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Report

Great Britain and Northern Ireland Regulatory Authorities Reports 2019

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Regulatory Authorities Report pursuant to section 5ZA of the Utilities Act 2000 and section 6A of the Energy (Northern Ireland) Order 2003.

The Great Britain (GB) report covers:

- Developments in the GB energy markets in the calendar year 2018 and the first six months of 2019. In some cases, data is only available for a subset of this period (i.e. the 2018 calendar year only). Where this is the case, it is clearly stated.
- The regulation and performance of the GB electricity and gas markets along the themes of network regulation, promoting competition, and security of supply.
- Our compliance with the Electricity and Gas Directives on consumer protection and dispute settlement. Since GB energy markets have been fully liberalised and the regulatory structures in place for a number of years, this report is intended as an updated version of the submissions made since 2007.

Finally, for further information on Ofgem's wider activities, please consult our Annual Report. The 2017-18 Ofgem Annual Report is available at the link below.[1]

[1] https://www.ofgem.gov.uk/about-us/corporate-policy-planning-and-reporting/annual-report-and-accounts

Legal Basis

All National Regulatory Authorities (NRAs) are obliged to report annually to the European Commission, in accordance with Directives 2009/72/EC (Electricity Directive) and 2009/73/EC (Gas Directive). The structure of the report is agreed at the Council of European Energy Regulators (CEER).

Ofgem is the GB Office of Gas and Electricity Markets. It is governed by the Gas and Electricity Markets Authority (the Authority). The terms 'the Authority', 'Ofgem', 'us' and 'we' are used interchangeably in this document. The Northern Ireland National Report, from the Northern Ireland Utility Regulator, is in the second section of this UK Report.

As the NRA for GB, Ofgem's above annual reporting requirement is specified in section 5ZA of the Utilities Act 2000. The Utility Regulator's equivalent requirement is specified in section 6A of the Energy (Northern Ireland) Order 2003.

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1. Chair's foreword

The foreword for the 2019 National Report is the first I have written as Chairman of Ofgem. I took over as Chair towards the end of the period this report covers and am excited to be taking on the role at what is a pivotal time for the GB energy sector.

The past year was a period of uncertainty, which included the ongoing discussions on the future relationship between the United Kingdom and the European Union. While we cannot predict the final outcome of those discussions, it is important to stress Ofgem's ongoing commitment to working with our fellow regulators in Europe.

Over the coming years we will continue to act in the spirit of cooperation that we have always tried to bring to our engagement with our European counterparts. We continue to believe that an integrated and liberalised European energy market provides benefits for consumers.

A large amount of our work is influenced by developments in Europe, and over the course of the year, Ofgem has worked towards the timely and full implementation of the European Network Codes and Guidelines. We have continued to work closely with industry to deliver a set of methodologies for the implementation of guidelines on Capacity Allocation and Congestion Management, Forward Capacity Allocation, and the Connection Codes. We also continued our activities towards the implementation of the Electricity Balancing Guideline Regulation, the Emergency and Restoration Code and the System Operation Guideline Regulation.

During the reporting period we made our decision on our Final Project Assessments (FPAs) of the NSL and IFA2 interconnectors, setting provisional cap and floor levels. The two projects are currently under construction and should become operational in 2022 and 2020 respectively.

We set out our sector specific methodology consultation for the next price control of the gas distribution, gas transmission and electricity transmission networks (RIIO-2), set to begin in 2021. For existing customers, this will keep quality of service high with costs being lower than they otherwise would be. This framework will support the energy system transition and decarbonisation, whilst providing additional support for those consumers in vulnerable situations.

We also continued our Future Charging and Access programme which aims to design a new charging framework that will drive whole system benefits, promote efficient investment decisions to reduce network and system costs, promote energy efficiency and deliver carbon benefits for GB consumers. Charging reforms will help ensure that where market participants take action to reduce system costs they share in those benefits. This approach will help the system accommodate more electric vehicles, renewable generation and storage facilities at a lower cost.

In retail markets, we widened the scope of the PPM safeguard tariff, on a temporary basis, to include a further one million customers in receipt of the Warm Home Discount. We also prepared for the introduction of the default tariff price cap on a temporary basis, which was implemented on 1 January 2019.

We have also been working in partnership with the retail energy market participants to deliver improvements to the switching process. These would allow our domestic consumers to switch supplier by the end of the next working day. Ofgem is continuing to develop the detailed design, delivery, and commercial and governance arrangements.

Martin Cave

2. Main developments in gas and electricity markets

Chapter Summary

This chapter shows some of the most notable work that we have done since the last Regulatory Authorities Report was published in August 2018. Further information about our activities is in our Annual Report and Accounts 2017-18.[2]

We have grouped the main developments into four areas:

- Investment
- Wholesale Markets
- Retail Markets
- Compliance and Enforcement

2.1 Investment

2.1.1 Interconnectors

Interconnectors are the physical links that allow the transfer of gas and electricity across national borders. Ofgem's cap and floor regime is the regulated route for electricity interconnector investment in GB and sits alongside the existing exemption route. The first interconnector project to be regulated under our cap and floor regime, the 1 GW Nemo Link interconnector to Belgium, commenced commercial operations at the end of January this year.[3] During the reporting period, we made decisions on the Final Project Assessments (FPAs) for the NSL interconnector (to Norway) and the IFA2 interconnector (to France) and set the provisional cap and floor levels for these projects. The two projects are currently under construction and should become operational in 2022 and 2020 respectively.

During the reporting period, we also concluded the Initial Project Assessment stage of our second cap and floor application window. We decided to grant a cap and floor regime in principle to three new interconnectors – NeuConnect (to Germany), NorthConnect (to Norway) and GridLink (to France). These projects collectively represent 4.2GW of potential new capacity and are now under development. The FPA stage for these projects is expected to start by 2021.

The exemption route for new interconnector investment remains available. The ElecLink interconnector project to France (granted an exemption in 2014) is currently under construction and due to become operational in 2020. In the 2017-18 reporting year, we agreed with CRE to refer the Aquind exemption request to ACER because we would be unable to reach a joint agreement on the decision within the legislative six-month timeframe. ACER's decision was published in June 2018. Aquind appealed against this decision to ACER's Board of Appeal, but it was rejected.

[2] https://www.ofgem.gov.uk/about-us/corporate-policy-planning-and-reporting/annual-report-and-accounts
[3] For more information on cap and floor, see: https://www.ofgem.gov.uk/system/files/docs/2016/05/cap_and_floor_brochure.pdf

2.1.2 Offshore transmission owners and tenders

Offshore transmission is needed to connect offshore wind generation. In the reporting period, we continued to manage the offshore transmission competitive tender process to grant licences to operate new offshore transmission assets.

Tender round six began in November 2018, representing over £2.7 bn of transmission investment and connecting over 2.5 GW of offshore wind generating capacity – the biggest tender round to date. We choose the most competitive bids from companies to own and operate the links to offshore sites over 20/25 years.

In the reporting period, we appointed Preferred Bidders in respect of tender round 5 projects to own and run:

- the £500 m transmission links for the Race Bank offshore wind farm near Norfolk, UK
- the £329 m transmission link for the Galloper offshore wind farm located near Suffolk, UK, and
- the £517 m transmission link for the Walney Extension offshore wind farm near Cumbria, UK.

2.2 Wholesale Markets

2.2.1 Creating a more independent, future-proofed system operator

The Electricity System Operator (ESO, also referred to as NGESO) has a central role in our energy system. This rapidly changing system needs an ESO that proactively responds to system challenges and maximises consumer benefits across the full spectrum of its roles. This includes playing a prominent role in the transformation to a low carbon energy system. We want the ESO to work closely with its stakeholders and other energy system parties to ensure there is a coordinated approach to electricity system planning and operation. We also want a more dynamic ESO that readily responds and adapts to new developments.

We have begun work on designing a dedicated ESO price control for the 2021-26 period which will come into effect as of April 2021 and will be fundamental to delivering these aims. The new price control should reflect the legal separation of the ESO from other National Grid group businesses and as a result we expect its price control to be different, in order to reflect its markedly different nature to that of the other RIIO-2 sectors. Our work on the new price control follows the introduction of a new ESO incentives framework, which we introduced in April 2018, to encourage the ESO to proactively identify how it can maximise consumer benefits across the full range of its activities. This approach moved away from the use of targeted, mechanistic incentives towards a principles-based, evaluative incentives approach. It is designed to increase transparency of the ESO's activities and make the ESO more accountable to its stakeholders across the full spectrum of its roles.

The ESO is responsible for day-to-day system operation, including balancing supply and demand and constraint management. The ESO ensures that supply and demand match through the procurement of balancing services, which includes the accepting of bids and offers from generators and suppliers to either increase or reduce their supply or demand. Since April 2019, the ESO has been a legally separate entity within the National Grid group, which helps to reduce the potential for real or perceived conflicts of interest in the ESO's activities and increase its independence from National Grid Electricity Transmission (NGET). Prior to this NGET was the designated ESO.

2.2.2 Security of supply

Security of supply, in both electricity and gas, is a priority for both Ofgem and government. During the reporting period, work in this area included:

- Managing changes to the Capacity Market Rules to ensure consumers are protected and objectives delivered.
- Delivering our mandatory Electricity Market Reform (EMR) roles: dealing with disputes on Contracts for Difference (CfD) and the capacity market; publishing reports on NGESO's delivery of its EMR delivery body role and the operation of the capacity market; receiving and logging price maker memorandums.
- Overseeing the behaviour of participants in the capacity market and referring to enforcement, and taking part in BEIS's operational and policy boards.

In November 2018, the General Court of the European Union made the judgment to annul State Aid approval for the CM. This introduced a standstill period during which the UK Government will not make capacity payments under existing Capacity Agreements until re-approval. The European Commission (EC) has opened an in-depth investigation to determine whether the British CM scheme is in line with EU State aid rules. The UK Government is currently awaiting the results of this investigation.

2.2.3 European Network Codes

European Network Codes and Guidelines are a suite of binding EU rules that promote competition, efficient use of transmission capacity, integration of energy markets and the harmonisation of rules for the operation of transmission and distribution networks. Our work to implement them involves multiple changes to GB industry arrangements, licences and legislation.

In 2018, we approved four modifications[4] to the Grid Code and Distribution Code to implement the Requirement for Generators network code (RfG), the High Voltage Direct Current network code (HVDC) and Demand Connection Code (DCC) in GB.
As part of the implementation of the Electricity Balancing Guideline Regulation (EBGL) in GB and the Emergency and Restoration (E&R) code, Ofgem made a decision on the assignment of TSO obligations to GB TSOs. These decisions should ensure responsibility is assigned appropriately to stakeholders across GB.

We also approved the proposal for the Implementation Framework for the Trans-European Replacement Reserves Exchange (TERRE) project. TERRE is the implementation project of the European platform for the exchange of balancing energy from replacement reserve as required by Article 19 of the EBGL. The goal of the TERRE project is to develop a platform that allows the TSOs performing the replacement reserve process to exchange balancing energy from this type of reserve.

We approved a proposal regarding the Key Organisational Roles, Responsibilities and Requirements (KORRR). The KORRR is a pan-EU proposal developed by the TSOs to define the organisational requirements, roles and responsibilities applicable to all data exchange provisions governed by Title 2 of the System Operation Guideline (SOGL) Regulation.

[4] https://www.ofgem.gov.uk/publications-and-updates/grid-code-gc0100-eu-connection-codes-gb-implementation-mod-1;
https://www.ofgem.gov.uk/publications-and-updates/grid-code-gc0101-eu-connection-codes-gb-implementation-mod-2;
https://www.ofgem.gov.uk/publications-and-updates/grid-code-gc0102-eu-connection-codes-gb-mod-3;
https://www.ofgem.gov.uk/publications-and-updates/eu-connection-codes-gb-implementation-demand-connection-code

2.2.4 Wider European work

Since the referendum decision to leave the European Union (EU), Ofgem has continued working very closely with government to provide impartial, expert advice on energy issues by liaising with colleagues in BEIS and the Department for Exiting the European Union, as well as seeking to ensure we understand the views of industry and maintain working relationships with our neighbouring regulators.

It is impossible to predict the outcome of the UK's future relationship with the EU, however Ofgem is committed to a close and collaborative working relationship with our fellow regulators in Europe. Over the coming years we will continue to act in the spirit of cooperation that we have always tried to bring to our engagement with our European counterparts. We continue to believe that an integrated and liberalised European energy market provides benefits for consumers.

We have continued to plan for the process of implementing the necessary regulatory changes to ensure that the new relationship with the EU is as smooth as possible.

2.3 Retail Markets

2.3.1 Price protection for domestic customers

On 2 February 2018, we extended the scope of the prepayment meter (PPM) price cap[5] to include a further one million customers in receipt of Warm Home Discount (WHD),[6] who were more likely than average to be vulnerable.

Our evidence gathering suggested that regulating the charges that a supplier can charge these customers will better protect their interests in the short term. The price cap for customers in receipt of WHD protects them by ensuring that suppliers cannot charge them above the price cap and thus setting a cap on the increase of the customers' bills. The saving delivered varied over time, because the level of the price cap moves with cost indices and suppliers' prices also changed over time. The price cap for customers in receipt of WHD was updated twice a year. To ensure that the measure was proportionate and in line with EU legislation, the price cap was a temporary measure and ended on 1 January 2019 when the default tariff cap[7] entered into effect.

The introduction of the default tariff cap is one of the most significant market interventions in recent years, and should save approximately £1 bn per year to 11 million customers who remain on their supplier's default tariffs. Its objective is to prevent default tariff customers from being overcharged, and to ensure they pay prices that more closely reflect the underlying cost of supplying them energy. Using published methodologies, we adjust the level of the caps twice a year (on 1 April and 1 October) to reflect the estimated costs of supplying electricity and gas to homes for the next six-month period.

The default tariff cap is also a temporary measure, which is intended to protect disengaged customers until the right market framework is in place for competition to be effective. From 2020, according to the requirements of the Domestic Gas and Electricity (Tariff Cap) Act 2018,[8] we will be carrying out an annual review of the market to assess whether the

[5] https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/implementation-cma-remedies/prepayment-meter-price-cap
[6] https://www.ofgem.gov.uk/about-us/how-we-work/working-consumers/protecting-and-empowering-consumers-vulnerable-situations/consumer-vulnerability-strategy/vulnerable-customer-safeguard-tariff
[7] In 2018 the Government introduced legislation to provide price protection to the estimated 11 million households on default energy tariffs. The Domestic Gas and Electricity (Tariff Cap) Act 2018 came into effect on 19 July 2018.
[8] https://services.parliament.uk/bills/2017-19/domesticgasandelectricitytariffcap.html

conditions for effective competition such that the default tariff cap is no longer required. This framework will form the basis of our recommendation to the Secretary of State, who will make the decision whether to extend the cap for the following year or not. If the Secretary of State decides to maintain the default tariff cap, we will carry out a further review in the following year. The default tariff cap will cease to have effect at the end of 2023 at the latest. The PPM cap still exists, in parallel to the default tariff cap, but customers can only be protected by one of the caps.

2.3.2 Switching programme

Ofgem is leading a major programme to improve customers' experience of switching by designing and implementing a new switching process that is reliable, fast and cost-effective. The aim is to facilitate greater engagement in the retail energy market by increasing customers' confidence in their ability to switch supplier with ease. In addition, the programme aims to foster innovation by revamping the existing arrangements. Increased switching will exert additional competitive pressure on suppliers, causing them to consider the prices they charge and the services they provide for fear of losing market share.

Over the past year, Ofgem has approved the design of the new switching arrangements and has been working in partnership with retail energy market participants to put in place introduce obligations (including a new industry code) for licensed entities to support delivery and the enduring operation of the new switching arrangements. We have also been working with Data Communications Company (DCC), the licensed organisation that has responsibility for procuring the new switching services. The programme has now entered its "Design, Build and Test" phase and we expect to finalise it in 2021.

2.3.3 Electricity settlement

Reforming the existing electricity settlement process will attribute the costs of gas and electricity consumption more accurately across the day, incentivising suppliers to offer new products and services that will help customers to use electricity at times of day when it is cheaper to generate and transport.

To realise the benefits of the smart meter roll-out more fully, we are seeking to introduce market-wide half-hourly settlement. Following the changes we made in 2017 to introduce elective half-hourly settlement, in August 2018 we published a second iteration of our business case for settlement reform (the Outline Business Case) which included a draft economic assessment. The draft assessment indicates substantial potential benefits, suggesting that our decision on the project should centre on when and how, rather than whether, market-wide settlement reform should be introduced.

2.3.4 Future supply market arrangements

Ofgem has said that it wants a future retail market where all customers, whether they engage in the market or not, receive good services and share in the benefits of competition and innovation, while being protected from risks.

Since privatisation at the end of the 1980s, suppliers (i.e. energy suppliers) have acted as the primary interface between customers and the energy system. There is evidence (including via Ofgem's Innovation Link)[9] that these 'supplier hub' market arrangements can

[9] Ofgem's Innovation Link is a 'one stop shop' offering support on energy regulation to businesses looking to launch new products, services or business models.

mean it is difficult for market participants to bring beneficial, and potentially disruptive, propositions to market.

It is in this context that Ofgem has been exploring whether the supplier hub model is still fit for purpose or whether Ofgem and the UK Government should consider changes as the energy system evolves. Based on the extensive engagement and analysis during its call for evidence on the current supplier hub model, Ofgem concluded that current retail market design may not be fit for purpose for energy customers over the longer term, and there is a strong case for considering fundamental reforms.

In line with this conclusion, the UK Government and Ofgem have launched a comprehensive joint review into the retail energy market that will consider options for ensuring the market can better serve customers' through enabling innovative business models and propositions, while ensuring future customers are appropriately protected – regardless of their level of engagement. Ofgem expects the review to report preliminary findings in the summer 2019.

2.4. Compliance and Enforcement

In 2018-19, we completed 8 investigations and concluded 5 alternative actions, resulting in £7.4m in compensation to customers, or in redress. We also concluded 63 compliance cases that did not result in enforcement action, outcomes of which range from changes to suppliers' contractual terms to compensation payments.

Our compliance cases included action on SSE who misreported on their Feed In Tariff (FITs) levelisation submission.[10] SSE overstated generation payments in its FITs annual levelisation submission for 2016-17 by £9.88 m; this resulted in SSE receiving £4.07 m more in payments from the levelisation fund than it was entitled to. SSE repaid the £4.07 m, paid an additional £455,705 in to the FIT levelisation fund and made a voluntary contribution of £250,000 to the Energy Industry Voluntary Redress Fund.[11] SSE have implemented new reports to eliminate manual reporting work and to ensure continued accuracy of their annual levelisation submissions following our engagement.

Our compliance and enforcement approach goes beyond simply penalising companies financially. We secured changes to behaviour and processes, using our bespoke and more general statutory powers. For example, following our engagement with it, British Gas paid £1.8 m to the Voluntary Redress Fund and took steps to ensure that its terms and conditions were corrected, overpayments were repaid and quality and review procedures were implemented to ensure that correct terms and conditions documents are sent to customer.

[10] The FIT scheme is a government programme designed to promote the uptake of renewable and low-carbon electricity generation technologies. FIT payments are made quarterly (at least) for the electricity that a customer's installation has generated and exported. Levelisation is the mechanism by which the total cost of the FIT scheme is apportioned across licensed electricity suppliers. The cost is allocated between suppliers in proportion to their share of the electricity supply market of Great Britain, whilst taking into account any FIT contribution they have already made.

[11] This is a means of distributing payments to charities from energy companies who have breached rules.

3. The Electricity Market

Chapter Summary

This chapter details developments in GB's electricity sector during 2018 and the first half of 2019. This is broken down into sections covering network regulation, promoting competition, and security of supply in the wholesale and retail electricity markets.

3.1 Network Regulation

3.1.1 Unbundling[12]

Transmission System Operators (TSOs)

Under Article 10(1) of the Electricity Directive, any undertaking that owns a transmission system is to be certified as ownership unbundled before it is approved and designated as a TSO.

During the reporting period, we published final certification decisions to certify eight TSOs: four new electricity Interconnectors[13], three Offshore Transmission Owners[14] and the Electricity System Operator (pursuant to section 10D (certification) of the Electricity Act 1989 and Article 3(2) of Regulation (EC) No. 714/2009).

Under Article 10(4) of the Electricity Directive, we have an obligation to monitor the continuing compliance of certified TSOs with the requirements of Article 9. Under Article 11(1), the Authority is to notify the European Commission of any circumstances that would result in a person or persons from a third country acquiring control of a TSO. During the reporting period, we reviewed the certification of five TSOs[15] (pursuant to section 10L (continuation or withdrawal of certification) of the Electricity Act); we published our decisions to continue the TSOs' certifications in December 2018.

We continue to monitor the certification status of the certified TSOs in GB, including through the review of annual declarations submitted by the relevant entities.

[12] Articles 9, 10, 11 and 26 of the Electricity Directive 2009/72 and Article 3 of the Electricity Regulation 714/2009 outline our obligations in respect of certification of transmission system operators (TSOs) as being ownership unbundled. The Electricity and Gas (Internal Markets) Regulations 2011 and the Gas and Electricity (Ownership Unbundling) Regulations 2014 amended the Electricity Act 1989 (Electricity Act) and the Gas Act 1986 to implement the Third Package, including the ownership unbundling requirements for TSOs and the requirements for Distribution System Operators (DSOs). The Electricity Act includes the requirement for the holders of electricity interconnector and electricity transmission licensees to be certified as independent under one of the grounds for certification in the Electricity Act. The Utilities Act 2000 designates the Authority as the National Regulatory Authority (NRA) for GB, with the responsibility for administering the certification process in GB.

[13] NEMO, Eleclink, National Grid IFA2 and National Grid NSL.

[14] Diamond Transmission Partners BBE Limited, TC Dudgeon OFTO plc and Diamond Transmission Partners RB Limited.

[15] TC Robin Rigg OFTO Limited, TC Gunfleet Sands OFTO Limited, TC Barrow OFTO Limited, TC Ormonde OFTO Limited and TC Lincs OFTO Limited.

Distribution System Operators (DSOs)

Under Article 26 of the Electricity Directive, we have an obligation to ensure that where the DSO is part of a vertically integrated undertaking, it should be independent at least in its legal form, organisation and decision-making from other activities not relating to distribution.

During the reporting period, we reviewed the information submitted to us by DSOs relating to business independence, financial reporting and output performance. In that context, we were satisfied that the Electricity Directive requirements relating to unbundling were correctly complied with.

3.1.2 Technical Functioning

Security and reliability standards, quality of service and supply

Transmission

Under Article 37(1)(h) of the Electricity Directive, National Regulatory Authorities (NRAs) must monitor compliance with, and review the past performance of, network security and reliability rules as well as offsetting or approving standards and requirements for quality of service and supply. The National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) is a technical standard that licensees are required to comply with.

