Electricity Act 1989 – such appeal must be made within 42 days of the date of service of the notice of penalty.
- Decisions made by local authorities or regulatory bodies may be challenged by way of judicial review. The court will review the lawfulness of the decision, rather than whether the decision is correct. The grounds for challenge are, broadly speaking, illegality, irrationality, procedural unfairness and legitimate expectation. The procedure is primarily governed by the Civil Procedure Rules and a claim may only be brought with the permission of the court.
- If a party wishes to appeal a decision made by the CMA, it may appeal to the Competition Appeal Tribunal.

Acquisition and merger control - competition

26 Responsible bodies

Which bodies have the authority to approve or block mergers or other changes in control over businesses in the sector or acquisition of utility assets?

European Commission

The European Commission (Commission) has the authority to review mergers in the electricity sector with a 'community dimension' under Regulation 139/2004 on the control of concentrations between undertakings (OJ 2004 L24/1) (Merger Regulation). A concentration has a 'community dimension' if it meets one of the two sets of thresholds related to turnover of the undertakings contained in the Merger Regulation. The Commission also issues various notices and guidelines to aid interpretation of the Merger Regulation. If a concentration has a community dimension then the Commission has exclusive jurisdiction to investigate the proposed transaction and the domestic regulatory bodies, such as the CMA, will not be able to apply national rules to review the proposed transaction.

CMA

The CMA is responsible for the initial investigation of merger cases in the UK that do not have a community dimension and, if deemed necessary, to agree voluntary measures with the parties of a merger transaction to mitigate any anti-competitive effects. The Secretary of State may also give notice of a proposed merger to the CMA if the transaction raises certain public interest issues (such as those concerning national security).

Ofgem

Under section 54 of the Competition Act 1998, regulators such as Ofgem have concurrent powers in relation to certain anti-competitive practices. The ERRA 2013 also introduced certain measures to increase cooperation between sectoral regulators and the CMA. The United Kingdom Competition Network is a group composed of UK regulators (including Ofgem and the Northern Ireland Authority for Utility Regulation) which seeks to strengthen collaboration between the regulators to encourage competition and prevent anti-competitive behaviour.

27 Review of transfers of control

What criteria and procedures apply with respect to the review of mergers, acquisitions and other transfers of control? How long does it typically take to obtain a decision approving or blocking the transaction?

It is worth noting that the current legislation relating to merger control, as described below, allows companies to benefit from a 'one-stop shop' regime, which means that a transaction subject to the Merger Regulation will generally not be subject to UK merger control rules. Following the results of the EU Referendum, if the UK remains a member of the EEA post-Brexit, then it will be subject to the EEA provisions on competition, which generally reflect the equivalent EU provisions. The Commission has exclusive jurisdiction to deal with all mergers with a community dimension in the EEA. If the UK is no longer part of the EU or the EEA, then many of the domestic competition law provisions closely mirror those of the EU and such provisions will remain in force until amended or revoked by the UK parliament. Whether UK competition law will continue to reflect developments in EU competition law post-Brexit is difficult to predict. It is also likely that upon the UK's exit of the EU/EEA, companies may no longer be able to take advantage of the 'one-stop shop' regime and any proposed merger may have to be reviewed in parallel by the CMA and the Commission.

European Commission

Under the Merger Regulation, concentrations with a community dimension must be notified to the Commission prior to their implementation. The Commission must complete its initial assessment (Phase I Investigation) within 25 working days from the working day following the date of receipt of the notification (or receipt of complete information if later). This period may increase to 35 working days if the Commission receives a request from a member state (either on its own initiative or upon invitation from the Commission) for the proposed merger to be referred back to the national competition authority as the proposed transaction threatens competition in a distinct market in that member state, or if the undertakings concerned offer commitments to ensure the merger will not impede competition. From the Phase I Investigation, the Commission may:

- find that the proposed merger does not fall within the ambit of the Merger Regulation and thus it has no jurisdiction (in which case the parties should then consider if notification to the national authority, the CMA, is required);
- clear the proposed merger as it does not raise serious doubts as to its compatibility with the common market (note that the Commission may clear the merger subject to certain conditions); or
- initiate proceedings and conduct an in-depth investigation (Phase II Investigation) if it considers that the proposed merger raises serious doubts as to its compatibility with the internal market.