NETS SQSS contains coordinated criteria and methodologies that transmission licensees and the Electricity System Operator (ESO) are required by their respective licences to use, when planning and operating a transmission system. Ofgem must approve any changes to the NETS SQSS[16]. In May 2018, we approved one change to the NETS SQSS. This was in relation to small and medium embedded generation assumptions[17]. In 2019, we approved two changes to the NETS SQSS: one in relation to the clarification of the applicability of the N-1-1 Criterion[18] and another in relation to National Grid legal separation[19].

National Grid Electricity System Operator (NGESO) is responsible for day-to-day electricity system operation, including balancing supply and demand and constraint management. In order to do this, the ESO procures balancing services, which includes the accepting of bids and offers from generators and suppliers to either increase or reduce their supply or demand. The costs NGESO incurs are recovered from users of the system via Balancing Services Use of System (BSUoS) charges.

NGESO, as required by its licence, submits to Ofgem a report on an annual basis called the National Electricity Transmission System Performance Report, that provides an overview of system security and quality of service and supply.

System reliability

National Grid Electricity Transmission Plc (NGET) is the owner of the onshore transmission system in England and Wales. The onshore system in Scotland is owned by SP Transmission Plc (SPT) and Scottish Hydro Electric Transmission plc (SHE-T); collectively the 'onshore TOs'[20]. The onshore TOs are incentivised to maintain a reliable and secure system.

[16] https://www.nationalgrideso.com/codes/security-and-quality-supply-standards
[17] https://www.nationalgrideso.com/document/115851/download
[18] https://www.nationalgrideso.com/document/135661/download
[19] https://www.nationalgrideso.com/document/135666/download
[20] In England and Wales, connection voltage up to 132kV is normally owned by the DSO. In Scotland and offshore, the level of 132kV already qualifies as transmission voltage.

The GB regulatory framework is designed to ensure that the TOs plan and operate a reliable network based on three main building blocks – the NETS SQSS, Network Output Measures (NOMs)[21], and the Energy Not Supplied (ENS) incentive. The ENS incentive was introduced to enhance the existing regulatory and legislative framework by providing a financial incentive to encourage TOs to go above the minimum standards required by the NETS SQSS, and to deliver a higher level of reliability, where it is good value for consumers.

Under the incentive mechanism, network reliability is measured by the total volume of ENS to customers due to loss of supply events. Each onshore TO has an annual ENS volume target and is either rewarded or penalised each year according to its level of performance against its target. All onshore TOs have significantly outperformed their targets in year five (2018-19) of the RIIO-ET1 price control[22]. Since the beginning of RIIO-ET1 in 2013, all three onshore TOs have reduced ENS to a level below their annual target each year, therefore have received rewards under the ENS incentive each year.

Key investments in system reliability

Onshore TOs are carrying out a number of activities during the RIIO-ET1 period, which target the maintenance and improvements of the security and resilience of the network. The key investments include the replacement for 2017-2018. The ESO currently anticipates incurring costs of c.£35 m across RIIO-ET1.

Offshore Transmission Owners' (OFTOs) system availability incentive targets are set out in each individual OFTO's licence. The mechanism incentivises the OFTOs to maintain system availability and therefore export capacity available to offshore generators. OFTOs receive financial rewards or incur penalties for performance above or below this target.

Distribution

In GB, licensed electricity Distribution Network Operators (DNOs) and independent Distribution Network Operators (IDNOs) are required to design their networks to meet the requirements of the Engineering Recommendation standard P2/6.[23] This standard sets out system planning and network capacity requirements and details the minimum standards for the security of supply. In the event that a licensee cannot comply with standard licence condition 24 of the electricity distribution licence (Distribution System planning standard and quality of performance reporting), it can apply to Ofgem for a derogation.[24] In 2017-2018, Ofgem did not grant any derogations. Ofgem extended the derogation where Group Demand is less than 60MW until 31 March 2019[25].

The electricity distribution price control, RIIO-ED1, began in April 2015 and will run until March 2023. The revenues that the 14 DNOs are allowed to recover for this period are linked to the delivery of outputs that provide for long-term reliability of the distribution system, minimise the number and duration of interruptions, and ensure compliance with climate change adaptation requirements.

The Electricity (Standards of Performance) Regulations 2015 specify minimum levels of service customers should expect from their DNO. If a company fails to meet a standard of performance, it must make a payment to the affected customer. The standards cover areas such as restoring supply during an unplanned interruption, connections, and voltage quality.

[21] This is known as Network Asset Risk Metric (NARM) in RIIO-2.
[22] https://www.ofgem.gov.uk/data-portal/volume-energy-not-supplied-electricity-transmission-riio-t1
[23] http://www.dcode.org.uk/assets/uploads/ENA_ER_P2_Issue_6__2006_-1.pdf
[24] SLC 24.2 of the Standard conditions of the Electricity Distribution Licence
[25] https://www.ofgem.gov.uk/publications-and-updates/decision-and-direction-extension-engineering-recommendation-p26-derogation-where-group-demand-60mw

We also have other financial incentives to encourage improvements in performance. The Interruptions Incentive Scheme incentivises DNOs to reduce the frequency and duration of power cuts experienced by their customers. The number of customer interruptions has fallen by 11% on average since the start of RIIO-ED1, and the duration of interruptions has fallen by 9% on average since the start of the price control.

Innovation

Innovation will be essential for DNOs and TOs[26] to deliver security and reliability of supply at an efficient cost, while dealing with uncertainty. In the RIIO-ET1 price control, we established the Network Innovation stimulus, to help network companies understand what they need to do to provide environmental benefits, reduce costs, and maintain security as GB moves to a low carbon economy. The stimulus has a number of different components, including the Network Innovation Competition (NIC), worth a value of around £70m, the Network Innovation Allowance (NIA), and the Innovation Roll-out Mechanism (IRM).

The stimulus includes two annual NICs, one for electricity network companies and one for gas network companies. The Electricity NIC is an annual opportunity for electricity network companies to compete for funding for the development and demonstration of new technologies, operating and commercial arrangements. Up to £70m per annum is available through the electricity NIC, and up to £20m per annum is available through the gas NIC.

In 2018, we received four submissions for the 2018 Electricity NIC seeking a total of £44.6m. In November 2018, Ofgem decided to fund three of these projects. The successful projects received a total of £33.5 m. The 2019 NIC is underway with six submissions that have passed the Initial Screening Process.[27]

The NIA is designed to fund smaller scale research, development and demonstration projects. The NIA provides each licensee with an allowance to spend on innovation projects in line with the NIA Governance Document. In 2017-2018, TOs claimed a total of £7.5m under NIA.[28]

The IRM is designed to facilitate the roll-out, in advance of the next price control period of proven innovations, which will provide long-term value for money to consumers. To qualify, roll-outs must deliver carbon and/or environmental benefits and must not provide a commercial return for the licensee within the price control. In addition, the cost efficiencies delivered from rolling out smart grid solutions and wider network innovation from Low Carbon Network Fund trials were reflected in reduced revenues for DNOs in the RIIO-ED1 period.

For electricity transmission, there were two application windows for the IRM, the first one in May 2015, and the second in May 2018. Ofgem did not receive any IRM applications in 2018. There are no further windows for transmission licensees to apply for IRM funding in the RIIO-ET1 price control period.

For electricity distribution, there are two application windows for the IRM, the first one in May 2017, and the second one in May 2019. In 2017, we received one application from UK Power Networks (which they subsequently withdrew) and three applications from Scottish Power Energy Networks in the first RIIO-ED1 IRM window, with a total value of £79 m (2012/13 prices). Ultimately, Ofgem decided to award £8.01 m IRM funding to SP Energy Networks for its Dumfries and Galloway Active Network Management scheme.[29]

[26] Onshore TOs and OFTOs
[27] https://www.ofgem.gov.uk/network-regulation-riio-model/current-network-price-controls-riio-1/network-innovation/electricity-network-innovation-competition
[28] Data for financial year 2018-2019 not yet available.
[29] https://www.ofgem.gov.uk/publications-and-updates/decision-2017-electricity-distribution-innovation-roll-out-mechanism

Monitoring time taken to connect and repair

Under Article 37(1)(m) of the Electricity Directive, regulators are required to monitor the time taken by transmission and distribution system operators (DSOs) to make connections and repairs. Here we report on how we monitored this requirement during 2018.

Transmission

As set out above, NGET is the owner of the onshore transmission system in England and Wales. The system in Scotland is owned by SPT and SHE-T, and the offshore network is owned by a variety of OFTOs.

All customers wishing to directly connect to the National Electricity Transmission System (NETS) will require a contract with the ESO. The process of connecting to the NETS is summarised below:

- Applications for a connection to the transmission network in Scotland and offshore, at voltages of 132kV and above, are made directly to the ESO.
- Once the application fee has been received, the project can be 'clock started', meaning the ESO must offer terms for a connection within three months.
- The ESO, in turn, makes an application to the relevant network company (NGET, SPT, SHE-T) asking it to specify the most economic and efficient design and provide costs for the completion of necessary work.
- The ESO utilises the information received from the network company and produces an offer. The offer includes a contract and details of any onshore construction works needed as a result of the connection.
- Upon receipt of the connection offer, the user has three months to accept or decline the connection offer. Once the offer is signed, the user becomes a contracted customer.

For offshore generators and interconnectors, the connection point is sometimes less obvious because of its distance from the onshore transmission system. The ESO carries out a process called 'CION' (Connection and Infrastructure Options Note) to identify the connection point with the lowest cost.[30]

Each network company is required by their licence to deliver timely and effective connections to the network.[31] For both SPT and SHE-T a timely connections financial incentive is in place under the RIIO price control framework, by which their annual revenues are reduced if they fail to offer terms for connection to its transmission network within the specified period. NGET currently has no direct financial incentive on timeliness of connection offers but it needs to comply with its licence obligations, failing which financial penalties may be levied through enforcement action.

We receive biannual 'Timely Connections' reports. These reports provide us with information on the factors affecting the connection dates offered to generators. This enables us to assess whether any changes to the existing framework are needed. A non-confidential version of the report is available on NGESO's website[32].

[30] Please see the CION Process Guidance Note: https://www.nationalgrideso.com/connections/registers-reports-and-guidance
[31] Data for this reporting year not yet available.
[32] https://www.nationalgrideso.com/document/130601/download

For the latest period, between April to September 2018, 76% of offers in England and Wales met the customer's requested connection date, albeit some were provided with access restrictions, which facilitated an earlier date than would have otherwise been provided. The equivalent percentage for Scotland was 52%. Many generation connections also remain in a 'scoping' phase without planning consent or awaiting a successful outcome in the Capacity Market and there is therefore significant uncertainty as to which generation is going to connect and in what timescales.

All OFTOs own and operate the offshore transmission systems, which are built by offshore generators to connect their generating stations to the NETS (the generator build model). As such, there have been no problems under the offshore transmission regime with the time taken to connect during this reporting year. OFTOs' licences require them to report, every quarter, offshore transmission system performance. Where an OFTO exceeds the annual availability target, the OFTO is rewarded up to 5% of annual revenue, and where that performance has fallen below the target of 98% availability, the OFTO is penalised up to 10% of its yearly revenue and up to 50% over five years. Where the OFTO is able to demonstrate that performance has fallen as a result of an 'Exceptional Event'[33], this period will not count against their availability target. When reviewing Exceptional Event claims, we look at whether the event was beyond the reasonable control of the OFTO and, if so, whether the OFTO has followed good industry practice to manage the impact of the event on the availability of the services (both in anticipation of the event and after the event has occurred). In 2018, system availability on the offshore transmission system was above 98%.

Distribution

For distribution network reporting we consider two elements: 'time to quote' and 'time to connect'. DNOs are incentivised to connect customers in a timely and efficient manner through the Time to Connect incentive, which sets both targets for these two elements. Time to quote is the difference, in working days, between the date the customer applies for a new connection and the date a quotation is issued to the customer. Time to connect is the difference between the date on which the customer accepts the quote and the final connection date (when the connection has been installed, commissioned and left safe).

Historically, we have monitored the time taken by DNOs to provide connection offers and (since 2010) complete the connection. We have also established guaranteed standards for connections that require the DNOs to make compensation payments to customers if the DNO fails to deliver specified connection services within minimum timescales. These standards cover the provision of quotations, the scheduling of agreed dates for works with customers and the completion of works on the dates agreed with customers. Failure to meet these standards on 90% of occasions in each quarter constitutes a breach of the licence. In 2017-18, all DNOs performed well under the Connections Guaranteed Standards of Performance. All DNOs met or exceeded their internal targets for 2017-18 and received a green RAG status in Ofgem's annual report.[34]

As part of RIIO-ED1, we have a 'time to connect' incentive, which rewards DNOs if they are able to issue quotes and complete connections (for smaller connection projects) quicker than the target timescales. The companies have also set their own targets for the time taken to connect which they report on annually. All DNOs met their 'time to quote' targets but just over half of all DNOs failed to meet the targets on 'time to connect' new customers to the network.

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[33] Please see Page 15 of the Generic Offshore Transmission Owner (OFTO) licence for a definition of an 'Exceptional 'Event'.

[34] https://www.ofgem.gov.uk/publications-and-updates/riio-electricity-distribution-annual-report-2017-18

We also monitor the time taken to repair faults through the Interruptions Incentive Scheme. The time taken to repair has been incentivised as part of the 'customer minutes lost' element of the Scheme. As noted above, the length of time customers are off supply has fallen by 9% since the start of RIIO-ED1.

Prevention of cross-subsidies

Under Article 37(1)(f) of the Electricity Directive, each National Regulatory Authority (NRA) is required to ensure that there are no cross-subsidies between transmission, distribution and supply activities.

In GB, licensed electricity distribution, gas distribution and transmission network operators (including OFTOs) are subject to licence conditions prohibiting regulated businesses from giving cross-subsidies to, or receiving cross-subsidies from, related undertakings.

Electricity and gas transmission and distribution licences include a requirement for independent auditors to carry out a range of procedures, agreed with the Authority, to provide assurance that obligations to avoid discrimination and cross-subsidies are being respected. We review the auditors' reports and may raise supplementary questions, as appropriate.

The unbundling requirements as described in Section 3.1.1 also provide for greater structural separation of transmission interests from generation, production and supply interests in order to prevent cross-subsidies.

One area that we will continue to monitor is the interpretation and application of requirements for financial transactions to be completed at arm's length and on normal commercial terms. This is especially relevant for the terms of loans made to or by the licensee. Other key risk areas that we take into account are:

- the basis of recharging for services provided at a group level;
- the justification for any management fees charged to the licensee by related parties; and
- the interest rates charged on intra-group loans affecting the licensee.

A requirement to have at least two sufficiently independent directors has been in effect since April 2014.

3.1.3 Network tariffs for connection and access

Under Article 37(1)(a), (3)(c), (d), (6)(a), (8), (10), (12), of the Electricity Directive, NRAs are required to fix or approve transmission or distribution tariffs or their methodologies. In this section we report on our activities related to the regulation of tariffs and network charges (for transmission and distribution) during the reporting period.

Transmission

In GB users of the electricity transmission system are subject to three types of transmission charges: Connection charges, Transmission Network Use of System (TNUoS) charges and Balancing Services Use of System (BSUoS) charges. For all three charges, the methodologies must be approved by Ofgem, but we do not set or approve the level of individual charges.

Transmission Connection Charges

For the purpose of the GB domestic regime, connection charges relate to the provision and maintenance of connection assets that are solely required to connect a particular user (i.e. a generator) to the transmission system. The cost of these assets are recovered directly from

the user via connection charges that are imposed by the ESO under its connection charging methodology.

Transmission Network Use of System Charges

TNUoS charges relate to the cost of installation and maintenance of the GB electricity transmission system. The costs are recovered by ESO under its TNUoS charging methodology. TNUoS charges are recovered from all users of the GB electricity transmission system (excluding interconnectors). Portions of these charges vary by location, reflecting the costs that users impose on the transmission system. TNUoS charges broadly combine three components: local charges (generators only), wider locational charges and residual charges (generation and demand).

Balancing Services Use of System Charges

The ESO recovers the costs of balancing the system through BSUoS charges, derived from the BSUoS charging methodology that is set out in Section 14 of the Connection and Use of System Code (CUSC).

Distribution

The electricity distribution licence requires DNOs to have in force at all times a Use of System Charging Methodology, and a Connection Charging Methodology (collectively known as 'the Charging Methodologies'). Both must be approved by Ofgem.

DNOs have developed common approaches to connections charging and distribution use of system (DUoS) charging as part of the Distribution Connection and Use of System Agreement (DCUSA). These common approaches include:

- the Common Distribution Charging Methodology for all customers connected at the lower voltages;
- the Extra High Voltage Distribution Charging Methodology for all demand and generation customers at the higher voltages; and
- the Common Connections Charging Methodology, incorporated into all DNO connection methodologies.

Each DNO's connection charging methodology incorporates a company-specific section as well as the common methodology. The licence requires DNOs to comply with their charging methodologies and to publish Charging Statements prepared in accordance with those methodologies – except where explicit consent is given by Ofgem.

Section 23 allows us to determine in relation to a broad range of disputes concerning connections under the statutory scheme. Standard licence condition 7.12 of the electricity distribution licence allows us to determine disputes concerning whether a DNO has applied charges in line with their Charging Methodologies.

As part of the electricity distribution price control RIIO-ED1, we also introduced a specific incentive for large connection customers, the 'Incentive on Connections Engagement'. This aims to drive DNOs to understand and meet the needs of major connection customers (larger metered demand, unmetered demand, distributed generation). If a DNO fails to do this, then it could incur a penalty. As part of the Incentive on Connections Engagement, DNOs must submit two reports to Ofgem, one at the start of the regulatory year (i.e. the financial year) outlining their commitments to improve services and another at the end of the year reporting back against the commitments made. Throughout the year, we consult with stakeholders to understand their views on the DNOs' work plans and target outputs. The DNOs reported on

2017-18 performance in May 2018. We engaged with stakeholders to formally review DNO performance and ultimately decided not to issue any penalties in 2018.[35]

Code modifications

Parties to the relevant codes (CUSC for transmission and DCUSA for distribution) can propose changes to the codes. Unless the change is subject to self-governance (typically minor, housekeeping changes), Ofgem makes the final decision on whether or not to approve the change. We do so based on the charging objectives in the codes and also taking into account our principal objective and wider statutory duties.

Stakeholders can provide input to proposed changes to the methodologies or tariffs. This is done either through participation in industry working groups, or through the public consultation process. We take into consideration any input received from stakeholders when reaching our decision on methodologies or tariffs. Appeals can be made either to the Competition and Markets Authority or via judicial review. There have been no appeals of any decision during the reporting period.

Reviews of Use of System Charges

We are undertaking a wide-ranging review of the charging arrangements in GB. This review is called our Future Charging and Access (FCA) programme, and aims to design a new charging framework that will drive whole system benefits, promote efficient investment decisions to reduce network and system costs, promote energy efficiency and deliver carbon benefits for GB consumers.

In GB, use of system charges include 'forward-looking' charges, which are designed to incentivise the efficient use of the network, and 'residual' charges, which are top-up charges set to enable total allowed revenues to be recovered.

In December 2018, we launched a Significant Code Review (SCR)[36] into electricity network access arrangements[37] and forward-looking charges.[38] The project aims to ensure that electricity networks are used efficiently and flexibly, reflecting users' needs and allowing consumers to benefit from new technologies and services while avoiding unnecessary costs on energy bills in general. The scope of the SCR includes a review of the definition and choice of access rights, a wide-ranging review of distribution network charges and distribution connection charges, and a focused review of transmission network use of system charges. We are currently working with industry to develop and assess the potential options for change. We intend to publish two working papers this year outlining initial thinking. We currently envisage that any changes will be implemented by 2023.

In August 2017, we launched a separate Targeted Charging Review (TCR) SCR into residual electricity network charges and the remaining differences in the non-cost reflective charges faced by smaller and larger generators, known as "embedded benefits". The TCR aims to reduce the harmful distortions caused by the current residual electricity network charging arrangements and ensures these charges are more fairly distributed.

[35] https://www.ofgem.gov.uk/publications-and-updates/outcome-our-assessment-under-2018-riio-ed1-incentive-connections-engagement
[36] A SCR is a tool for Ofgem to initiate wide ranging and holistic change and to implement reform to a code-based issue.
[37] The nature of users' access to the electricity networks (for example, when users can import/export electricity and how much) and how these rights are allocated.
[38] The type of ongoing electricity network charges which signal to users how their actions can ether increase or decrease network costs in the future.

In November 2018, we published our minded to decision and draft impact assessment for TCR. We intend to issue the final decision in the second half of 2019.

3.1.4 Cross-border issues

To achieve a fully integrated European energy market, it is vital that NRAs coordinate effectively on cross-border issues. In this section, we provide an update on our interconnector activities (including allocation of capacity and congestion management), our investment plans with regards to the Ten Year Network Development Plan (TYNDP) and our cooperation with other NRAs during 2018-19.

European Network Codes

Please see Main Developments part of the report on Wholesale Markets (section 2.2).

Access rules for interconnection

The GB electricity market is interconnected to the Netherlands (BritNed), Belgium (Nemo Link), France (IFA), Northern Ireland (Moyle) and the Republic of Ireland (EWIC).

The Third Package introduced new responsibilities for NRAs regarding the rules for granting access to cross-border electricity infrastructure, which in GB are reflected in the standard licence conditions of the electricity interconnector licence[39]. These responsibilities can be summarised as follows:

- licensees are required to submit any new or amended charging methodologies and access rules to Ofgem for approval;
- both Ofgem and the interconnector licensee must ensure that charging methodologies and access rules, and any modifications to these, are: objective, transparent, non-discriminatory and compliant with the Electricity Regulation and any relevant legally binding decision of the European Commission or ACER;
- interconnector licensees are required to review their access rules at least once each year and consult on any modifications that may be necessary to ensure that the access rules better achieve the relevant objectives. Where modifications are proposed, interconnector licensees must provide Ofgem with a report that sets out how any proposed modifications better achieve the relevant objectives. The report must present details of any responses to the consultation and of any changes to the proposed modifications as a result of those. In 2017, the four operational GB interconnectors submitted proposed modified access rules. We approved each of these on the basis that they better achieve the relevant objectives;[40] and
- Ofgem has the power to request licensees to review and amend their access rules and charging methodology.

[39] See standard license conditions 10, 11 and 11A: https://epr.ofgem.gov.uk//Content/Documents/Electricity_Interconnector_Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf.

[40] IFA: https://www.ofgem.gov.uk/publications-and-updates/approval-modified-access-rules-and-charging-methodology-ifa-interconnector;
BritNed: https://www.ofgem.gov.uk/publications-and-updates/approval-modified-access-rules-britned-interconnector;
Moyle:https://www.ofgem.gov.uk/publications-and-updates/approval-modified-access-rules-and-charging-methodology-moyle-interconnector;
EWIC: https://www.ofgem.gov.uk/publications-and-updates/approval-modified-access-rules-and-charging-methodology-east-west-ewic-interconnector

In 2018, Ofgem continued to monitor interconnector statistics, including information on auctions, capacity, nominations and flows.

Existing interconnection

Interconnexion France-Angleterre (IFA)
The England-France Interconnector is jointly operated by National Grid Interconnectors Limited and the French TSO, Réseau de Transport d'Électricité. IFA is a high voltage direct current line with a capacity of 2000MW.

Capacity is allocated explicitly in the long term, using a single coordinated capacity platform. 'Netting'[41] and 'use-it-or-sell-it' are applied to ensure that the maximum possible capacity is made available to market participants in all timeframes. Day-ahead capacity is allocated via implicit auctions following the implementation of market coupling. Explicit auctions are used for intraday trading.

BritNed
The 1000MW BritNed high voltage direct current interconnector, between GB and the Netherlands, began operating in 2011. BritNed allocates capacity on its cable through a blend of implicit and explicit auctions. It holds annual, quarterly, monthly, and multi-day explicit auctions, an implicit day-ahead auction, and explicit intraday auctions.

BritNed has a 25-year exemption from rules relating to the use of interconnector revenues and charging methodologies, and certain conditions are not in operation in its licence.[42] However, it must still comply with the interconnector licence condition relating to access rules, introduced as a result of the Third Package.[43]

Moyle
The Moyle interconnector, which links Scotland to Northern Ireland, offers capacity to the market through explicit long term, daily and intraday auctions. It offers a range of long term products from one month to one year. To maximise the availability of capacity, the 'use-it-or-sell-it' rule applies to all long term capacity.

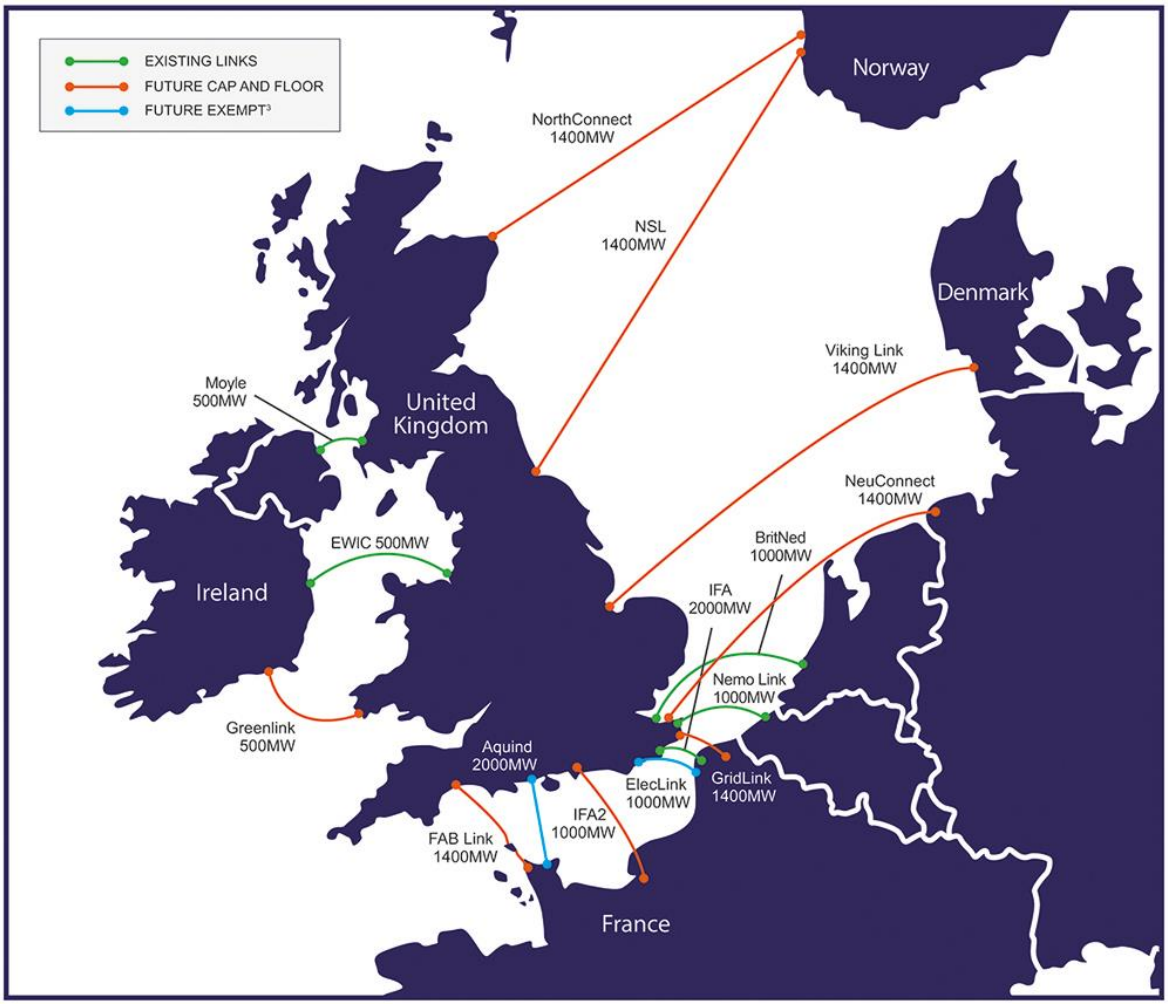
EirGrid East-West Interconnector (EWIC)
EWIC became operational in November 2012. It has a technical capacity of 500MW between Wales and Ireland and uses the same capacity allocation platform as Moyle. It offers capacity through explicit long term (monthly and annual), daily and intraday auctions and applies the 'use-it-or-sell-it' rule to long term capacity.

Nemo Link
Nemo Link is a 1000MW electricity interconnector to Belgium and is the first interconnector project to be regulated under our cap and floor regime.[44] We published our final decision to award the cap and floor regime to Nemo Link in December 2014.[45] In February 2018, Nemo Link was certified as a TSO in accordance with the Electricity Directive[46] on the basis that all of the five tests set out in section 10F of the Electricity Act have been met.

[41] Netting means that any capacity sold in one direction is netted off against capacity sold in the other direction.
[42] Standard license conditions 9 and 10 of the electricity interconnector license.
[43] Standard license condition 11A of the electricity interconnector license.
[44] The cap and floor regime is the regulated route for new interconnector investment in GB.
[45] Our 2014 decision: https://www.ofgem.gov.uk/sites/default/files/docs/2014/12/final_cap_and_floor_regime_design_for_nemo_master_-_for_publication_1.pdf
[46] https://www.ofgem.gov.uk/publications-and-updates/certification-under-ownership-unbundling-requirements-third-package-decision-gas-and-electricity-markets-authority-nemo-link-limited

After successfully clearing the test operation period[47], Nemo Link entered commercial operation on 31 January 2019.

Figure 1: Existing and future electricity interconnectors



Note: for illustrative purposes only.

Merchant 'exempt' is the alternative route for delivering interconnector investment in GB. Projects are developed without consumer underwriting and request exemptions from certain aspects of EU legislation.[48]

New interconnection

ElecLink

ElecLink, a planned 1000MW interconnector project between GB and France, has a partial exemption from use of revenues, third party access and unbundling rules under Article 17 of Electricity Regulation.[49] ElecLink is currently under construction, and is expected to enter commercial operation in 2020.

[47] Special license condition 2 of Nemo Link electricity interconnector licence.

[48] Aquind applied for a regulation exemption in 2017. ACER rejected the exemption application in 2018. Aquind is now seeking alternative regulatory solutions.

[49] https://www.ofgem.gov.uk/publications-and-updates/final-decision-eleclink-limited%E2%80%99s-request-exemption-under-article-17-regulation-ec-7142009-great-britain-france-electricity-interconnector

NSL
NSL (formerly NSN) is a planned interconnector to Norway. At just over 700km, it will be the longest subsea interconnector in the world. Currently under construction, it is expected to start operating in 2022 and will have a capacity of 1400MW.

We approved the needs case for the NSL project in 2015.[50] In July 2017, we made our decision on NSL's Final Project Assessment, setting the provisional cap and floor levels at £89.85m and £50.90m. We will confirm the final cap and floor levels for the project prior to operation at our post-construction review stage.[51]

In July 2018 we also updated NSL's interconnector licence to give effect to the cap and floor regime decisions that apply to NSL.[52]

IFA2
Interconnexion France-Angleterre 2 (IFA2) is a planned interconnector to France, with capacity of 1000MW. In April 2017, contracts were awarded to build the interconnector and construction is now underway, with an anticipated operation date in late 2020. We have recently published our decision on IFA2's Final Project Assessment, setting the provisional cap and floor levels at £50.7m and £27.6m (in 2016-17 prices).

Ofgem's cap and floor regime

In 2015, we granted a cap and floor regime to five interconnector projects as part of the first application window of cap and floor projects.[53] These projects will connect GB with France (FAB Link - 1400MW and IFA2 - 1000MW), Denmark (Viking Link - 1400MW), Norway (NSL – 1400MW) and the Republic of Ireland (Greenlink – 500MW). Two of the five projects are now under construction (see above), and the others continue to make good progress towards operation.

Following work throughout 2017, we concluded our second cap and floor application window in January 2018. We granted a cap and floor regime in principle to three new interconnector projects. These projects propose to connect GB with Norway (NorthConnect – 1400MW), France (GridLink – 1400MW) and Germany (NeuConnect – 1400MW). These projects are now under development and we expect our Final Project Assessment stage for these three projects to start by January 2021.

The GB transmission system currently has 4GW of electricity interconnection. The projects that are currently under construction (mentioned above) are set to increase GB interconnector capacity to 8.4GW. If all other future projects illustrated in Figure 1 are realised, GB interconnector capacity could increase up to 17.9GW.

Aquind
Aquind is a proposed 2000MW high voltage direct current interconnector to France. The developer applied for an exemption in summer 2017. We agreed with Commission de *Régulation* de l'Énergie, the French energy regulator, to refer the Aquind exemption request to ACER because we would be unable to reach a joint agreement on the decision

[50] Our 2015 decision: https://www.ofgem.gov.uk/publications-and-updates/decision-initial-project-assessment-nsn-interconnector-norway
[51] https://www.ofgem.gov.uk/publications-and-updates/decision-final-project-assessment-nsl-interconnector-norway
[52] Our 2018 decision: https://www.ofgem.gov.uk/publications-and-updates/decision-changes-electricity-interconnector-licence-held-national-grid-north-sea-link-limited
[53] Under the cap and floor approach, if interconnector developers' revenues exceed the cap then revenue above the cap is returned to consumers. Conversely, if their revenues fall below the floor then consumers top up developers' revenues to the level of the floor. Prior to Window 1, Nemo Link was the pilot project under the cap and floor regime.

within the legislative six-month timeframe. This is in line with Article 17(5) of Electricity Regulation. In June 2018 ACER decided not to grant the exemption, and it confirmed its decision in appeal in October 2018. In December 2018 Aquind submitted a further appeal application before the European Court of Justice, which has yet to deliberate on it. Aquind is currently seeking alternative regulatory routes to progress the development of the project.

Table 1 below provides an overview of the current development status of new GB interconnector projects.

Table 1: New interconnector project progress

Project	Regulatory approval stage		Construction	Estimated operational date
Cap and floor regime (9.9GW)				
	IPA	**FPA**		
NSL	✓	✓	✓	2022
FAB Link	✓			2022/3
IFA2	✓	✓	✓	2020
Viking Link	✓			2022
Greenlink	✓			2023
GridLink	✓			2023
NeuConnect	✓			2023
NorthConnect	✓			2022/3
Exemption projects (3GW)				
ElecLink	Exemption granted in September 2014.		✓	2020
Aquind	Exemption request referred to ACER in December 2017; ACER decided not to grant an exemption in June 2018. Auquind appealed against such decision to ACER's Board of Appeal, but it was rejected. In December 2018 Aquind submitted a further appeal application before the European Court of Justice			2022

Other significant developments

Network Options Assessment (NOA) for interconnectors

In January 2018, National Grid as the GB SO published its forth iteration of the NOA for interconnectors, which aims to signal where further GB interconnection may be beneficial (beyond those projects already approved). National Grid also published the new methodology for the NOA for interconnectors 2018-19 in July 2018.

Overcoming operability challenges

In our January 2018 decision[54] on the cap and floor projects applying under the second application window, we acknowledged that the changing energy landscape presents a number of system operability challenges for the SO and noted that the GB SO has a number of initiatives currently either underway or under consideration to help meet these operability challenges. We will continue to monitor developments in this area as new projects mature.

3.1.5 Compliance

3.1.5.1 Investigations concluded and notable compliance action

Annual Statements

In November 2017 we opened an investigation into SSE's Compliance with SLC 25, resulting in consumers being providing inaccurate and misleading information on Annual Statements, including incorrect Alternative Cheapest Tariff messaging and incorrect estimated annual savings. We also found evidence that on some Annual Statements, SSE had overstated estimated annual savings by erroneously including direct debit and paperless billing discounts which should not have been included for PPM tariffs (in contravention of SLC 31).

We decided this investigation was suitable for alternative action with SSE making a payment of £1m to the Voluntary Redress Fund, in accordance with the criteria set out in our enforcement guidelines[55]. SSE admitted the breaches we had outlined to them and had acted to put things right, they also identified the full extent of the breach and there are no ongoing concerns with SSE's IT systems or fault reporting.

Misleading sales practices

In February 2018, we became aware that Green Star Energy was using Utility Discount, a third-party intermediary (TPI), to acquire customers. Utility Discount did not make it clear to consumers through its sales channel for Green Star Energy that it primarily offered Green Star Energy tariffs, instead of providing a wider selection of tariffs from across the market. Green Star has now addressed this and made sure the website is compliant and will waive any early termination fees for consumers who switched to Green Star on the basis on this information. In addition to this, Green Star failed to provide customers with annual statements between August 2014 and November 2017 (in accordance with SLC 31). Green Star self-reported this failure to Ofgem in March 2018.

Green Star paid £361,415 in compensation to customers affected and paid £317,868 in voluntary redress to the Voluntary Redress Fund(sum totalling £679,283). Green Star Energy has now put in place systems to issue annual statements to the majority of its customers and has set out an action plan to issue annual statements to the remainder of the effected customers. Due to these actions and the voluntary redress payment, we decided not to take enforcement action on this occasion.

Termination fees

British Gas (BG) agreed to pay £1.8 m to the Voluntary Redress Fund, as a result of issues stemming from the incorrect application of termination fees and tariff rates applied to customers' final bill in the protected period following a switch (in accordance with SLC 24.9). BG also failed to achieve certain Standards of Conduct required by SLC 25C (SLC 0 from

[54] https://www.ofgem.gov.uk/publications-and-updates/decision-initial-project-assessment-gridlink-neuconnect-and-northconnect-interconnectors
[55] https://www.ofgem.gov.uk/system/files/docs/2017/10/enforcement_guidelines_october_2017.pdf

October 2017). BG applied charges to customers' bills in circumstances where they were not appropriate, and as a result bills were inaccurate; the conduct continued for a considerable period of time and BG's billing process failed to prevent this from happening or to identify the error promptly.

BG took the following remedial action prior to and during our investigation. It corrected the incorrect terms and conditions; refunded in full all customers who had been overcharged; paid compensation to customers who had been overcharged and implemented revised quality and control procedures in relation to charging and the production of terms and conditions.

We decided that this investigation was suitable for resolution by way of alternative action under our Enforcement Guidelines. We were satisfied the full extent of the breaches being investigated had been identified. We reviewed BG's implementation of these measures and the impact of the changes BG had made to its quality and control procedures. We were satisfied that BG had taken appropriate remedial action to address non-compliant activity and that affected customers had been appropriately compensated.

Advanced meters

In September 2018, the Enforcement Decision Panel (EDP) formally found that npower had replaced electricity meters at specified non domestic premises with meters that were not advanced meters, in contravention of SLC 12.18. Npower had also failed to take all reasonable steps to install or arrange for the installation of advanced meters. Npower had admitted these failings.

Having considered our findings, the EDP decided to impose a single joint penalty of £2.4 m on npower Direct Limited, npower Limited, npower Northern Limited and npower Yorkshire Limited. This was paid to HM Treasury in line with the statutory process.

SMART meter roll out programme

The Government introduced the smart meter roll-out programme in 2014 requiring all suppliers by law, to take all reasonable steps to roll-out smart meters to all homes and small businesses by the end of 2020. Suppliers are required set individual annual targets for smart meters to be installed for their customers, against which Ofgem monitors compliance. EDF failed to meet its target for installing SMART meters for its customers for 2017.

EDF Energy agreed to pay £350,000 into the Voluntary Redress Fund. EDF also submitted plans to Ofgem for meeting its 2018 target. We decided not to take formal enforcement action against the supplier due to these steps it had taken.

Feed In Tariff misreporting

SSE self-reported that it had overstated its generation payments in its Feed-in Tariff (FIT) annual submissions to Ofgem. This was due to an administrative error, that resulted in SSE receiving £4.07 m more in payments from the annual levelisation fund than it was entitled to. SSE has repaid the £4.07 m and agreed to an independent audit to review its internal processes. The audit recommended changes to reporting processes which SSE are currently implementing.

In addition to this, SSE paid £455,705 in interest to the FIT levelisation fund and £250,000 to the Voluntary Redress Fund over the incorrect submissions. We decided not to take enforcement action, taking into account the steps SSE has taken to address its failings and the redress it has agreed to pay.

Failure to make FITs levelisation payment

Foxglove had failed to make a payment into the Feed-in Tariff levelisation fund. Foxglove paid £497,691.80 to pay off its outstanding Feed-in Tariff debt, which was used to reduce the mutualisation amount due from other suppliers. We decided not to take enforcement action as result of the receipt of the outstanding payment.

Failure to discharge Renewable Obligation

Under the government's Renewables Obligation schemes, suppliers who do not source the required proportion of electricity from renewable sources have to pay into a buy-out fund administered by Ofgem. Several suppliers failed to make these payments.
We opened an investigation into Spark Energy over their compliance with Article 68 and Article 44 of the Renewables Obligation. Spark Energy had missed Renewables Obligations payments. Spark Energy ceased trading at the end of November , during the investigation . Spark's customers were transferred to Ovo under the Supplier of Last Resort (SoLR) process. The case closed in December 2018.

An investigation was opened for Economy Energy's compliance with Article 68 and Article 44 of the Renewables Obligation. Economy Energy had missed Renewables Obligations payments. During the course of the investigation, Economy Energy paid £4 m towards the £17,064,304.60 owed, leaving £13,064,304.60 outstanding. Economy Energy ceased trading on 8 January 2019. Economy Energy's customers were transferred to Ovo Energy under the Supplier of Last Resort (SoLR) process. The case closed in January 2019.

Eversmart and URE Energy agreed to deliver all outstanding payments due under Article 68 and Article 44 of the Renewables Obligation by 31 March 2019 through monthly instalments. URE did not make these payments by the required date. This resulted in Ofgem issuing a final order for full payment. Eversmart made all of its monthly instalments, repaying the full amount of £439,149,82.

Customer complaints handling, assessing ability to pay, treatment of vulnerable customers, billing and switching

In February 2018, we opened an investigation into Iresa's compliance with Standard License Conditions 14, 23.3, 23.4, 25C (SLC 0 from October 2017), 27.5-27.8, 27.16, and the CHSR 2008. These conditions relate to Consumer Complaints Handling Standards (treating customers fairly), complaints and call handling, customer switching, providing refunds and consideration of customers' ability to pay when in debt. Iresa Energy ceased trading at the end of July, during these proceedings. Iresa's customers were transferred to Octopus Energy under the Supplier of Last Resort (SoLR) process. The case closed in August 2018.

Standards of conduct, customer complaints handling, billing and switching

We opened an investigation into Extra Energy in July 2016 into whether Extra had breached numerous licence conditions. These conditions related to Consumer Complaints Handling Standards (treating customers fairly), frequency of billing, timely provision of final bills, provision of annual statements, return of credit balances, handling meter readings appropriately, transfer blocking, and complaints and call handling. Extra Energy ceased trading at the end of November, during the investigation Extra Energy's customers were transferred to Scottish Power under the Supplier of Last Resort (SoLR) process. The case closed in December 2018.

Sales and marketing obligations

In September 2016, we opened an investigation into Economy Energy's compliance with SLC 25, in relation to its sales and marketing obligations. Economy Energy ceased trading on 8 January 2019. Economy Energy's customers were transferred to Ovo Energy under the Supplier of Last Resort (SoLR) process. The case closed in January 2019.

3.1.5.2 Ongoing investigations

Enforcement Section

The following enforcement investigations were also ongoing as of March 2019:

- Investigation into whether there has been an infringement of Chapter I of the Competition Act 1998 in relation to possible anticompetitive agreements and concerted practices.
- Investigation into whether there has been an infringement of Chapter II of the Competition Act 1998 and/or Article 102 of the Treaty on the Functioning of the European Union, concerning potential abuse of a dominant position by a company providing services to the energy industry.
- Investigation into whether Ovo has complied with its obligations under standard licence conditions 25C (SLC 0 from 10 October 2017) and 31A of the gas and electricity supply licences in respect of information on bills, statements of account and Annual Statements.
- Investigation into National Grid Electricity Transmission (NGET) and its compliance with its obligations under the Standard Licence Condition 16 of the Transmission Licence.
- Investigation into Utility Warehouse's compliance with Standard Licence Conditions (SLCs) 25C/0, 27.5, 27.8 and 28B of the Electricity Supply Licence and the Gas Supply Licence.
- Investigation into whether there has been an infringement of Chapter I of the Competition Act 1998 in relation to possible anticompetitive agreements and concerted practices.

REMIT - section 3.2.1.1 of this report provides information on our work in this area in respect of monitoring, investigation and improving compliance.

The fact that the investigations have been launched does not imply that any company has breached its obligations.

3.1.5.3 Provisional Orders

Below you can find details of the provisional orders (POs) made during the period April 2018 to March 2019. Four POs were issued and there was one PO from the previous year that concluded during this period.

Failure to participate in the Active Choice Collective Switch Autumn Trial

In September 2018, a PO was imposed on npower for refusing to comply with a direction from Ofgem requiring their participation in the Active Choice Collective Switch Autumn Trial. These trials were introduced by Ofgem in response to the recommendations made by the CMA following the Energy Market Investigation.