If the Commission begins a Phase II Investigation, it must review the proposed merger in the context of the objectives of the Merger Regulation to determine whether it is compatible with the common market. The Commission must make a decision within 90 working days of the date on which such investigations are initiated. The period is automatically increased to 105 working days if the undertakings concerned offer commitments to ensure that the merger will not obstruct competition, unless the parties offer such commitments within 55 working days from the start of Phase II Investigation. Upon the conclusion of Phase II Investigation, the Commission may clear the concentration (often subject to certain conditions) or declare the concentration incompatible with the internal market and prohibit the transaction. If the proposed merger has already been implemented, the Commission may require the parties to undo the transaction or take any other appropriate measures. No filing fee is payable.

CMA

Notification of a merger to the CMA remains voluntary, but the CMA can review a transaction on its own initiative if there is a 'relevant merger situation'.

The parties may apply to the CMA for informal advice on likely competition issues of the proposed merger as part of the pre-notification process. Once the merger is announced, the parties may submit a notice using a prescribed form of 'Merger Notice'. CMA has 40 working days to conduct Phase I merger investigations. The 40-working-day period may be extended if, for example, any of the parties fail to comply with the CMA's request for information or if the CMA has referred the proposed merger to the Commission under article 22(1) of the Merger Regulation.

CMA will conduct a more in-depth, Phase II merger investigation if it believes that there is a relevant merger situation that has resulted in or may be expected to result in a substantial lessening of competition within any UK market. The parties may offer undertakings to remedy, mitigate or prevent the anti-competitive effects of the proposed merger – such undertakings must be offered to the CMA within five working days after CMA's Phase I decision. The CMA has 10 working days from the day after the CMA's Phase I decision to determine whether such undertakings are acceptable in principle. If they are, the CMA must decide whether to accept the proposed undertakings within 50 working days (which may be extended by a maximum of 40 working days for special reasons) from the date of notification of its Phase I decision.

A Phase II merger investigation by the CMA will typically take up to 24 weeks, which may be extended by up to eight weeks in certain cases. Once a merger has been referred for Phase II merger investigation, the CMA has the power to make interim orders (for example, to stop the parties from starting or continuing with the merger until the CMA has concluded its investigation) or to accept interim undertakings from the parties. If the CMA concludes that the proposed merger would lead to a substantial lessening of competition, it may impose remedies which must be implemented within 12 weeks. The deadline for implementation of remedies may be extended once by up to six weeks if there are special reasons. Under section 92 of the Enterprise Act 2002, the CMA must keep under review any undertakings and orders. A fee is payable if the proposed merger is referred for a Phase II merger investigation (certain exceptions may be available for small or medium-sized entities) - the amount will depend on the value of the UK turnover of the target business being acquired but it ranges from £40,000 to £160,000.

The CMA will also liaise with sectoral regulators such as Ofgem as a merger in the electricity industry may require modification of the operator's licence or give rise to sector-specific issues.

It should be noted that given the complexity of mergers in the energy sector, pre-notification to the Commission and/or the CMA is advisable and such pre-notification can add to the timetable generally.

28 Prevention and prosecution of anti-competitive practices

Which authorities have the power to prevent or prosecute anti-competitive or manipulative practices in the electricity sector?

As further detailed in question 29, Chapters I and II of the Competition Act 1998 (CA 1998) set out the substantive standards which are applied to determine whether the conduct of an undertaking is anti-competitive. The CMA has the power to investigate and prosecute anti-competitive behaviour set out in CA 1998.

The Commission can enforce articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU). The CMA may also apply articles 101 and 102 directly. Under the CA 1998, the courts and the CMA are required to ensure that competition issues arising within the UK are dealt with in a manner consistent with the treatment of corresponding competition issues arising within the European Union. Licences issued by GEMA also facilitate the prevention and prosecution of anti-competitive behaviour. Under the Energy Act 2010, there are provisions for the Secretary of State to modify licence conditions to limit or eliminate circumstances in which a licence holder may gain excessive benefit from electricity generation.