Npower challenged the lawfulness of the provisional order and requested a judicial review. As npower refused to comply with the provisional order, we successfully enforced it by obtaining an injunction in the High Court.On 21 December 2018, the High Court issued its decision to dismiss npower's claim for a judicial review on our decision that they should work with us on our ongoing trial of simplified collective switching. In relation to the provisional order issued to npower, Npower has now complied with the direction requiring their participation in the Active Choice Collective Switch Autumn Trial. We are consulting on revoking the provisional order.

Customer service, complaints handling and billing and payment issues

Ofgem had concerns over Economy Energy's compliance with SLCs 0, 27 and the Complaint Handling Standard Regulations (CHSR) 2008. In January 2019, we issued a PO to address concerns relating to treating customers fairly, customer service, complaints handling and billing and payment issues.
In relation to the provisional order issued to Economy Energy, the company ceased trading on 8 January 2019 and its supply licences were revoked on 12 January 2019, thereby ending the provisional order of 4 January 2019.

Transfer of customer during SoLR process

In January 2019, we became aware that Economy Energy were transferring it customers to E Gas & Electricity Limited (EGEL). Economy Energy ceased trading in January 2019 and customers were transferred to Ovo through the Supplier of Last Resort (SoLR) process.
In relation to the provisional order issued to EGEL, having established that the transfers of former customers of Economy Energy to EGEL were properly cancelled and were not completed, the Authority made a Revocation Order under section 25(7)(c) of the Electricity Act 1989 and section 28(7)(c) of the Gas Act 1986. It was decided that the terms of the provisional order were no longer requisite for the purpose of ensuring EGEL's compliance with SLC 14A and SLC 0.3a.

Consumer Complaints Handling Standards, debt recovery/ability to pay and treatment of vulnerable consumers

In February 2019, we issued a provisional order relating to Solarplicity's compliance with SLCs 0, 14, 22, 27 and the CHSR 2008. We had concerns relating to treating customers fairly, customer service, complaints handling, debt recovery/assessing ability to pay and the treatment of vulnerable consumers. Customers were not able to contact Solarplicity and some of their contact channels were not fit for purpose.

The provisional order for Iresa issued in March 2018 (issued during previous reporting year) was confirmed in June 2018 and ended in July 2018 when Iresa ceased trading and its licenses were subsequently revoked.

3.1.5.4 Final Orders

In March 2019, we issued a final order on URE Energy[56]. URE failed to make payments to discharge its RO, for the 2017-2018 obligation period. The final order relates to URE's non-compliance with its obligations under Article 7 of the Renewables Obligation Order 2015. The order required URE to pay its outstanding Renewables Obligation debt of £207,024.36 and late payment interest of £1,989.42 (totalling £209,013.78) by 31 March 2019. On 1 May 2019 we issued URE with a Notice of failure to comply with a Final Order within the meaning of section 25 of the Electricity Act 1989. The notice provided URE with written notice,

[56] https://www.ofgem.gov.uk/publications-and-updates/ure-final-order

pursuant to Schedule 2(1)(c)(i) of the Electricity Supply Licence, of URE's failure to comply with the Final Order dated 8th March 2019,

The notice further explained that if this failure is not rectified to our satisfaction of within three months of URE receiving the notice, we may at any time revoke URE's Electricity Supply Licence subject to giving no less than 30 days' notice

3.2. Promoting Competition

3.2.1 Wholesale markets

The following section is an overview of our monitoring under Article 37(1)(i), (j), (k), (l), (u) and Article 40(3) of the Electricity Directive, and the main developments in the wholesale electricity market in GB during 2018. Details are summarised below:

- Monthly averaged over-the-counter[57] (OTC) day-ahead baseload and peakload electricity prices for 2018 were up from 2017, increasing 26% and 24% respectively;
- Price increases over the past year were mainly driven by higher gas prices as a result of a very cold winter in February and March 2018;
- Annual churn rates for total traded electricity volumes decreased to 3.66 in 2018 compared with 3.68 in 2017 (Figure 3);
- The total traded volume of wholesale electricity decreased in 2018 by 2% to 1,087 TWh;
- Net imports along GB's interconnectors significantly increased by around 22% between 2017 and 2018 to 19.1 TWh; and
- EDF again contributed the largest proportion of power generation in GB. Drax, RWE, SSE, and Uniper all produced more than 5% each of total GB generation.

Policy developments in several areas of GB's wholesale electricity market have continued throughout 2018. Some notable areas of our work include:

- Continuing implementation of the system operation and balancing guidelines, including close cooperation with other European NRAs and TSOs to design the new cross-border balancing markets;
- Delivering further changes to the Capacity Market rules and developing our Five Year Review of the CM for consultation over the Spring/ Summer 2019. Additionally, we have worked closely with Department for Business, Energy and Industrial Strategy (BEIS) since November 2018, to help manage the impact and uncertainty associated with the decision by the General Court of the European Union to annul the decision by the Commission that the CM was compatible with EU rules on state aid; and
- Developing and implementing European Network Codes and Guidelines.

[57] Over The Counter - bilateral trading between two market participants or where an intermediary (the broker) brings together a buyer and seller.

3.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Prices

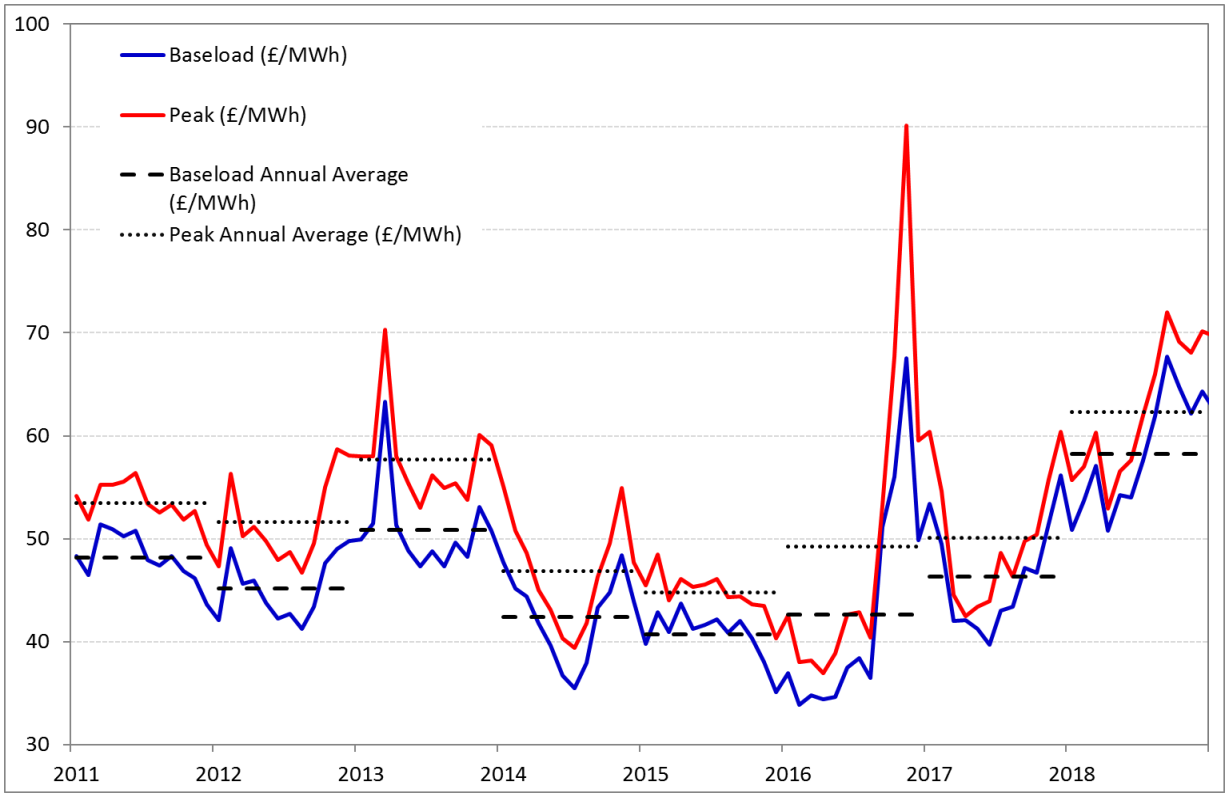
Wholesale prices are compiled and made available to market participants by a number of independent pricing agencies, energy market brokers, and exchanges.

Argus Media, ICIS Energy and Platts provide pricing based on reported OTC trades, which are made available to the market via subscription services. Data providers produce reference price data for a wide variety of peak and baseload contracts up to several years ahead of delivery. Close to real time, OTC trading data is available via financial data providers.

In addition to a wide range of OTC pricing data, three power exchanges in the GB electricity market[58] all provide pricing data to the market. Cash-out prices from the balancing market are also provided to the market via the Balancing Mechanism Reporting Service site.[59]

Figure 2, below, shows monthly averaged OTC day-ahead baseload and peak electricity prices in GB since the beginning of 2011. Baseload and peak prices were on a broadly upward trend since July 2017 and through most of 2018, following higher gas prices, before declining at the start of winter 2018. In 2018, both baseload and peak annual averages hit highs not seen since 2013, they were assessed at £58.26/MWh and £62.29/MWh respectively.

Figure 2: GB monthly and annual averaged day-ahead baseload and peakload power prices



Source: ICIS Energy

[58] Epex Spot, N2EX (a Nord pool Spot and Nasdaq OMX commodities joint venture) and the Intercontinental Exchange (ICE).
[59] Balancing mechanism reporting service: https://www.bmreports.com/bmrs/?q=help/about-us. Section 4.2 has more details on gas prices.

Liquidity

On 31 March 2014, new regulatory requirements to promote liquidity in the wholesale electricity market came into effect.[60] We introduced these reforms, known as 'Secure and Promote' (S&P) because we were concerned that low liquidity was a barrier to effective competition. The aim was to help independent suppliers access the wholesale market and ensure that it provides the products and price signals that all companies need to compete effectively. S&P was introduced as a special licence condition in the generation licences of the largest six vertically integrated companies and the two largest independent generators.

The licence obligation includes three key elements:

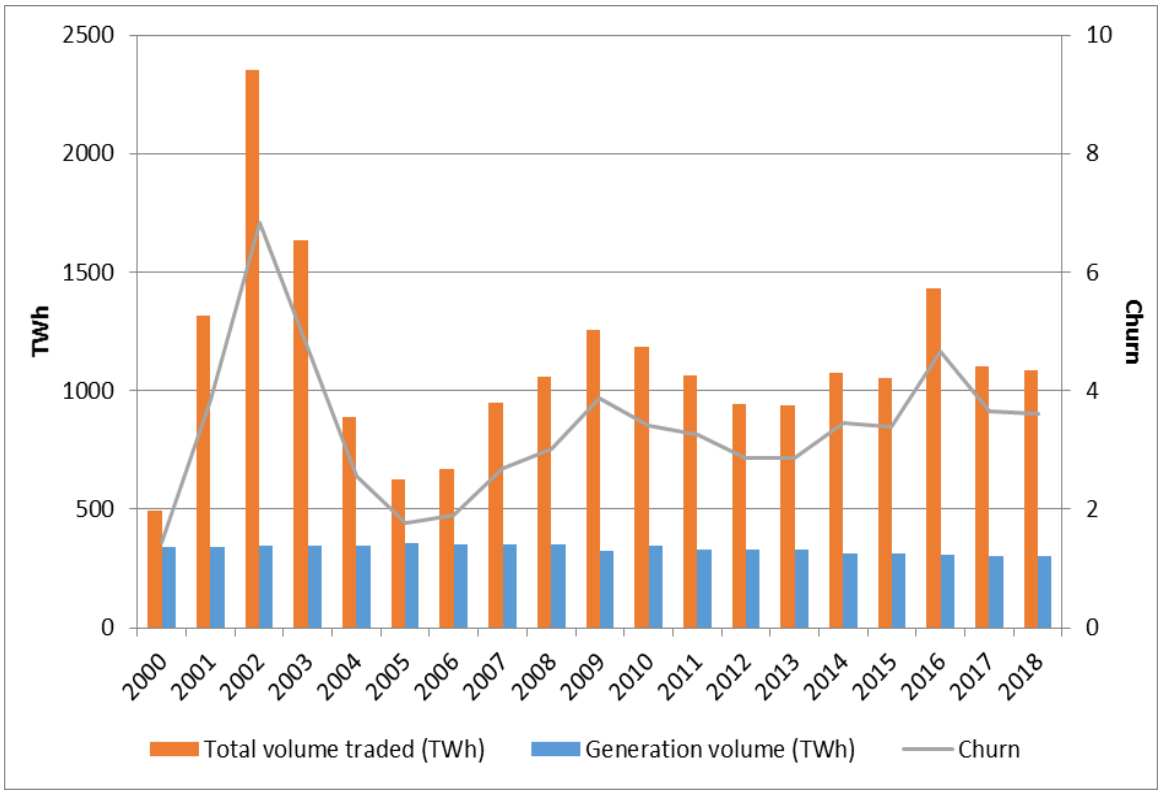
1. **A market making obligation** that obliges firms to post prices at which they would be prepared to buy and sell electricity. It creates more transparency in the wholesale market as participants can see prices for delivery of electricity up to two years out. This is important for building trust and confidence.
2. **Supplier Market Access rules** to improve access to the wholesale market for smaller suppliers. These rules ensure that the largest eight generators cannot treat requests to trade by independents as a low priority. The rules also set deadlines for them to respond to these requests.
3. **A reporting requirement** of day-ahead trading of the six largest vertically integrated companies and the two largest independent generators.

At the time of introducing the S&P, we committed to review the policy after no less than 3 years. We published our 'Secure and Promote review: Consultation' in July 2017[61], which closed in September 2017. The consultation outlined our assessment of how we think the policy was working. Data suggests that some measures of liquidity have improved since the introduction of the procedures, for example:

- **Reference prices**: The policy has led to improved reference prices through the mandated bid-offer spreads on market making products, but this has not been reflected in non-mandated products.
- **Volumes**: Greater traded volumes of forward products, suggesting some improvement in the availability of products that support hedging.
- **Trading throughout the day**: A further concentration of traded volumes within the market making windows, with mixed views on this. Evidence suggests near-term markets have not been negatively affected.
- **Churn**: Churn has averaged around 3.5 to 4.5 since 2014, with spikes of almost 5 in quarters with relative high price volatility. Churn has remained on a largely flat long term trend since the policy started.

[60] https://www.ofgem.gov.uk/publications-and-updates/wholesale-power-market-liquidity-decision-letter
[61] Secure and Promote review: Consultation' in July 2017.
https://www.ofgem.gov.uk/system/files/docs/2017/07/liquidity_consultation_july_2017_final_0.pdf

Figure 3: GB total traded volume, generated volume and churn ratios from 2000 to 2018



Source: ICIS Energy, EPEX Spot, ICE, N2EX, BEIS DUKES.

We also consulted stakeholders for their views and for supporting evidence on:

- Impact of the licence condition to date, including costs and benefits.
- Evidence to establish definitive conclusions on the effectiveness of the policy.
- Whether the policy could be refined to better facilitate the original objectives.

We found general agreement amongst stakeholders that liquidity has either improved or remained constant since the introduction of the policy.[62]

In December 2017 we published a consultation on proposed changes to the licence condition.[63] It focused on smaller adjustments to the S&P licence condition, with the view of reducing the cost for the licensees whilst meeting the key aims of the policy. We also highlighted our intention to carry out further work on the S&P licence condition review in the medium- to longer-term, including a review of the criteria for obligated parties to make them clearer. This review is ongoing.

In mid-2018, a number of mergers and divestments in the retail market reduced the number of parties falling under the Market Making Obligation (MMO) to four, and then to three in

[62] Responses to the consultation are available on our website.
https://www.ofgem.gov.uk/system/files/docs/2017/11/all_responses.zip
[63] Secure and Promote Review: Consultation on changes to the special licence condition.
https://www.ofgem.gov.uk/system/files/docs/2017/12/december_2017_consultation_final.pdf

January 2019[64]. Ofgem published a consultation in August 2018[65] to explore if this development would affect the efficacy of the MMO in meeting its objectives and/or if it would result in undue burdens on the remaining obligated parties. Since 2014 we have been monitoring the effects of the reforms to assess their impact and to make sure the obligated parties comply with them.

In November 2018, Ofgem published an update based on the responses received from industry stakeholders on the consultation letter published in August 2018[66]. The majority of the responses received opposed a suspension of the MMO and it was decided that it would remain in effect alongside the other elements of S&P. In addition, the update advised market participants to prepare for a possible suspension should the remaining obligated parties go through with future plans to divest/merge. This was due to divestment/merger plans being pursued by three of the remaining parties under the MMO. Should the three parties follow through with their plans in 2019, this will leave only one party under the MMO.

Transparency

REMIT

The EU Regulation 1227/2011 on Wholesale Energy Market Integrity and Transparency (REMIT) prohibits insider trading and market manipulation, bringing regulation of the wholesale power and gas markets in line with equivalent financial markets[67]. Since 2013 Ofgem has been monitoring and investigating potential breaches of REMIT[68]. Our REMIT work supports effective competition and promotes trust and confidence in the wholesale markets.

We have continued to monitor the wholesale market for suspected breaches of REMIT and conducted all stages of REMIT investigations from identification of issues through to formal investigation. In addition, we have engaged with a number of companies in order to improve compliance processes. As of 2018, we have registered over 1300 market participants and continued to support those who still needed to register.

We have been actively providing guidance on REMIT issues through our open letters, and have been working closely with ACER, other NRAs and financial regulators, such as the Financial Conduct Authority, to develop the REMIT framework. This cooperation helps us deal effectively with potential instances of market abuse that have an impact on wholesale energy markets in more than one EU country or where there may be crossovers with financial markets.

During 2018, we have worked with the BEIS to ensure that all the legal requirements of REMIT endure once the UK leaves the EU. Ofgem will continue to monitor and enforce GB wholesale energy market integrity and transparency as it does currently. The obligation on market participants to publicly disclose inside information in an effective and timely manner, and the prohibitions on insider trading and market manipulation, will remain. Also, we will continue to monitor, investigate and enforce breaches of integrity and transparency using our powers under Electricity and Gas (Market Integrity and Transparency) (Enforcement etc.) Regulations 2013.

[64] Ofgem's decision regarding ScottishPower: https://www.ofgem.gov.uk/system/files/docs/2019/01/request_for_modification_of_special_condition_aa_of_scottishpowers_electricity_generation_licences.pdf
[65] https://www.ofgem.gov.uk/system/files/docs/2018/08/ofgem_open_letter_-_secure_and_promote_update.pdf
[66] https://www.ofgem.gov.uk/publications-and-updates/november-2018-update-secure-and-promote
[67] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011R1227&from=EN
[68] In 2013 the Electricity and Gas (Market Integrity and Transparency) (Enforcement etc.) Regulations 2013 took effect. These gave Ofgem the ability to monitor, investigate and enforce against breaches of REMIT.

The Transparency Regulation

EU Regulation 543/2013 on submission and publication of data in electricity markets (the Transparency Regulation) is a tool for making sure that the data needed for participants to take efficient production, consumption and trading decisions is made available promptly. Primary data owners must publish data about the generation, transportation and consumption of electricity on a central European platform. Throughout the reporting period, Ofgem has monitored the compliance of the responsible GB parties and contributed to the ACER Opinion on ENTSO-E's review of the Manual of Procedures for the Transparency Platform, which was completed in January 2017. Ofgem will continue to monitor compliance with the data publication requirements of the Transparency Regulation.

Market opening and competition

Ofgem will publish its State of the Market report later this year. This follows our second annual State of the Market report in 2018 and subsequent conclusion of the CMA investigation in 2016.

Wholesale market trading

A total of 1,087 TWh of wholesale electricity was traded in GB during 2018. This is a small decrease (2%) on total traded volume in 2017.

OTC trading

Total OTC trading in 2018 decreased by 2% (20 TWh) year-on-year to 897 TWh. The proportion of the total electricity volumes OTC-traded was broadly stable year-on-year. Around 82% of all power traded in GB was OTC traded, down slightly from 83% in 2017.

Exchange trading

Volumes traded on the exchanges increased in 2018 by 1.4% to 190 TWh, from 188 TWh in 2017. Volumes on the EPEX Spot intraday market had a 25% increase to 19 TWh (from 15.2 TWh in 2017).[69]

The N2EX exchange, which mainly runs day-ahead trading, saw a large increase in traded volumes. Volumes in its day-ahead auction rose by 5% to 120 TWh, up from 114 TWh in 2017. The EPEX Spot day-ahead auction saw a 1.4% decrease in activity, with traded volumes at 49.7 TWh in 2018, from 50.5 TWh in 2017[70].

UK power futures exchange traded contracts are also available on the Intercontinental Exchange (ICE). Traded volumes on the ICE more than halved in 2018 to 1.4 TWh, from 7.9 TWh in 2017.

Market integration

For background information on GB interconnection, interconnection policy and market coupling please see section 3.1.4 of this report.

The GB market is deeply integrated with neighbouring markets. Prices for capacity and flows along these are established using market-based methods. In 2018 the interconnectors had lower availability than in 2017: East-West Interconnector (EWIC) between Ireland and Wales was offline between the end of February and end of March due to a system trip, and also was

[69] Includes both Epex Spot Continuo available from: https://www.epexspot.com/
[70] Includes both Epex Spot Continuo available from: https://www.epexspot.com/

on a full planned outage at the start of May for nine days. The French interconnector (IFA) operated at reduced capacity of 1.5 GW during April as well as two planned outages during the summer each lasting approximately nine days reducing capacity to 1 GW. The BritNed interconnector had two planned outages during the summer, each lasting four days.

IFA (2GW) and BritNed (1GW) have been part of the NWE Day Ahead market coupling since February 2014. Market coupling ensures that power is produced where it is most efficient, and transported to areas of consumption where it is most valued. This benefits consumers overall and supports secure and sustainable supply. On 1 October 2018, both the EWIC and Moyle interconnectors were coupled through the new trading arrangements set out in the I-SEM[71] which couples the island of Ireland market with the Europe market.

Net imports of power along GB's four interconnectors significantly increased in 2018 to 19.1 TWh (from 15.6 TWh in 2017[72]). Gross flows (both imports and exports) increased from 23.0 TWh in 2017 to 24.4 TWh in 2018. Imports accounted for 78% of the gross flows in 2018, an increase of 10 percentage points since 2017.

Exports from GB to France were around 0.4 TWh in 2018, meaning 97% of the flows along IFA in 2018 were imports from France to GB. BritNed similarly largely imported into GB (in 2018 making up 97% of the flows). East-West imports to GB from the I-SEM 62% of the time in 2018. Meanwhile, Moyle imported to GB from the Irish Single Energy Market only 32% of the time in 2018.

Market concentration

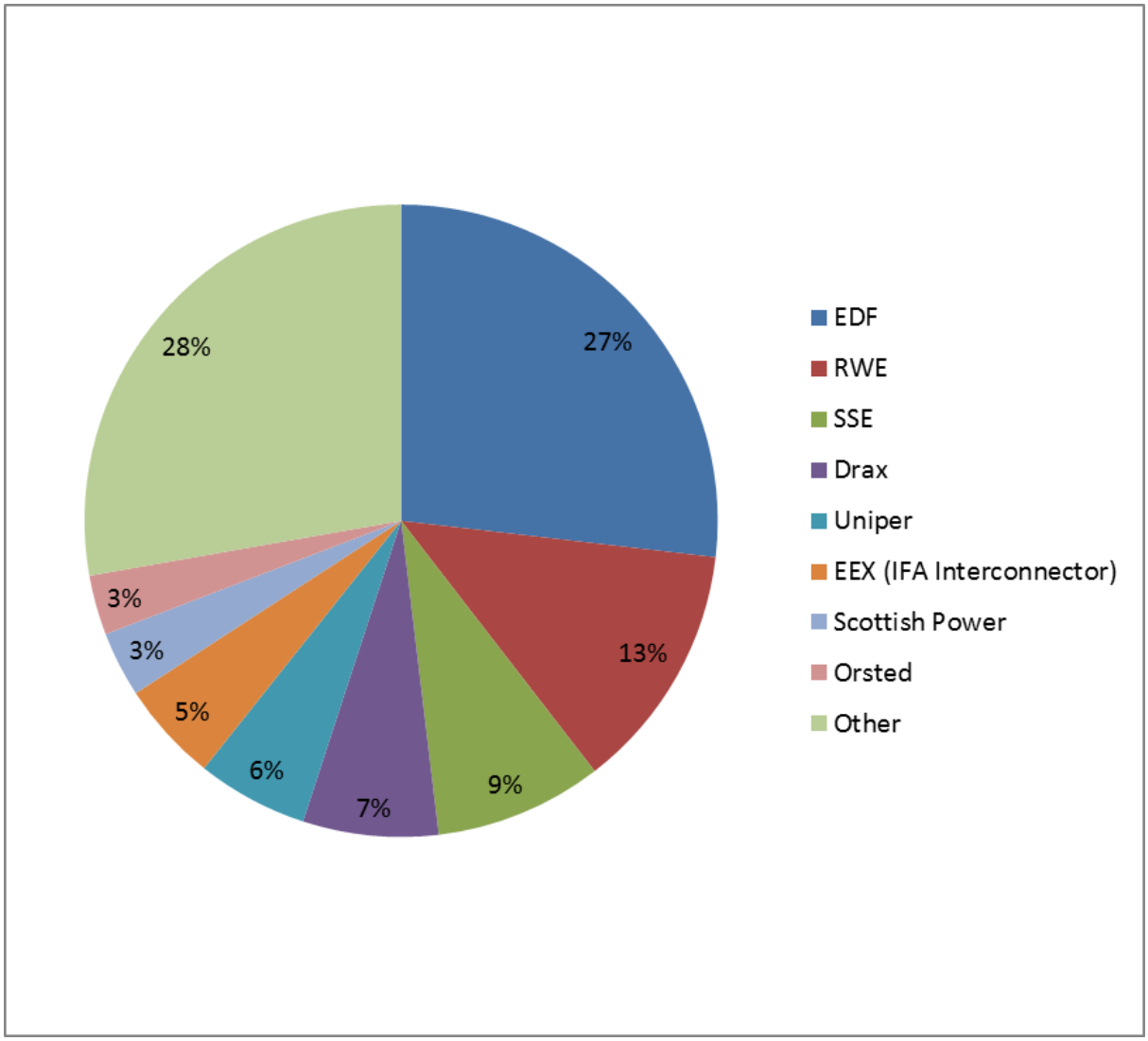
Figure 4 below shows that five generation companies had market shares exceeding 5%. Similar to 2017, the largest three companies generated almost half of the electricity supplied to the GB market in 2018.[73]

Between 2017 and 2018, EDF's share rose by 3%. Metered generation and interconnector volumes in 2018 make this generation company the largest contributor to power supply in GB (27%). EDF is also the majority owner of most of GB's nuclear fleet.

SSE's share gained 1% in the last year, while RWE lost 1%. The market shares of generators outside of the largest eight decreased from around 29% to 28% in 2018.

[71] I-SEM is the integrated single electricity market on the island of Ireland.
[72] Historical figures have been revised because National Grid have revised its reporting data.
[73] Based on metered generation volume and interconnector imports. Generation shares are based on proprietary data. Station demand has been excluded.

Figure 4: Wholesale electricity market share in GB, 2018 metered volume



Source: Ofgem calculations using data from Elexon and NETA reports

Table 2 provides the Herfindahl-Hirschman Index[74] (HHI) analysis based on the same data as the market shares.

The HHI is an indicator for the level of competition in a specific market. Though HHIs do not provide conclusive evidence on the level of competition, they point to whether there are potential risks to the market not delivering competitive outcomes.

The largest individual HHI by capacity is EDF (HHI of 720), which is higher than 2017. The total HHI fell to 1,138 in 2018.

[74] HHI is commonly used to assess market concentration, ranging from 10,000 for a monopoly to just above zero for perfect competition. The CMA in the UK categorise a market as 'concentrated' if its HHI exceeds 1,000 and 'highly concentrated' if its HHI exceeds 2,000.

Table 2: HHI based on 2018 metered volumes

Company	HHI
EDF	720
RWE	161
SSE	73
Drax	48
Uniper	32
EEX	26
Scottish Power	11
Orsted	9
Other	56

Market power concerns in the electricity wholesale sector

The TCLC was introduced in 2012 as a temporary measure and applies to electricity generators during periods when there is insufficient capacity to transmit electricity from where it is generated to where the demand is. In such circumstances, known as transmission constraints, the System Operator will need to take actions to ensure that the level of electricity supplied equals the level of electricity demanded. There are often only a limited number of options available to the System Operator, which can sometimes lead to higher costs to balance the system. In cases where the generator obtains a financial benefit from the System Operator in return for reducing their generation during a period of transmission constraint, the TCLC prohibits generators from obtaining an excessive benefit.

The original TCLC was a temporary licence condition that expired in July 2017. Following industry consultation, Ofgem decided to extend part of TCLC as a permanent standard licence condition (Standard Licence Condition (SLC) 20A), which came into force the day after the original one expired.

Throughout 2018, we continued to monitor the bids submitted and accepted in the balancing mechanism and generators' compliance with TCLC. We engaged with a number of generators to ensure that they remained in compliance with the licence condition.

3.2.2 Retail markets

Ofgem's assessment of and engagement with the retail energy market often takes a holistic approach and may not always distinguish between the electricity and gas sectors. This is reflected below in a section on the state of competition and in section 5, which looks at customer protection and dispute settlement. Where Ofgem considers or regulates the electricity and gas retail sectors differently, we have grouped the information accordingly, i.e. this section primarily covers the retail electricity market while section 4.2.2 considers the retail gas market. Nevertheless, some sources of evidence, such as customer surveys on switching trends, cover the behaviour in relation to both markets.

State of competition and main changes on previous year

Our State of the Energy Market Report 2018,[75] which provides a comprehensive annual assessment of the state of energy market in Great Britain at the end of June 2018, found that competition continues to benefit customers who are able and willing to shop around, meaning they can usually secure a good deal.

[75] https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

Domestic retail market

The report stated that active customers could choose from a large number of active licensed suppliers. Customers continued to look for better deals by switching suppliers or tariffs. In June 2018, rolling annual household switching rates reached 18.4% for electricity and 19% for gas. However, only the traditional six largest energy suppliers have market shares above 5%, and 60 suppliers have market shares below 1%.

The report also found that competition is not working well for customers who are less active. Similar to 2017, more than 60% of customers reported changing supplier only once or that they have never switched, and over half of customer accounts that do not currently qualify for price protection were still on expensive default tariffs. Around 54% were on default tariffs for more than three years. These customers are typically paying more than they need to for their energy. The difference between the average standard variable tariff (SVT) of the six large suppliers[76] and the cheapest market tariff was on average £320 between June 2017 and June 2018.

The PPM cap and price cap for customers in receipt of WHD that we have put in place protect around five million vulnerable customers from paying too much for their energy.[77] Over 90% of PPM customers are on tariffs priced close to the price cap, but there are still opportunities to switch to cheaper tariffs. For example, as of 17 September 2018, the cheapest PPM dual fuel tariff for a typical customer was £984, which is £105 less than the PPM cap, and suppliers continue to offer smart pay-as-you-go tariffs, with easier access to top-up and emergency credit. However, PPM customers' engagement with the energy market remains below average.

Customer service performance varies across suppliers, with variation in key quality indicators being especially high among small suppliers. While some small suppliers tend to outperform larger suppliers, others have not invested in customer service resources as they grow, leading to a decline in standards. There are some signs of overall improvement. For instance, customer satisfaction with complaint handling has increased significantly, from 27% in 2017 to 32% in 2018.[78]

A key change in the domestic retail markets in 2018 has been a high number of exits (10) either through the application of the Supplier of Last Resort (SoLR) process or through corporate decisions. The great majority of exits (eight) occurred in the second part of the year.

There was also a historically low level of new entry of independent suppliers, as only four suppliers entered the market in 2018. As a result, at the end of December 2018, there were 62 suppliers offering electricity and/or gas to household customers, 6 fewer than a year earlier. However, new suppliers have continued to grow their customer numbers, shrinking the six largest energy suppliers' share of the household market from nearly all customers in 2012 to 74% of electricity customers and 73% gas customers in December 2018.

On the demand side, switching and engagement are increasing. After a period of decline between 2008 and 2013, which coincided, among other things, with a drop in suppliers' door-to-door sales, the rate of switching between suppliers has increased during five consecutive years. The annual household switching rates in 2018 increased to 19% in electricity and gas, the highest since 2014.

[76] The six large suppliers are the suppliers that that existed before the liberalisation and that supply most of the energy to domestic customers in the GB market.
[77] See Sections 5.1 and 2.3.1 for further details.
[78] See: https://www.ofgem.gov.uk/publications-and-updates/consumer-engagement-survey-2018

Non-domestic retail market

The State of the Energy Market Report also found that competition is working better in non-domestic markets, but small and micro businesses continued to pay much more on average for their energy than larger businesses. Historically, non-domestic markets have had higher entry and exit rates than domestic markets, resulting in more rival suppliers of comparable size, and higher levels of engagement including switching. Large industrial customers can often negotiate deals directly with suppliers, and some can earn revenue by selling flexibility services into the balancing and capacity markets. However, a significant minority of microbusinesses (24% in gas and 27% in electricity) are on poor-value default and deemed contracts. In Q1 2018, microbusinesses on deemed contracts paid around twice as much for each unit of gas consumed and 70% more for each unit of electricity consumed compared to microbusinesses on negotiated contracts.

3.2.2.1 Monitoring the level of prices and the effectiveness of market opening and competition

In this section, we report on the results of our monitoring activities during 2018 with regard to the supply side of the market (i.e. market structure and prices), the demand side (i.e. customer switching and custumer experience), contractual practices and capability of data exchange processes.

The health of our retail market is crucial for delivering benefits to customers. We monitor how well competition is working in the interests of customers, and how far it supports consumer outcomes such as lower bills, better quality of service, benefits for society as a whole and reduced environmental damage.

Ofgem monitors the effectiveness of competition in retail markets, in particular through regularly collecting and analysing market participants' data. We publish our analysis on our website,[79] in market monitoring reports[80] and commission customer research to inform our view of market engagement and the quality of service customers receive.

Market structure

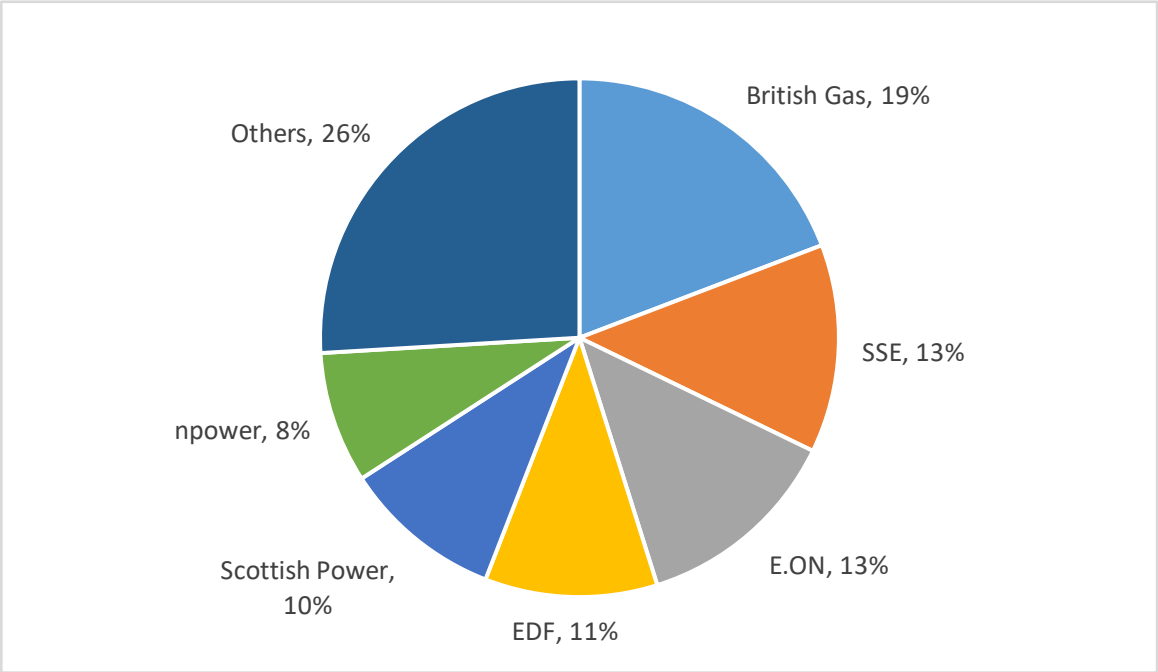
Domestic market

In December 2018, there were 55 active domestic electricity suppliers in total (i.e. in addition to 6 large suppliers there were also 49 small and medium suppliers[81]), 6 fewer than in December 2017. At the same time, there were around 28.4 million domestic electricity customers.

As Figure 5 shows, the large six suppliers (British Gas, E.ON, EDF, nPower, Scottish Power and SSE) supplied 74% of 28.4m domestic electricity customers in GB.[82] The combined market share of these small and medium suppliers has increased to around 26% - a 5 percentage point increase relative to December 2017. The new entrants are competing on price, quality of service and simplicity (e.g. offering only one or two tariffs), but some are also using product differentiation strategies to enter into 'niche' markets (e.g. local tariffs, renewable energy or smart technology).

[79] https://www.ofgem.gov.uk/data-portal/retail-market-indicators
[80] https://www.ofgem.gov.uk/publications-and-updates/state-energy-market-2018
[81] The six large energy suppliers are the suppliers that that existed before the liberalisation and that supply most of the energy to domestic customers in the GB market. Small and medium suppliers are independent suppliers that entered the market since market liberalisation and have fewer or more than 250,000 customers respectively.
[82] The figures relating to the national market shares do not reveal regional characteristics of the electricity market, which are a legacy of the regional monopolies that existed in the electricity sector prior to market liberalisation. The former electricity incumbents retain, on average, a market share of 30% in their home regions.

Figure 5: GB Domestic electricity suppliers' market share, December 2018



Source: Ofgem analysis of DNOs data

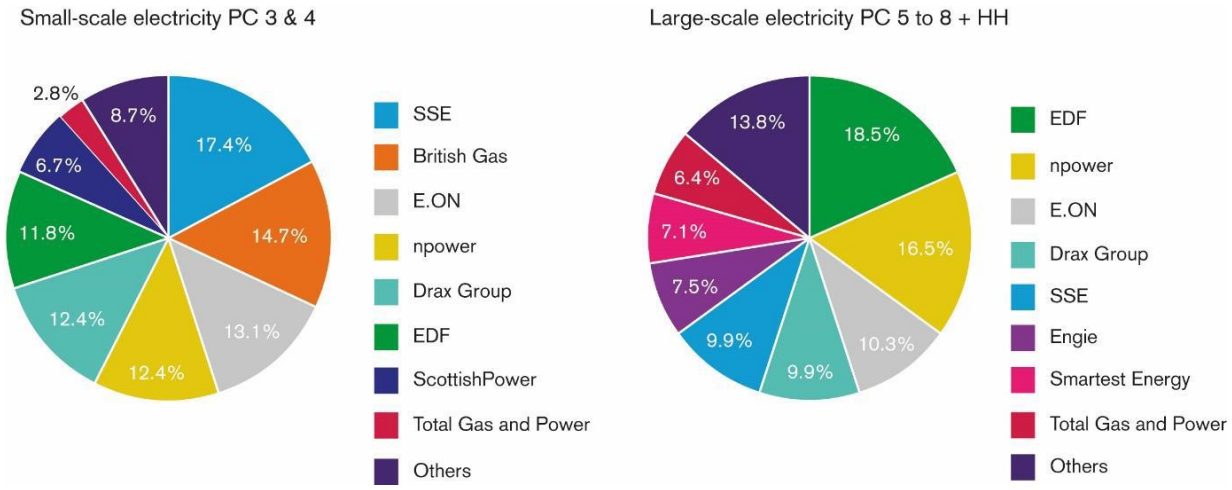
Non-domestic market

We also regularly monitor the number of suppliers in the non-domestic market and their market shares. Non-domestic markets liberalised earlier than domestic markets and have lower concentration and greater presence of suppliers besides the six large domestic suppliers.

In December 2018, there were 65 active non-domestic electricity suppliers, 57 smaller non-domestic suppliers in addition to the six large suppliers also present in the domestic market. During 2018, two non-domestic electricity suppliers entered the market, while two suppliers exited the market.

During 2018, large suppliers have generally continued to lose ground across all non-domestic customer types, and other suppliers have reinforced their positions, especially in the segment of larger businesses, as shown in Figure 6 below.

Figure 6: Market shares in non-domestic electricity market, June 2018[83]



Source: Ofgem analysis of Elexon data

Note: Electricity profile classes' definitions refer to Elexon Guidance. Profile classes 3 & 4 are typically small businesses, and market shares are measured in terms of meter points; profile classes 5 to 8 and half-hourly (HH) customers are typically larger and market shares are measured in terms of volume.

Herfindahl–Hirschman Indices (HHI)[84]

The HHI is often used to gauge market concentration. Though HHI is not conclusive evidence of the level of competition, it suggests whether there are potential risks of the market not delivering competitive outcomes. The relevant HHIs for electricity markets in 2018[85] were as follows:

- domestic: 1,035;
- non-domestic, Profile Class 3 & 4 (PC 3&4): 1,157; and
- non-domestic, Profile Class 5-8: 909.

The domestic electricity market and non-domestic electricity market PC 3&4 are judged to be concentrated according to the threshold HHI levels (1,000) used by the Competition and Market Authority (CMA),[86] with the non-domestic half-hourly market just below the threshold. By comparison with 2017, the HHIs for all three markets have fallen, with the biggest decline recorded in the domestic market.

[83] The latest publicly available market share data for the non-domestic market: https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf
[84] The Herfindahl-Hirschman Index (HHI) measures market concentration by summing the squares of the market share of each player. The higher the number, the greater the concentration.
[85] In December 2018, for domestic market and in June 2018 for non-domestic market.
[86] The CMA in the UK categorise a market as 'concentrated' if its HHI exceeds 1,000 and 'highly concentrated' if its HHI exceeds 2,000.

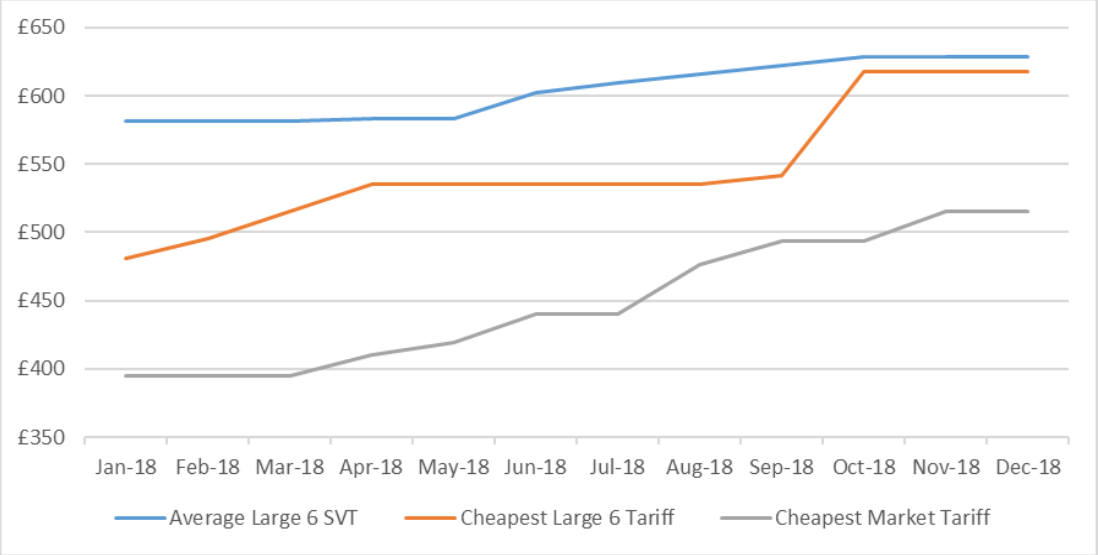
Prices for domestic customers

Market forces determined most final customer prices in the GB retail energy markets in 2018. Two exceptions for 2018 were the customers with prepayment meters as a temporary PPM cap continued to be in place after its introduction on 1 April 2017 (as recommended by the CMA) and customers in receipt of a WHD who also benefit from a temporary price cap from February 2018[87]. In addition, there are elements of the final price offered to customers that are not determined by suppliers because they are attributable to regulated aspects of the market, in particular distribution and transmission charges, which are price controlled.

Ofgem monitors domestic suppliers' electricity prices across Great Britain. We receive price change notifications an independent data provider and one of the comparison sites accredited by the Confidence Code[88] run by Ofgem. We use this information to calculate the implications for domestic customers' retail bills, based on characteristics such as their consumption level, payment type and region.