GEMA has concurrent powers with the CMA to enforce competition regulations. ERRA 2013 introduced various measures to encourage sectoral regulators such as GEMA to use its competition enforcement powers. For example, GEMA is required to consider whether the exercise of its competition law enforcement powers is more appropriate prior to using its sectoral powers.

29 Determination of anti-competitive conduct

What substantive standards are applied to determine whether conduct is anti-competitive or manipulative?

The prohibitions on anti-competitive behaviour are contained mainly in CA 1998 and the relevant provisions closely mirror articles 101 and 102 of the TFEU. Section 2 of CA 1998 prohibits agreements between undertakings which are intended to or which have the effect of preventing, restricting or distorting competition within the UK and may affect trade within the UK (Chapter I Prohibition). Certain agreements may be exempt if they yield benefits such as improving production or distribution or promoting technical or economic progress, and a share of the benefit is allocated to the consumers, provided that the agreement does not give rise to the possibility of eliminating competition in respect of a substantial part of a product or a service market. Under section 10 of CA 1998, if an agreement is exempt from restrictions of article 101 of the TFEU then it will also be exempt from the Chapter I Prohibition. Article 101 of the TFEU contains the same restrictions as a Chapter I Prohibition, except it applies to agreements that have an EU-wide impact. There are also similar exemptions to article 101 of the TFEU and there are block exemptions for certain types of agreements which are automatically exempt from article 101.

Section 18 of CA 1998 prohibits any conduct which amounts to abuse of a dominant position in a market if it may affect trade within the UK (Chapter II Prohibition). Article 102 of the TFEU prohibits abuse of dominant position as applied to trade between EU member states. In order to assess whether an undertaking enjoys a dominant position, it will be necessary to identify the product and geographical market and assess the relevant undertaking's position within that market. Very broadly, there is a presumption of dominant position if an undertaking has over 50 per cent of the market share, but depending on the circumstances an undertaking with a smaller market share may be found to be dominant.

30 Preclusion and remedy of anti-competitive practices

What authority does the regulator (or regulators) have to preclude or remedy anti-competitive or manipulative practices?

The CMA, GEMA or the Commission may take certain actions if an undertaking has intentionally or negligently breached competition rules.

If an undertaking has breached article 101 of the TFEU or the Chapter I Prohibition, it may be fined up to 10 per cent of its worldwide group turnover and be ordered to cease the operation of an anticompetitive agreement.

If an undertaking has breached article 102 of the TFEU or the Chapter II Prohibition, it may be fined up to 10 per cent of its worldwide group turnover and be ordered to cease or modify its conduct. The Commission may impose structural or behavioural remedies which are proportionate to the anti-competitive behaviour.

The CMA can also apply to court to have a director of a company that is in breach of UK or EU competition law disqualified for up to 15 years. Individuals involved in cartels may also face criminal liability under the Enterprise Act 2002.

Update and trends

The UK's vote to leave the EU has resulted in significant uncertainty for the foreseeable future. It is currently unclear what form the future UK-EU relationship will take and in particular whether the UK will continue to have access to the IEM. The BEIS Committee recommended in its May 2017 report that the government should seek to maintain ongoing access to the IEM with no accompanying tariffs or barriers to trade.

On 29 March 2017, the UK prime minister served a formal notice under article 50 of the Treaty of Lisbon (the article 50 Notice) to commence the exit process. A two-year period, starting on the date the article 50 Notice was served and ending at midnight on 29 March 2019 (unless all member states agree to extend the period, or an agreement is reached sooner which is considered unlikely), has now commenced during which the UK and EU will seek to agree the terms of the UK's exit. As a result, it is unlikely that substantive changes to UK electricity legislation will arise in the near term.