Figure 7 below shows electricity price levels over the year, based on tariff offers available in the market. Over the year, the average annual SVT offered by the large six suppliers increased by 8% (£47), while the cheapest tariff on the market increased by 30% (£120). The price differential between the largest six suppliers' average SVT and their cheapest tariffs decreased over the year from £100 to £11. The differential between the largest six suppliers' average SVT and the cheapest market tariff decreased from £187 to £113.

Figure 7: Domestic retail electricity price levels, Jan – Dec 2018

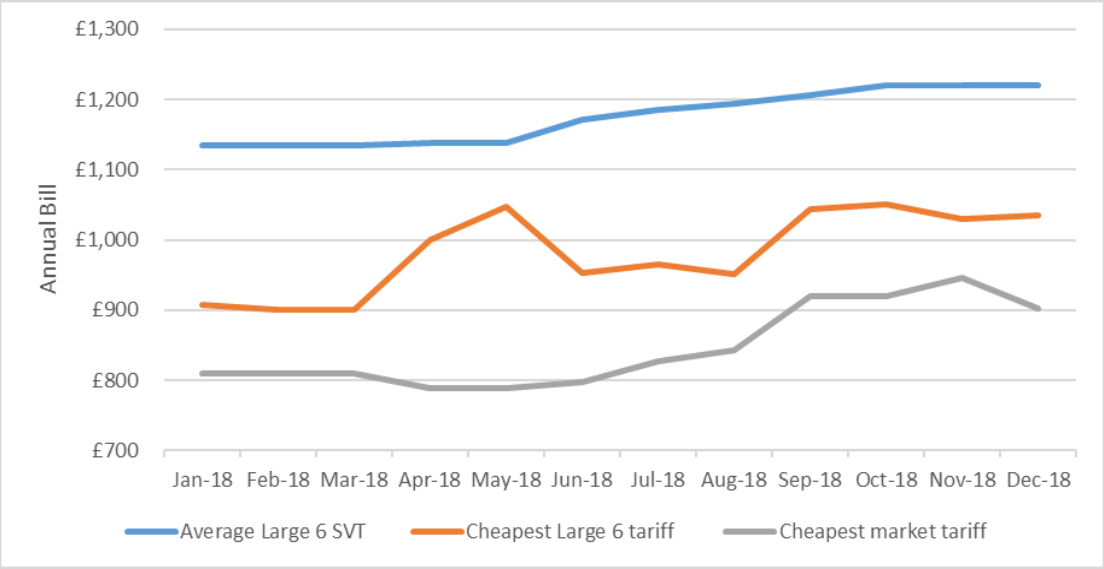


Source: Ofgem analysis of Energyhelpline data
Notes: Price level is based on consumption level of 3,100 kWh per year

[87] See Sections 5.1 and 2.3.1 for details.
[88] A voluntary code of practice for domestic energy price comparison services, from Consumer Focus. The Code insists that its members follow key principles, providing reassurance to consumers about the independence, transparency, accuracy, and reliability of the service.

Figure 8 below presents changes in typical domestic bills based on SVTs in GB's dual fuel market between January and December 2018

Figure 8: Domestic retail dual fuel price levels, Jan – Dec 2018

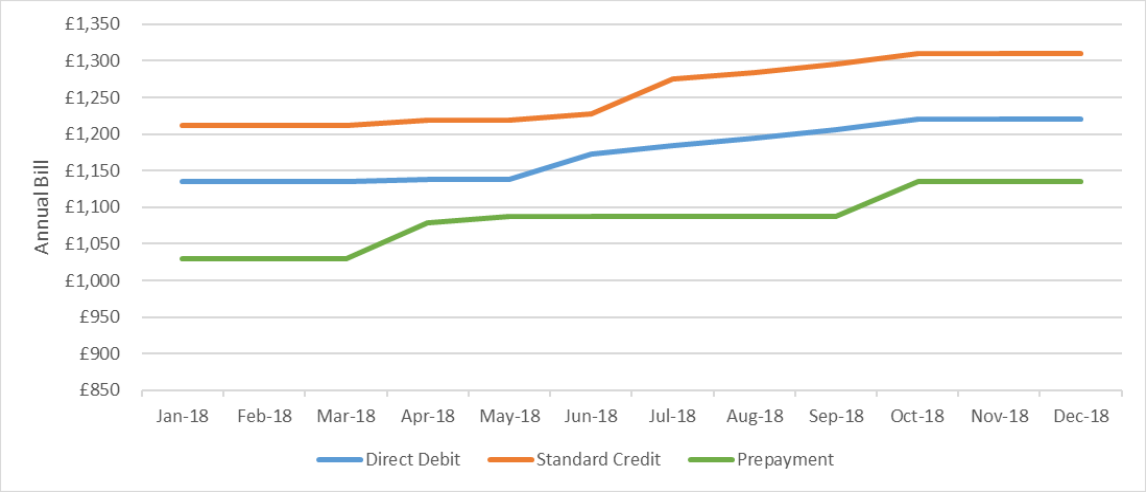


Source: Ofgem analysis of Energyhelpline data
Notes: Price level is based on consumption level of 3,100 kWh per year for electricity, 12,000 kWh per year for gas

Over the year, suppliers continued to offer fixed tariff deals often priced at a discount relative to SVTs. In December 2018, the average annual bill for a one-year fixed tariff across the large suppliers was £1,137, while the average annual bill for SVTs across the large suppliers was £1,221.

Figure 9 displays the change in large suppliers' average SVT by payment method in GB's dual fuel market between January and December 2018.

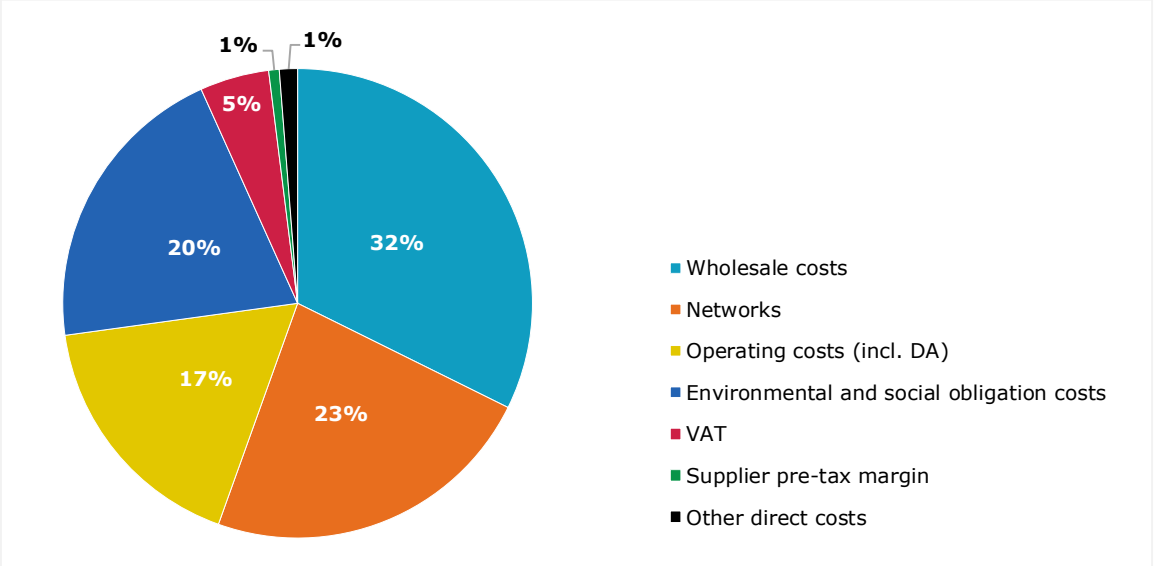
Figure 9: Domestic dual fuel price levels by payment method, Jan – Dec 2018



Source: Ofgem analysis of Energyhelpline data
Notes: Average of six largest suppliers' standard tariffs and revised consumption level: 3,100 kWh per year

As well as monitoring domestic electricity bill levels, we also assess the extent to which particular costs have an impact on these bills. Suppliers face a range of costs that influence how they set retail electricity prices. These costs can vary within and between years, and include wholesale energy costs, the costs of the UK Government's environmental and social policies and transmission and distribution costs. Figure 10 shows the breakdown of the annual electricity bill for a domestic customer on direct debit, with annual consumption of 3,100 kWh.

Figure 10: Domestic electricity bill breakdown, 2018



Source: Ofgem analysis

Customer engagement and experience

Domestic switching rates

Customers' ability to switch energy supplier is important for a well-functioning, competitive energy market.

Switching by domestic electricity customers has been on the rise since 2014. In 2018, 5.4m domestic customers switched their electricity supplier, equivalent to an average of approximately 450,000 per month. This represents an annual switching rate of 19%, one percentage point higher than in 2017. This has been the highest annual switching rate since 2014. We also saw an increase in switching away from the six large suppliers. On average 62% of domestic electricity customers that switched during 2018 moved to smaller or medium suppliers, an increase of 6% relative to 2017.

The speed and reliability of switching is also important (see Section 4.1 for details of our programme to improve the switching process). In December 2018, the system average time[89] to complete a switch increased slightly to 16 days from 15 days in December 2017.

Our customer surveys are an additional source of information on the customer switching experience. They show that most of those who switched did so to save money. In our domestic customer engagement survey,[90] we found that 87% of customers that switched

[89] This is the average number of calendar days from the day when the supplier notifies the switching request to the network operator system until the day the switch is executed.
[90] https://www.ofgem.gov.uk/publications-and-updates/consumer-engagement-survey-2018

supplier, changed tariff with the same supplier or compared tariffs in the preceding 12 months, were motivated by the prospect of saving money. Among those who switched in the last year, 79% believe they are paying less for their energy now or expect to pay less in the future.

Among all customers, 58% are confident they are on the best energy deal for their household, the highest level seen since tracking commenced in 2015. Switching increases confidence. Nearly three quarters (72%) of those who switched supplier or tariff in the past 12 months are confident they are on the best deal.

Non-domestic switching rates[91]

Our micro and small business engagement survey[92] monitors switching among businesses with fewer than 50 full time equivalent employees. In 2018, 47% stated they had either switched their energy supplier (24%) or switched their tariff without switching suppliers (23%). Switching rates have been stable over time. However, more micro and small businesses are taking an interest in managing energy costs. Nearly half (45%) re-negotiated their contract in the past 12 months (the highest recorded level since tracking commenced in 2014) and around three quarters (74%) know their contract end date.

Non-domestic supplier or tariff switching is primarily price-driven, with the majority (89%) citing cost savings as the switching. Micro and small businesses tend to be prompted to switch by actions from their supplier. Nearly half (44%) were prompted to switch because a supplier offered them a lower price contract or tariff. A further 20% switched because they received a price increase notification.

Switching may result in benefits to the business. Around four out of five (78%) micro and small businesses that switched supplier or tariff in the past 12 months are confident they are on the best tariff from their supplier and that their tariff is competitive (82%). By contrast, among businesses that have not switched or compared prices in the past 12 months, only around three in ten are confident they are on the best tariff from their supplier (59%) or confident their tariff is competitive in the market (65%).

The research also shows that businesses that have not engaged in the energy market in the past 12 months may be unaware of the benefits of switching. Significantly more of those that didn't compare of switch suppliers believe all suppliers charge the same (43%) compared to switchers (29%).

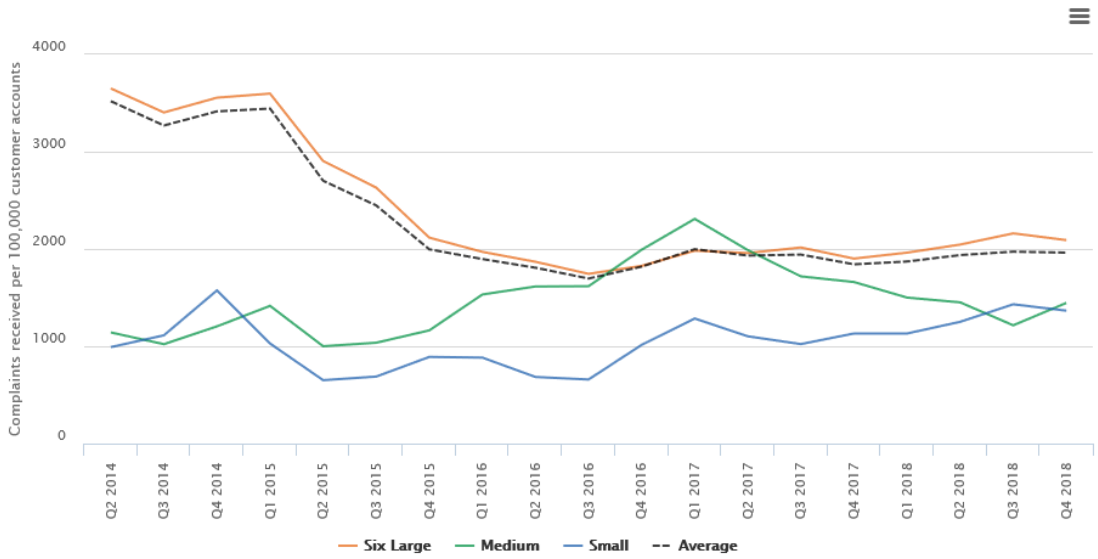
Complaints by household customers

Ofgem does not directly investigate domestic customer complaints. If a complaint is raised, suppliers are required to meet the complaints handling standards set by Ofgem. If a complaint is not resolved to the customer's satisfaction and either eight weeks have passed since the complaint was made or it has reached a point of deadlock (i.e. where the energy company says it can do no more to resolve the complaint), the supplier must write to the customer to tell them they can seek redress through the alternative dispute resolution body.

Figure 11, overleaf, shows the number of complaints per 100,000 customers for large, medium, and small suppliers.

[91] Electricity and gas.
[92] https://www.ofgem.gov.uk/system/files/docs/2018/10/micro_and_small_business_engagement_survey_2018_report.pdf

Figure 11: Complaints received by supplier per 100,000 customers

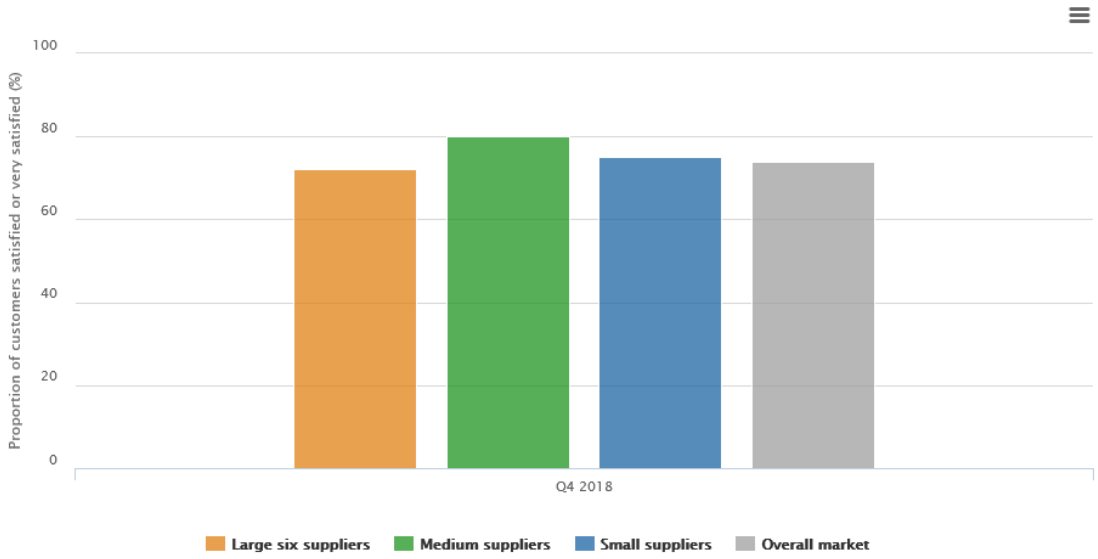


Source: Ofgem analysis of suppliers' data

Customer satisfaction

We expect energy suppliers to make it easy for customers to contact them when needed and to provide clear energy bills that customers can easily understand. As of Q4 2018, three quarters (74%) of customers were satisfied with their suppliers overall. Three in five (61%) found it easy to contract their supplier, while 11% found it difficult. Around 7 in 10 were satisfied with the ease of understanding their bill (72%) or the accuracy of their bills (73%).[93]

Figure 12: Customer satisfaction with their supplier



Source: Survey conducted for Ofgem by Accent Research in Q4 2018

[93] This survey started in 2018 and is conducted every quarter. We use feedback from this survey to inform compliance engagement with individual suppliers, where appropriate. The question asked in the survey which relates to this chart is: Overall, how dissatisfied or satisfied are you with the customer service you have received from [supplier name].

Disconnections for debt

We require suppliers to tell us about disconnections for debt as part of their Social Obligations Reporting.[94] Disconnecting a customer's energy supply should be a last resort and avoided wherever possible. Disconnections for debt are now extremely rare in Great Britain, with 17 disconnections for debt recorded in 2017. Monitoring supplier performance in this area allows us to identify issues of concern with supplier performance and take action.

Contractual practices

Under Article 37(1) paragraphs (k) and (l) of the Electricity Directive 2009/72/EC and Article 41 (1) paragraphs (k) and (l) of Gas Directive 2009/73/EC, Ofgem is required to monitor restrictive contractual practices and ensure contractual freedom.

We have teams to engage with a variety of stakeholders, ensuring that we are monitoring the market, and that we are open to dealing with any issues that may be brought to our attention. Additionally, the suppliers' licences contain conditions on providing clear contractual information to domestic and small business customers.

Domestic customers are also protected by the general national rules that transpose Directive 2011/83/EU of 25 October 2011 on consumer rights and Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts. These rules were transposed by the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013 and the Consumer Rights Act 2015. In respect of contracts concluded before October 2015, transitional provisions exist. Ofgem is one of the public bodies empowered to take action to enforce certain consumer protection legislation.

Compatibility of data exchange processes

Under Article 37(1)(u) of the Electricity Directive 2009/72/EC and article 41 (1) (u) of the Gas Directive 2009/73/EC, Ofgem as a National Regulatory Authority (**NRA**) is required to contribute to the compatibility of data exchange for the most important market processes. All licensed suppliers and network operators must comply with industry codes (changes to which must be approved by Ofgem) in order to operate in the gas and electricity markets.

Access to consumption data from smart meters is managed centrally, through the Data and Communications Company (**DCC**), which is licensed by Ofgem.

Charges for and the execution of maintenance services

The electricity and gas distribution networks must submit regulatory returns to us each year, showing relevant cost, volume and output information, so that we can assess their performance. A component of the Distribution Use of System (**DUoS**) charges that all customers pay as part of their energy bills reflects the costs of maintenance work.

Monitoring transparency

Under Article 37(1)(i) of the Electricity Directive 2009/72/EC and Article 41 (1) (i) of the Gas Directive 2009/73/EC, Ofgem is committed to ensuring the energy market is transparent to the benefit of customers. In this section, we explain the rules about transparency of suppliers' activities and how we monitored compliance in 2018.

[94] https://www.ofgem.gov.uk/about-us/how-we-work/working-consumers/supplier-performance-social-obligations

Financial transparency

Over the past few years, we have put in place measures to make suppliers' revenues, costs and profits more transparent. Since 2009, we have required large, vertically integrated suppliers to publish annual Consolidated Segmental Statements (**CSS**) on their websites. These statements break down suppliers' revenues, costs and profits and are reconcilable to audited accounts. In previous years, we produced an annual review summarising the large suppliers' CSS, archived on our website.[95] In 2018,[96] we published a summary as part of our annual report on the retail energy markets.

We have improved the reporting requirements[97] for the statements. We now require companies to audit their statements, to publish them within four months of their financial year end, to provide a detailed cost breakdown, and insight into their trading activities.

Supply prices, investigations and measures to promote effective competition

Supply prices

At the end of 2018, apart from prices for customers with prepayment meter and customers in receipt of WHD, supply prices in the GB retail energy market continued to be determined by market forces. Retail prices are affected by input costs such as: wholesale energy prices; security of supply costs, such as capacity market auctions; costs associated with government environmental schemes, such as the Renewables Obligation98 and the WHD;99 and network transmission and distribution costs.

Since 1 April 2017, the prices for the customers with prepayment meters are regulated by means of maximum charging limit in form of a price cap. Following a two-year investigation in the energy market that ended in June 2016, the CMA found – amongst other things - that PPM customers face higher actual and perceived barriers to information and access to switching. As a result, they often face higher annual bills than customers in other market segments. The CMA recommended a cap on prices of PPM tariffs as a temporary measure until 31 December 2020, to coincide with the completion of the smart meter rollout.[100] On 2 February 2018, Ofgem extended this price protection to a further one million vulnerable customers in receipt of WHD, which was superseded by the implementation of the default tariff cap on 1 January.

The default tariff cap does not apply to customers that are benefitting from the PPM cap as they are already receiving price protection. The PPM cap exists in parallel to the default tariff cap and customers can only be protected by one of the caps.

The default tariff cap is also a temporary measure, intended to protect disengaged customers until the right market framework is in place for competition to be effective. From 2020, we will be carrying out an annual review of the market to assess if the conditions for effective competition are in place for a post-price cap market. This framework will form the basis of our recommendation to the Secretary of State, who will make the decision to extend the cap to the next year or not. If it is decided to maintain the default tariff cap in place we will carry

[95] See: https://www.ofgem.gov.uk/gas/retail-market/retail-market-monitoring/understanding-profits-large-energy-suppliers
[96] https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf
[97] https://www.ofgem.gov.uk/sites/default/files/docs/2015/05/css_guidelines_jan_2015.pdf
[98] http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx.
[99] http://www.ofgem.gov.uk/Sustainability/Environment/WHDS/Pages/WHDS.aspx.
[100] The CMA launched its mid-term review of the PPM safeguard tariff in January 2019. Its provisional decision is to adopt the default tariff cap methodology with some adjustments for the PPM cap. It also include a recommendation to extend the PPM cap beyond 2020 until the smart meter rollout is substantially complete.

out the review in the following year. The cap will cease to have effect at the end of 2023 at the latest.

Investigations

The Authority has concurrent competition and customer protection powers with the CMA. We work with the CMA, including as members of the United Kingdom Competition Network, which aims to promote best practice and coordination between the sectoral regulators in the use of their concurrent competition powers.

Measures to promote effective competition/monitoring distortions or restrictions of competition

Our monitoring activities and actions help us to address issues hindering the promotion of competition and support markets to operate more effectively (i.e. by ensuring there is greater transparency of information to all parties including customers). In addition, we actively seek to ensure that adequate support is provided for society's most vulnerable customers.

We have implemented the CMA remedies around five objectives: regulation for effective competition, prompting greater customer engagement, protecting and empowering those on non-standard meters, building industry systems and governance for the future, and enhancing our role as a robust and independent regulator.

These remedies include:

- a price cap on PPM;
- trialling prompts for the 'stickiest' customers[101] to engage in the market and shop around for cheaper tariffs. We have worked with suppliers to conduct these trials and issued guidance on good trialling;
- a database which will lead to disengaged customers being contacted about better value deals;
- removing part of our Retail Market Review reforms so customers can enjoy a wider selection of deals;
- consulting on a system of code governance that allows strategic change to be delivered smoothly, efficiently, and in customers' interests; and
- consulting on the new Confidence Code rules for price comparison websites.

We believe that these initiatives will stimulate engagement in the market, and help make competition work for all customers, as suppliers compete by driving down the prices and improving service. Subsequently, it will be easier and quicker for customers to get a better deal, as we head towards a smarter market.

[101] Sticky customers are customers who are unable or reluctant to shop around and switch to get a better deal.

3.3 Security of supply

3.3.1 Monitoring balance of supply and demand

Under Article 4 of the Electricity Directive, Member States have to ensure they monitor security of supply issues.

Responsibility for ensuring security of supply in GB is shared across several entities. BEIS sets overall policy on energy security. Ofgem is responsible for regulating the market. NGESO, as SO of the GB electricity system, has responsibility for ensuring that supply meets demand on a minute-by-minute basis each day.

The Third Package puts an obligation on NRAs to monitor investment in generation capacities to secure supply. We therefore review NGESO annual Electricity Ten Year Statement[102], Future Energy Scenarios[103], and Winter Outlook Report (WOR)[104] documents, which outline electricity demand and generation (closure and investment) projections. The Security of Supply Standard to which generation capacity in Great Britain is planned to is 3 hours Loss of Load Expectation.

In 2018 we also published the annual Statutory Security of Supply Report (SSSR)[105] jointly with BEIS, which analyses the availability of electricity and gas for meeting the reasonable demands for energy consumers in GB.

Here we report the main results and insights from our monitoring and these publications on the balance of electricity supply and demand during the reporting period.

Winter 2017-18

Going into the winter, there was sufficient capacity with margins of 6.2GW (de-rated) and 10.3%. Throughout the winter there was a good electricity supply and comfortable margins. The weather was relatively mild throughout until an unseasonably cold period at the end of February which affected some generation assets as some power stations encountered problems ramping up. Because gas prices had increased to 250 pence/per therm, coal-fired generation became the most economical plant to run, and by 1 March coal-fired plant was providing some of the baseload. Demand peaked in this period at 50.7 GW.

Winter 2018-19

Peak demand on the transmission network was forecast to reduce slightly to 48.2 GW. Peak forecast underlying demand is also due to decrease slightly by 1.8 GW to 60.5 GW. Against an increasing total generation capacity of 104.7 GW the de-rated margins are increased by 0.9 GW to 7.1 GW (11.7%).

Anticipated minimum transmission demand is expected to decrease again slightly, and low demand can create operational challenges for the SO.

[102] https://www.nationalgrideso.com/insights/electricity-ten-year-statement-etys
[103] https://www.nationalgrideso.com/insights/future-energy-scenarios-fes
[104] https://www.nationalgrideso.com/document/127551/download
[105] https://www.gov.uk/government/publications/statutory-security-of-supply-report-2018

3.3.2 Monitoring investment in generation capacities in relation to Security of Supply

Statutory Security of Supply Report (SSSR)

In December 2018, we published our joint SSSR[86] alongside BEIS. This is part of an obligation on government and ourselves to report annually to Parliament on the availability of electricity and gas for meeting the reasonable demands of consumers in GB. The report noted that GB has resilient electricity and gas systems with sufficient capacity to meet demand in all but the most unlikely circumstances. GB's electricity system has delivered secure supplies to date whilst facing the challenges of decarbonisation. The gas system has also delivered security of supply to date and is expected to continue to function well.

2017-18 Winter Outlook Report

On an annual basis in October, NGESO publishes the Winter Outlook Report (WOR)[106]. It presents their view of gas and electricity supply and demand for the coming winter. The report followed the publication of their initial view of security of supply for the winter in their Winter Review and Consultation, published in June 2018. The report covers both gas and electricity, reviewing the previous winter and provides a whole 'winter view' for both fuels.

The electricity security of supply outlook was as expected for winter 2017-18[88].
For gas, National Grid expected sufficient availability in the winter to meet demand, with GB's gas demand expected to be met by a wide range of supply sources. Demand was expected to be slightly lower year-on-year due to reductions in gas demand for generation. However, two major events affect gas supply and demand during winter 2017-18. The first was the closure of the forties pipeline in December, coinciding with low temperatures and high demand. The second was the unseasonably low temperatures during the cold snap in late February/ early March 2018. Both incident created operability challenges requiring different grid configurations to manage supply and demand, with the gas demand on the 1st March 2018 the highest for seven years. On this day a Gas Deficit Warning was issued to the market to draw attention to the supply/ demand imbalance and encourage market participants to take action which resulted in medium range storage, LNG and interconnectors responding. As a result, during this extreme event at no time was security of supply compromised.

Electricity Capacity Report

NGESO have an obligation to produce an Electricity Capacity Report (ECR) each year[107]. The ECR sets out NGESO's recommendation for the volume to procure for Capacity Market auctions.

An independent Panel of Technical Experts (PTE) is commissioned by BEIS to scrutinise and quality assure the analysis carried out by NGET for the purposes of informing the policy decisions for the CM. We work closely with NGET, BEIS and the PTE in scrutinising and reviewing the analysis as part of our market monitoring role and to inform policy decisions. BEIS decide the level of capacity to procure in each Capacity Market auction taking into account NGESO's recommendation and scrutiny provided by the PTE and Ofgem.

[106] https://www.nationalgrideso.com/document/127551/download
[107] https://www.emrdeliverybody.com/CM/Electricity-Capacity-Report.aspx

3.3.3 Measures to cover peak demand or shortfalls of suppliers

Capacity Market

The Capacity Market (CM) mechanism was introduced to maintain sufficient levels of capacity to ensure security of electricity supply. The CM provides regular revenue in the form of capacity payments to potential capacity providers. In return, these capacity providers commit to delivering electricity at times of system stress, or face penalties if they fail to do so.

Ofgem sets incentives and funding for the EMR Delivery Body (NGESO), and monitors its performance in delivering the CM. Ofgem also enforces the CM Rules and the Electricity Capacity Regulations 2014, the Competition Act 1998, REMIT, and monitors NGESO's data compliance.

Since its introduction in 2014, to date there have been eight CM auctions with two auctions to be held in late Autumn each year: an auction for delivery in four years' time (T-4) to provide sufficient period to build new plant, and an auction for delivery the following Autumn (T-1) for 'top-up' purposes.

On the 15th November 2018, the General Court of the European Union made the judgment to annul State Aid approval for the CM. This introduced a standstill period during which the UK Government will not make capacity payments under existing Capacity Agreements until re-approval. The General Court's judgment was decided on procedural grounds; it was not a challenge to the nature of the CM mechanism itself. As a result of the judgement, the European Commission (EC) has opened an in-depth investigation to determine whether the British CM scheme is in line with EU State aid rules. The UK Government is currently awaiting the results of this investigation.

In order to maintain capacity and replace the auctions that were not held in late 2018, the Department for BEIS determined to hold a T-1 auction in June 2019, for delivery in 2019/20, and a T-3 auction in early 2020, for delivery in 2022/23. Agreements secured through these auctions are conditional on the outcome of the EC's State Aid investigation.

In addition, BEIS and Ofgem have communicated their belief that Capacity Market auctions help to deliver secure supplies and the UK Government is confident that a new State Aid approval for the Capacity Market will reduce security of supply risks in the medium and long term. BEIS, Ofgem and National Grid have closely monitored the electricity market and capacity margins over Winter 2018-19 since the judgement and then throughout Q1 2019 looking ahead to Winter 2019/20. The electricity supply market has high levels of capacity and hence there are no immediate concerns for our electricity supplies.

4. The Gas Market

Chapter Summary

This chapter details developments in GB's gas sector during 2018 and the first half of 2019. This is broken down into sections covering network regulation, promoting competition, and security of supply in the wholesale and retail gas markets.

4.1. Network Regulation

4.1.1 Unbundling[108]

Transmission System Operators (TSOs)

Under Articles 9 and 10 of the Gas Directive, we have an obligation to ensure any undertaking that owns a transmission system is certified as independent from generation and supply interests before it is designated as a TSO. In 2018 there were no applications by gas TSOs to be certified as unbundled.

We continue to monitor the certification status of existing gas TSOs in GB, including through the review of annual declarations submitted by the relevant entities. We remain satisfied that the grounds for their certifications remain valid.

Distribution System Operators (DSOs)

There were 25 gas DSOs in 2018.

We have eight gas distribution networks owned and operated by five incumbent gas DSOs: Northern Gas Networks Ltd, Scotland Gas Networks plc, Southern Gas Networks plc, Wales and West Utilities Ltd and Cadent.

There are 20 independent (embedded) gas DSOs who own and operate a number of relatively small networks at various locations. They include 13 Independent Gas Transporters[109]: Energetics Gas Ltd, Energy Assets Pipelines Ltd, ES Pipelines Ltd, ESP Connections Limited, ESP Networks Limited, ESP Pipelines Limited, Fulcrum Pipelines Ltd, GTC Pipelines Ltd, Harlaxton Gas Networks Limited, Independent Pipelines Ltd, Indigo Pipelines Ltd, Murphy Gas Networks Ltd and Quadrant Pipelines Limited.

They also include seven site-specific operators: Greenpark Energy Transportation Ltd, Humbly Grove Energy Services Ltd, INOVYN Enterprise Ltd, Severn Gas Transportation Ltd,

[108] Articles 9, 10, 11, 26 of the Gas Directive and Article 3 of Regulation (EC) 715/2009 (the **Gas Regulation**) outline our obligations with regard to the unbundling and certification of TSOs. In this section we refer to the Electricity and Gas (Internal Markets) Regulations 2011 and the Electricity and Gas (Ownership Unbundling) Regulations 2014 as 'the GB Regulations'. The GB Regulations implement the Third Package into the GB domestic regulatory regime including legislation, licences and industry codes. Ownership unbundling requirements are included alongside Regulations for TSOs, storage and Liquefied Natural Gas (**LNG**) system operators, and the unbundling requirements for DSOs. The GB Regulations have amended the Gas Act 1986 (the **Gas Act**) to include the requirement for the holders of gas transporter and gas interconnector licences to be certified as independent from generation and supply interests under one of the grounds for certification in the Gas Act.

[109] Gas Transporter is defined within the Gas Act as a holder of a licence to convey gas through pipes in GB.

SP Gas Transportation Cockenzie Ltd, SP Gas Transportation Hatfield Limitedand WINGAS Storage UK Ltd.

DSOs report on business independence, financial reporting and output performance annually. In that context, we were satisfied that the Gas Directive requirements relating to unbundling were properly observed in 2018.

Storage and LNG System Operators

The Second and Third Packages established a number of unbundling requirements for storage operators as part of the mandatory third party access arrangements.

In GB, the default access regime for a gas storage facility is negotiated third party access (nTPA). Under nTPA, storage system operators cannot produce gas, except as an unintended consequence of storage activities. They also cannot supply, ship, or sell gas except for the efficient operation of the storage facility or of another storage facility. Legal and functional separation is required from any parent company or associated undertakings involved in these activities. These provisions, in Articles 15-16[110] of the Gas Directive, were transposed in Section 8(R) of the Gas Act. Ofgem published the latest version of its guidance on compliance with nTPA requirements in September 2015.[111]

In 2018, one storage facility was subject to nTPA in GB. This was Hornsea, owned and operated by SSE Hornsea Limited. Under current legislation they must operate their storage facility independently of the affiliates carrying out any of the above restricted activities. This includes establishing an independence programme to ensure non-discrimination against other parties, and the appropriate disclosure or use of information. In addition, the storage system operator must publish an annual report setting out compliance with the independence programme.

Rough, owned and operated by Centrica Storage Limited (CSL), was previously subject to nTPA. However, in June 2017, CSL, announced that it intended to close the Rough storage plant due to its age, physical deterioration and the associated safety risks, as well as economic infeasibility as the primary reasons. This changed the facility from a storage site to a production facility due to the production of remaining cushion gas.

All other storage facilities (six operational) in GB have been granted Minor Facilities Exemptions (MFEs) from nTPA. MFEs are granted on the basis that the facility is not economically and/or technically necessary for providing efficient access to the system for the operation of an efficient gas market. The nTPA unbundling requirements set out above do not apply to facilities with an MFE.

For LNG facilities, the default access regime under the Third Package is regulated Third Party Access (rTPA). Under rTPA, LNG system operators must keep their (financial) accounts separate from any other business. These provisions, contained in Article 31 of the Gas Directive, were transposed in section 19E(2)-(3) of the Gas Act. Ofgem published guidance on rTPA in April 2012.[112] All three LNG facilities in GB[113] have been granted an exemption from rTPA requirements under section 19C of the Gas Act.

[110] A storage system operator shall be independent at least in terms of their legal form, organisation and decision making from other activities not relating to transmission, distribution and storage.
[111] https://www.ofgem.gov.uk/publications-and-updates/guidance-regulatory-regime-gas-storage-facilities-great-britain-version-2
[112] https://www.ofgem.gov.uk/ofgem-publications/40393/guidance-regulated-third-party-access-regime-liquefied-natural-gas-facilities-gb.pdf.
[113] Isle of Grain, South Hook and Dragon LNG.

4.1.2 Technical functioning

The technical functioning of the network is of great importance to ensure safe, secure and reliable gas supply for consumers. In this section, we report on our responsibilities and activities for gas balancing services, maintaining security and reliability standards, monitoring time taken to connect and repair, monitoring safeguard measures and reporting on the RES regulatory framework over the course of 2017-18, in the transmission and distribution networks.

We recently published the RIIO Gas Distribution (RIIO-GD1)[114] and RIIO Gas Transmission[115] 2017-18 Annual Reports. These reports review the progress made by the relevant companies during the 2017-18 period of the RIIO price control and provide stakeholders with information on how the companies are performing against their obligations and incentives.

Balancing services

Under Article 41(6)(b) of the Gas Directive, regulators must fix or approve the methodologies used to calculate or establish the terms and conditions for the provision of balancing services. These balancing services must be economic and incentivise network users to balance their inputs and offtakes.

NGG is the gas transmission SO responsible for balancing the system across GB. In order to do this, NGG buys and sells gas as well as procures associated services. It also provides information to market participants such as demand forecasts. NGG is obliged to perform its balancing roles economically and efficiently.

Balancing arrangements in GB are designed to provide gas shippers with strong commercial incentives to balance their positions. Market-based imbalance charges are the primary tool used by NGG to balance the system. Shippers who are not in balance at the end of a gas day incur imbalance charges, known as 'cash-out.' The cash-out price is set when NGG buys or sells gas in the market. Rather than procure the entire system imbalance, NGG trades small volumes to set the cash-out price and incentivise shippers to balance their inputs and offtakes.

Security and reliability standards, quality of service and supply

Under Article 41(1)(h) of the Gas Directive we are required to monitor the compliance with, and review the past performance of network security and reliability rules for both the transmission and distribution networks. We also have an obligation to set and/or approve standards and requirements for quality of service and supply.

Gas quality is regulated through both the Gas Safety (Management) Regulations 1996 and the Gas (Calculation of Thermal Energy) Regulations 1996. These regulations set rules about the gas composition, calorific value and measurement standards to ensure the safety and quality of the supply.

[114] https://www.ofgem.gov.uk/publications-and-updates/riio-gas-distribution-annual-report-2017-18
[115] https://www.ofgem.gov.uk/publications-and-updates/riio-1-gas-transmission-annual-report-2017-18

Transmission

The long-term reliability standards of the National Transmission System (NTS) are provided for by the gas transporter licence which is granted and regulated by Ofgem.

We monitor quality of service by:

- requiring NGG to comply with standard special condition A9 of the gas transporter licence; and
- monitoring the quality of service and supply to individual users as the standards are set out in the Uniform Network Code (UNC).

Distribution

Standard special licence condition D10 of the gas transporter licence for the distribution networks sets timescales within which Gas Distribution Network companies (GDNs) must provide connection services, attend/respond to gas emergencies and respond to telephone calls to its emergency services and enquiry service obligations telephone line. GDNs must provide services within these timescales at least 90 or in some cases 97 per cent of the time (dependent on the obligation) in order to comply with their licence obligations. The guaranteed standards of performance also require GDNs to meet expected levels of service or pay customers compensation if they fail.

We monitor quality of service by:

- requiring GDNs to comply with and monitor performance against standard special licence condition D10 – quality of service standards of the gas distribution licence; and
- monitoring GDN performance against guaranteed standards of performance in the Gas (Standards of Performance) Regulations 2005, and standard special licence condition D10.

Monitoring time taken to connect and repair

Article 41(1)(m) of the Gas Directive requires regulatory authorities to monitor the time taken by transmission and distribution system operators to make connections and repairs. We do this by requiring the GDNs to report on their performance in this regard. In the following paragraphs, we report on how we have monitored this for transmission and distribution system operators during 2018.

Transmission

The UNC governs connections to the NTS. Connections to the NTS are infrequent, and for major pipeline developments can take many years. The UNC requires NGG to provide quarterly data on connections agreements. NGG has published this data for its 2018 quarterly reporting periods under Connection Offer Performance Reports [116]

Distribution

We set Guaranteed Standards of Performance, which the eight GDNs must meet. The GDNs must meet the standards at least 90% of the time. The performance of the eight GDNs is summarised in Tables 2.310 and 2.320 of our price control annual report supplementary data file.[117]

[116] https://www.nationalgrid.com/uk/gas/industrial-connections/applying-connection
[117] https://www.ofgem.gov.uk/system/files/docs/2019/03/riio-gd1_annual_report_2017-18_supplementary_data_file.xlsx

Monitoring access to storage, linepack and other ancillary services

Under Article 41(1)(n) of the Gas Directive, regulators are required to monitor and review the access conditions to storage, linepack (the storage of gas by compression in gas transmission and distribution systems) and other ancillary services. In the GB gas market, the default regime is for all storage facilities to offer nTPA unless the facility has been granted an exemption. Key requirements for storage facilities are:

- to be legally unbundled from related undertakings; and
- to offer access to third parties on non-discriminatory terms.

NGG is required by its licence to procure Operating Margins on an annual basis as an ancillary service. The Operating Margins service is used to maintain system pressures in the period before other system management services become effective (i.e. national or locational balancing actions). Ofgem continues to monitor this process.

Monitoring correct application of criteria that determine model of access to storage

Under Article 41(1)(s) of the Gas Directive, regulators must monitor the correct application of the criteria that determine whether a storage facility falls under negotiated or regulated access. As noted above, the GB default regime for all storage facilities is to offer nTPA unless the facility has been granted an exemption.

Ofgem grants an MFE where we are satisfied that access to the storage facility by other persons is not technically or economically necessary for the operation of an efficient gas market. The owner of a storage facility may apply to Ofgem for such an exemption, and Ofgem may revoke an exemption if the criteria are no longer met. More details on our approach are set out in an open letter that was published 16 June 2009.[118]

Monitoring safeguard measures

Under Article 41(1)(t) of the Gas Directive we are also required to monitor the implementation of safeguard measures. These are used in the event of a sudden crisis in the energy market as referred to in article 46 of the Gas Directive. Article 46 was taken forward by and further specified in Articles 10(6) - (7) of the EU Gas Security of Supply Regulation (Regulation (EU) No. 994/2010), which was in turn repealed and replaced by Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply. As such, the competent Authority (BEIS) is required to prepare, in accordance with Article 10 of Regulation 2017/1938, an emergency plan that outlines the action required to be taken in case of emergency.

In 2018, Ofgem continued to contribute to the implementation of Regulation (EU) 2017/1938.

4.1.3 Network and LNG tariffs for connection and access

Under Article 41(1)(a), 41(6)(a), 41(8), 41(10) and 41(12) of the Gas Directive, NRAs are required to fix or approve transmission or distribution tariffs or their methodologies. In this section, we report on our activities surrounding the regulation of tariffs and network charges (for transmission and distribution) during 2017.

NGG is the sole owner and operator of the GB gas NTS. There are eight GB GDNs. We determine the revenues that both NGG and the GDNs can collect from users of the NTS and GDN via network charges at the price control review. The current gas transmission and

[118] https://www.ofgem.gov.uk/publications-and-updates/gas-storage-minor-facility-exemptions-open-letter

distribution price controls are based on the RIIO model (RIIO-T1[119] and RIIO-GD1[120]) and began on 1 April 2013, running until 31 March 2021.

Following an assessment, we establish cost allowances and performance targets that form the basis of the price control and incentive framework. Incentive that allows allowed revenue to increase in response to user signals for new capacity is also included in these arrangements. Together, these elements determine the total amount of revenue (the 'allowed revenue') that NGG and the GDNs may earn on annual basis. All are required by the regulatory regime to set charges for the use of their networks to comply with the limits on allowed revenue that have been set. Should more or less than the permitted revenue be earned in any formula year, then a compensating adjustment is made in the following year.

Transmission

Users of the gas NTS are subject to three main elements of transmission charges:

- TO entry and TO exit charges. These are for the provision and maintenance of transmission network assets; and
- SO charges. These charges are for the day-to-day operation of the NTS.

Under its licence, NGG is obliged to develop and maintain a methodology for determining NTS charges and must comply with objectives below:

- the methodology results in charges reflect the costs incurred by NGG in its transportation business;
- it facilitates effective competition between gas shippers;
- it takes account of developments in the gas transportation business; and
- it is compliant with the Gas Regulation and legally binding decisions of the European Commission and/or the Agency.

NGG's charging methodology is set out in the contractual framework between GB gas network users and operators, the UNC. Ofgem must approve all material changes to the UNC.[121]

We do not set or approve the level of individual charges levied, only the charging methodology used to determine them. NGG is required to submit a report each year to us, which notes developments in the gas transmission charging methodology in the previous formula year, and outlines the further changes that may be necessary to better comply with objectives.[122]

Connection charges are levied on new connections to the NTS and reflect the costs incurred by NGG in providing any assets required to connect a user to the NTS. These connection costs are not determined by the price control review.

The current charging regime was designed to promote the effective use of the network and facilitate effective competition. Significant and ongoing structural changes to the GB gas market since implementation, and new EU legislation to harmonise transmission charges across Member States (TAR NC[123]), mean it is necessary to consider changes to the charging regime in order to further the interests of current and future consumers.