The UK will remain a member of the EU during this two-year transition period – EU regulations will continue to have direct effect and domestic legislation transposing EU legislation will continue to be in force. The UK will also remain a party to key international climate change conventions, such as the Paris Agreement (which it signed as both a national signatory and as part of the EU 'bloc') and the Kyoto Protocol, and continue to be bound by domestic climate change targets such as those set out in the Climate Change Act 2008.

However, following the UK's departure from the EU there may be changes in UK energy policy which may lead to existing UK electricity legislation being amended or revoked. Any such changes will depend not only on the policy direction of a post-Brexit government but also on whether the UK remains part of the EEA, which if it does will enable the UK to continue in the IEM but will require it to ensure its domestic legislation is harmonised with EU regulations. On 21 June 2017, the Repeal Bill was announced which will repeal the European Communities Act (1972), ending the supremacy of EU law in the UK and transferring EU law onto the UK statute book. The Repeal Bill was published under its official title of the European Union (Withdrawal) Bill on 13 July 2017 and is expected to complete its passage through Parliament well before the UK leaves the EU; it will come into force on the day that the UK leaves the EU.

As of today, the full and long-term impact on UK electricity regulation of the UK's vote to leave the EU remains to be seen and will necessarily remain uncertain for the immediate future. In any event, new technological innovations including energy storage, smart meters and electric vehicles are expected to change traditional demand profiles and the nature of the UK's electricity networks, moving from 'one-way' flows to a more decentralised and dynamic system.

International

31 Acquisitions by foreign companies

Are there any special requirements or limitations on acquisitions of interests in the electricity sector by foreign companies?

There are no specific restrictions, but the Electricity and Gas (Internal Markets) Regulations 2011 requires Ofgem and the Commission to consider whether a foreign entity's acquisition of interest in the electricity sector poses a threat to security of supply.

32 Authorisation to construct and operate interconnectors What authorisations are required to construct and operate interconnectors?

A licence from GEMA is required to participate in the operation of an electricity interconnector. The consents required for construction will differ depending on whether the works required are offshore and/or onshore.

For offshore works, a licence from the MMO is required under Marine and Coastal Access Act 2009 for laying cables within UK territorial waters. In addition, consents from relevant harbour authorities may be required for works within a harbour and wider area. It may be beneficial to enter into cable-crossing agreements with holders of existing active cables and other submarine infrastructure. For onshore development, a planning permission under the Town and Country Planning Act 1990 will need to be obtained.

The Trans-European Energy Networks Regulation (EU 347/2013) sets out guidelines for streamlining the permission process for projects of common interest, which are major infrastructure projects that contribute to market integration of at least two EU countries, foster competition and energy security and contribute to climate change and energy goals.

33 Interconnector access and cross-border electricity supply What rules apply to access to interconnectors and to crossborder electricity supply, especially interconnection issues?

An interconnector licensee may not hold a generation licence, transmission licence, distribution licence or a supply licence. Interconnectors must provide non-discriminatory access in accordance with EU legislation and its licence conditions. It may be able to obtain an exemption from certain provisions of EU legislation – Ofgem will consider each request for exemption on a case-by-case basis and may attach certain conditions to the interconnector licence.

Ofgem has created the 'cap and floor' regime in an attempt to encourage investment in electricity interconnectors. Ofgem's rationale for such a regime is that it strikes a balance between commercial incentives and appropriate risk mitigation for project developers. Under the 'cap and floor' regime, an interconnector developer's revenue is capped and any excess revenue is returned to the consumers. If an interconnector's revenue falls below a minimum threshold then the consumers (via transmission charges) will top up the revenues to meet such threshold. The floor is set at a level that ensures that an interconnector can cover its annual operating expenditure and service its debt.

Transactions between affiliates

34 Restrictions

What restrictions exist on transactions between electricity utilities and their affiliates?

The licences contain various conditions requiring the separation of function at a financial, operational and management level. The nature and extent of such separation requirements varies depending on the licensee entity.

35 Enforcement and sanctions

Who enforces the restrictions on utilities dealing with affiliates and what are the sanctions for non-compliance?

GEMA can penalise any breaches of licence conditions. Under the Electricity Act 1989, GEMA can impose financial penalties of up to 10 per cent of the licence holder's annual turnover.

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