[119] https://www.ofgem.gov.uk/network-regulation-%E2%80%93-riio-model/riio-t1-price-control
[120] https://www.ofgem.gov.uk/network-regulation-%E2%80%93-riio-model/riio-gd1-price-control
[121] Published on the Joint Office of Gas Transporters website.
[122] http://www2.nationalgrid.com/uk/Industry-information/System-charges/Gas-transmission/Forecasts/
[123] Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (TAR NC): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R0460

This work is being taken forward through the Joint Office of Transporters[124] who commenced a Gas Charging Review (GCR), following the publication of an open letter in November 2015[125] confirming Ofgem's policy preferences for the GCR.

On 24 July 2018, we received a number of proposals to amend the charging regime so it is compliant with the TAR NC and addressed the issues identified in the GCR. These proposals were called the UNC621 modifications.[126] On 21 December 2018, we published a decision letter that explained the UNC621 proposals were not compliant with certain aspects of TAR NC.[127] As a result, we rejected the UNC621 modifications.

In response to our decision on UNC621, NGG raised UNC678 in January 2019. This modification proposed changes to align the charging regime with TAR NC while taking into account our decision on UNC621. A further 10 alternative modifications to UNC678 have subsequently been raised by industry parties.[128]

UNC678 and the alternative modifications are being developed through the UNC modification processes. We recieved the final modification proposals at the end of May 2019. We are considering them against the relevant charging and UNC objectives, and the requirements of TAR NC.

Distribution

On the distribution side, the GDNs recover their allowed revenues via a combination of Local Distribution Zones (**LDZ**) capacity and commodity charges and an LDZ customer charge.

Similarly with NGG, the GDNs are obliged under the licence to develop and maintain a methodology that sets out how LDZ charges are determined and that complies with the same objectives as the NTS charging methodology objectives mentioned above. The licensee is not allowed to show preference for anyone who operates (or wishes to operate) a pipeline connected to the system under this specific licence. These objectives also apply to the GDNs' connection charging methodology that they are also obliged to maintain under the licence.

Similarly with NGG's NTS charging methodology, the GDN charging methodologies are also set out in the UNC. All material changes to the charging methodology must be approved by Ofgem.

LNG facilities

The three[129] LNG facilities currently operating in GB are exempt from third party access. Therefore the provisions of Article 41(10) and (6) of the Gas Directive do not apply to them.

Any exempted LNG facility is required to operate under the terms and conditions of its exemption. Commercial terms and conditions are agreed between the facility operator and its primary capacity holders. However, if we believe terms and conditions published[130] by LNG operators are discriminatory, we are able take actions under the enforcement provisions in the Gas Act 1986, in particular section 28.

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[124] The Joint Office of Gas Transporters is the entity that administers the UNC

[125] https://www.ofgem.gov.uk/publications-and-updates/gas-transmission-charging-review-confirmation-policy-view-and-next-steps

126 There were eleven UNC621 modifications in total. They are available on the Joint Office of Gas Transporters website: https://www.gasgovernance.co.uk/0621

127 Our decision letter can also be found on the UNC621 page on the Joint Office of Gas Transporters website.

[128] UNC678 and the alternative modifications can be found on the Joint Office of Gas Transporters website: https://www.gasgovernance.co.uk/0678

[129] Isle of Grain, South Hook and Dragon LNG.

[130] Under section 19D Gas Act.

Prevention of cross-subsidies

Each NRA, under Article 41(1)(f) of the Gas Directive, is required to ensure that there are no cross-subsidies between transmission, distribution, storage, LNG and supply activities.

In GB, licensed gas transmission operators and DNOs are subject to conditions prohibiting regulated businesses from giving cross-subsidies to, or receiving cross-subsidies from, related undertakings. The regular information submissions that licensees are required to make, principally those relating to their price control arrangements, allow us to assess whether any risk or incidence of cross-subsidisation has arisen.[131]

Gas distribution licences contain a requirement for independent auditors to carry out a range of procedures that have to be agreed with us, in order to provide assurance that obligations to avoid discrimination and cross-subsidies are being respected. We review the auditors' reports and raise supplementary questions as appropriate.

One area we will continue to monitor is the interpretation and application of requirements for financial transactions to be completed at arm's length and on normal commercial terms. This is especially relevant for the terms of loans made to or by the relevant licensee. For gas distribution licensees, we also monitor the risk of licensee-owned freehold sites being sold to related parties at insufficient value. This particularly relates to gasholder sites in major cities, where land value for development is especially high at present.

Other key risk areas we take into account are:

- the basis of recharging for services provided at a group level;
- the justification for any management fees charged to the licensee by related parties; and
- the interest rates charged on intra-group loans affecting the licensee.

Regulated and negotiated access to storage

Under article 41(1)(s) of the Gas Directive, regulators must monitor the correct application of the criteria that determine whether a storage facility falls under negotiated or regulated access. The default regime is for all storage facilities to offer nTPA unless the facility has been granted an exemption. More information on this can be found in section 4.1.2.

[131] The prohibition on cross subsidies is prescribed by: the Gas Directive at Article 31(3); and Standard Special Condition A35 of the gas transporter licence (Standard Condition 41 for independent gas transporters).

4.1.4 Cross-border issues

In order to reach a fully integrated European energy market, it is vital that NRAs coordinate effectively on cross-border issues. In this section, we report on our access to cross-border infrastructure, LNG terminals and storage facilities, network investment plans and cooperation with other NRAs during 2017-18.

Access to cross-border infrastructure including allocation and congestion management

Under Article 41(6)(c), 41(8) and 41(9) of the Gas Directive, NRAs are responsible for: fixing or approving methodologies used to calculate or establish the terms and conditions used for access to cross-border infrastructures, ensuring transmission and distribution system operators are granted appropriate incentives, monitoring congestion management of national gas transmission networks including interconnectors and the implementation of congestion management rules and capacity allocation mechanisms.

The GB gas system is interconnected with Belgium, the Netherlands, Northern Ireland and the Republic of Ireland. These interconnections play an important role in gas security of supply by allowing gas to flow to where it is valued most and allowing for a more integrated European gas market.

The paragraphs below give an overview of the arrangements on each of the interconnectors. Each interconnector is licensed by Ofgem and must submit its access rules and charging methodologies to us for approval on annual basis.

IUK
The interconnector with Belgium, Interconnector UK Limited (IUK) became operational in 1998. IUK can physically flow gas in both directions and has an import capacity of 25.5 billion cubic metres (bcm)/year and an export capacity of 20bcm/year.

IUK has sold all of its capacity in long-term contracts until 2018. IUK has also made post-2018 capacity available

- through auctions consistent with the requirements of the network code on Capacity Allocation Mechanisms (CAM NC).[132]
- Through an implicit allocation mechanism. In 2018 we approved[133] modifications to IUK's access rules suspending parts of CAM NC from effect for 50% of IUK's technical capacity. In 2019 we approved an increase to 75%.[134]

BBL
The interconnector with the Netherlands (NL), Blagzand Bacton Leiding Company (BBL) became operational in 2006. Prior to July 2019, gas could only be physically transported through the pipeline from NL to Great Britain (GB). Technical modifications have been made at the compressor station at Anna Paulowna and the gas terminal at Bacton to facilitate physical reverse flow. BBL has a total import capacity of 18bcm/year (NL to GB) and a potential export capacity of 6bcm/year (GB to NL).

[132] Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R0459

[133] https://www.ofgem.gov.uk/system/files/docs/2018/03/180302_authority_decision_to_approve_proposed_modifications_to_iuks_access_rules_and_disapply_certain_articles_of_cam.pdf

[134] https://www.ofgem.gov.uk/system/files/docs/2019/03/iuk_decision_letter_-_access_rules_18032019.pdf

Moffat
The Moffat interconnector with the Republic of Ireland became operational in 1993 and is a physically uni-directional interconnector. The capacity available to exit the NTS at Moffat is 32.8 mcm/day. In December 2011, a virtual reverse flow service was introduced. This allows shippers to nominate flows from Ireland to GB on an interruptible basis. The maximum entry capacity at Moffat is 31.1 mcm/day.

Access to LNG terminals and storage facilities

For the reasons given in section 4.1.1, LNG and gas storage are not required to provide third party access therefore Article 41(10) does not apply to them.[135] However, in each case we monitor access arrangements and have the power to take action should we think any of these arrangements were to become discriminatory.[136]

The Gas Directive gives the right to any party affected to submit a complaint for review by the NRA regarding a decision on methodologies used or concerning the proposed tariffs or methodologies. Changes that were made to the Gas Act extend the scope of the dispute resolution mechanism in order to cover disputes arising from complaints to the Authority against owners of gas storage facilities and owners of LNG import or export facilities.[137] We did not receive any complaints in during this reporting period.

Implementation of the Third Package
The Third Package introduced new responsibilities for regulatory authorities regarding the rules for granting access to cross-border gas infrastructures.[138] In GB, changes were made to the standard conditions of the Gas Interconnectors Licence[139] to take full account of these new responsibilities. In 2017, there were a number of proposals from TSOs to help implement European Network Codes and Guidelines resulting from the Third Package.

On 28 February 2018, we published a decision approving proposed modifications to IUK's charging methodology. These modifications proposed by IUK sought to facilitate compliance with certain requirements in harmonised transmission tariff structures for gas (TAR NC). On 19 March 2019 we published a similar decision for BBL.

We also published decisions for IUK and BBL on 17 July 2018 and 18 January 2019 respectively derogating them from parts of TAR NC that would have a negative impact on their ability to operate as merchant interconnectors.

On 5 March 2018 we published a decision approving proposed modifications to IUK's access rules. The proposed modifications sought to facilitate compliance with provisions in CAM NC.

Cooperation

Article 41(1)(c) of the Gas Directive requires us to cooperate on cross-border issues with the other NRAs concerned and with ACER. These cross-border issues include the integration of national gas markets, jointly managed cross-border trade in gas and the allocation of cross-border capacity. We made changes to the Gas Act 1986 to reflect this.[140]

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[135] See Article 41(10) of the Gas Directive and https://www.ofgem.gov.uk/gas/wholesale-market/market-efficiency-review-and-reform/third-party-access-exemptions
[136] In the case of LNG we have enforcement provisions in the Gas Act, in particular Section 28. For Storage we have enforcement provisions in the Gas Act and certain powers under section 19B (acquisition of rights to use storage facilities).
[137] See sections 27B-27D of the Gas Act.
[138] See Articles 41(6)(c), 41(8), 41(9) and 41(10) of the Gas Directive.
[139] See standard conditions 10, 11 and 11A of the gas interconnector licence.
[140] See Regulation 34 of the Electricity and Gas (Internal Market) Regulations 2011, which inserted section 4D into the Gas Act.

Examples of cooperation
In 2018, we continued to cooperate with neighbouring NRAs over a number of issues concerning interconnectors and full implementation of the European Network Codes and Guidelines.

In 2018 we have continued our engagement at a European level participating in ACER and CEER's relevant working groups and task forces.

Monitoring investment plans and assessment of consistency with Community wide network development plan

We set price controls for NGG and as part of this we review the company's business plans. We explicitly require the business plans to consider the interaction with wider European developments. We also require the company to consider the various uncertainties across the period for which the control is set and beyond.

In practice, major changes to the gas transmission network including those related to EU-wide network developments will arise through the commercial incremental entry and exit arrangements that we will be involved at major stages of development, i.e. setting revenue drivers to make sure that NGG receives an appropriate revenue adjustment. We will therefore have sufficient information to fulfil our duty under Article 41(1)(g).

We have established a monitoring approach to review ongoing performance against the outputs determined in the price control.

4.1.5 Compliance

Update on Ofgem's compliance cases

Record keeping

We launched an investigation into Cadent and its compliance with its obligations under its gas transporter licence (Standard Special Conditions A40, A50 and A55) and as a consequence section 9 of the Gas Act 1986; on whether they were keeping adequate records of gas pipes (risers) in some blocks of flats that are part of its network. It is Cadent's responsibility to keep records of these. This investigation is currently ongoing.

Guaranteed Standards of Performance

Under Guaranteed Standards of Performance 2, companies are required to make payments in relation to the reinstatement of customer premises. Following concerns about Northern Gas Networks Ltd's (NGN) compliance with the Guaranteed Standards of Performance 2, NGN paid £247,440 in compensation to customers affected; and paid £15,000 in voluntary redress to the EST fund (sum totalling £262,440).

Similarly, under Guaranteed Standards of Performance 2 and 12, companies are required to make payments in relation to the reinstatement of customer premises. Following concerns about Cadent's compliance with the Guaranteed Standards of Performance 2 and 12, Cadent paid £1,660,050 in compensation to customers affected; and paid £278,050 in voluntary redress to the EST fund (sum totalling £1,938,100).

4.2 Promoting competition

In this section, we report on the current state of the wholesale and retail gas markets in GB and the main changes in 2018, as well as our monitoring activities in both the wholesale and retail gas markets during the past year.

4.2.1 Wholesale markets

The following section is an overview of our monitoring under Article 41(1)(i), (j), (k), (l), (u) and Article 44(3), and the main developments in the wholesale gas market in GB during 2018. Detailed information is summarised below:

- National Grid issued a Gas Deficit Warning (GDW) for the 1 March 2018;
- Average day-ahead gas prices in 2018 increased 25% year-on-year. On 2 March 2018, day-ahead prices hit a record high of 230 pence/therm following the GDW;
- A combination of currency movements, lower levels of gas in storage and higher oil prices contributed to increases across the gas forward curve over the year;
- Traded gas volumes decreased in 2018 to 1,591bcm relative to 2017, with annual churn declining from 23 to 20;
- Futures volumes accounted for 58% of total annual traded volume similar to 2017;
- After a significant contraction in the amount of LNG imported into the UK in 2017, imports of LNG rose by 7.3% in 2018; and
- In 2018, the UK imported 46.9bcm of gas and exported 7.6cm, making it a net importer for 39.2bcm.

4.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Prices

Wholesale gas prices in GB are compiled and made available to market participants by a number of independent pricing agencies, energy market brokers and via exchanges. Argus Media, ICIS Heren and Platts provide pricing based on reported OTC trades, made available to the market via a subscription service. In addition, financial data providers provide close to real-time energy broker pricing based on OTC trades.

In addition to a wide range of OTC pricing data, ICE also provides pricing data to the market, both through the 'On-the-day Commodity Market' (OCM) and through the ICE Futures market.

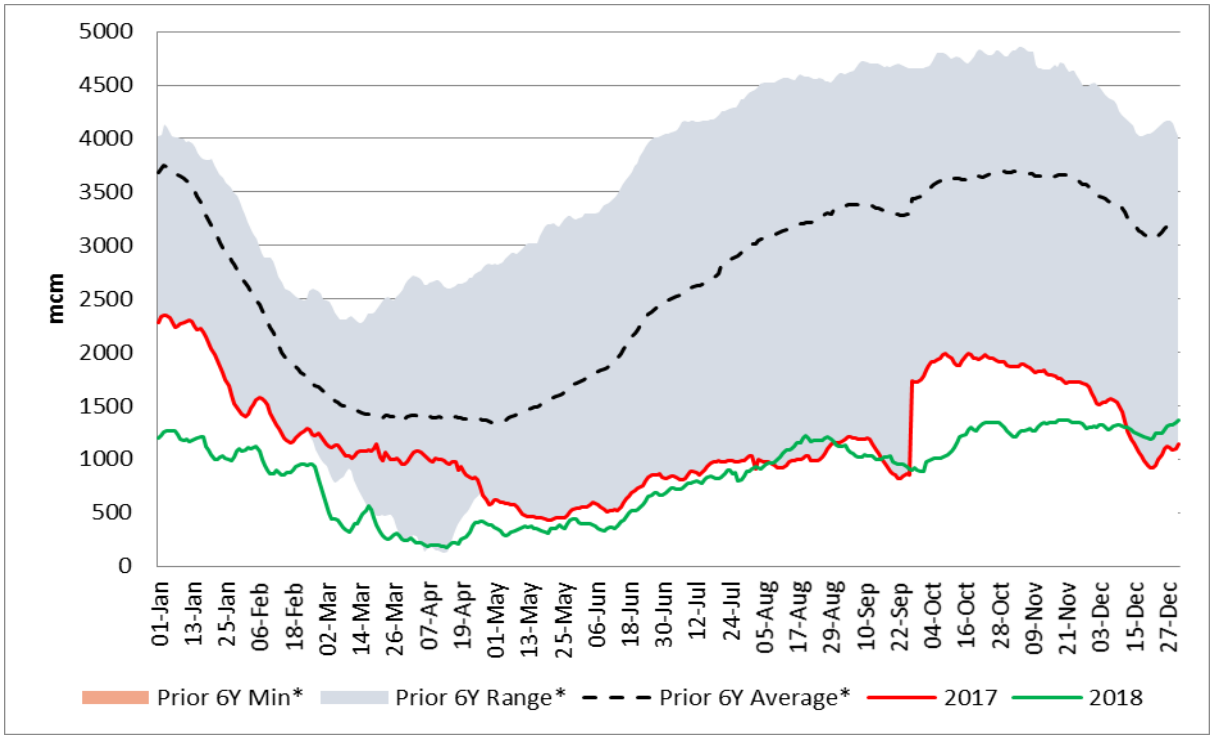
Fundamentals

For the first time since 2008, National Grid issued a Gas Deficit Warning lasting one day on 1 March 2018 following extremely high weather-driven demand and a series of supply outages both domestically and at a Norwegian processing plant. After this event, sufficient margins persisted for the rest of the year, with GB benefiting from a diverse range of gas supply.

Figure 13 shows that total GB storage stocks in 2018 were lower than in 2017, due to the end of storage operations at Rough. This was GB's only long range storage facility. However, storage volumes throughout winter 2018-19 remained relatively high. With milder

temperatures over winter 2018-19 and an abundance of LNG, there was less need for storage withdrawals. Storage levels were nearly depleted at the end of winter 2017-18 dropping to 13% by the end of March 2018. After these levels steadily rose over summer and were almost full from November 2018 to the end of January 2019. Storage levels have been maintained at around 50% full over most of the winter 2018-19.

Figure 13: Total GB gas in storage during 2018 (green line), compared with 2017 (red line), 6Y average (dotted) and prior 6-year range (grey bands)



Source: National Grid/Bloomberg/Ofgem

LNG imports increased sharply in Q4 2018. Q4 saw the highest quarterly total for LNG imports since 2014 and the volume was three times the level observed in Q4 2017. The driver of increased LNG volumes was the UK gas price premium over Asian markets.

Additionally, a combination of the Asian market buying Qatari LNG on the forward market, increased shipping costs, and new LNG supply projects coming online through 2018 increased the volumes arriving in the UK from the US and Russia, thereby providing the UK with a more diversified supply portfolio. In 2017, more than 83% of all LNG imports came from cargoes originating in Qatar, but in 2018 this fell to 40% with arrivals from US and Russia increasing significantly to a combined total of 35%.

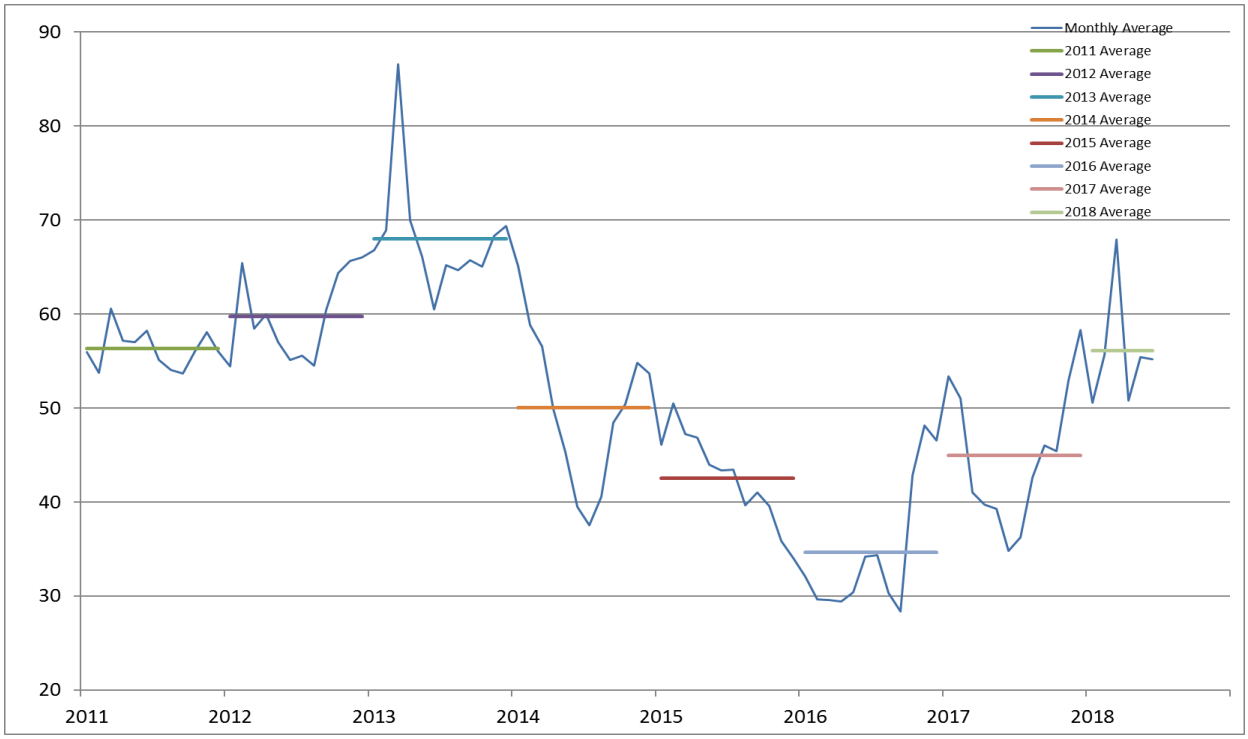
Total GB gas demand increased in 2018 compared to 2017 as well as experiencing interesting variations. Demand for final consumption increased by 3.1%, with domestic and other final users up 3.2% and 3.9% respectively. Domestic demand was influenced by particularly cold weather and subsequent high demand in Q1 2018, however there was lower demand later in the year. In contrast, demand for gas used for electricity generation in 2018 follows a year-on-year decrease of 4.7% due to the continued uptake of low carbon generation.

Price developments

GB wholesale gas prices both for near-term and forward delivery generally increased throughout 2018 driven by a combination of currency movements, lower levels of gas in storage and extreme weather at the end of winter 2017-18 (referred to above). In 2018, the average annual day-ahead gas price was 56p/therm compared with 45p/therm in 2017 (see

figure 14)[141]. On 2 March 2018, day-ahead prices hit 230 pence/therm following a Gas Deficit Warning issued by National Grid the previous day.

Figure 14: Monthly average day-ahead NBP price (p/therm, light blue) and yearly average day-ahead prices since 2011



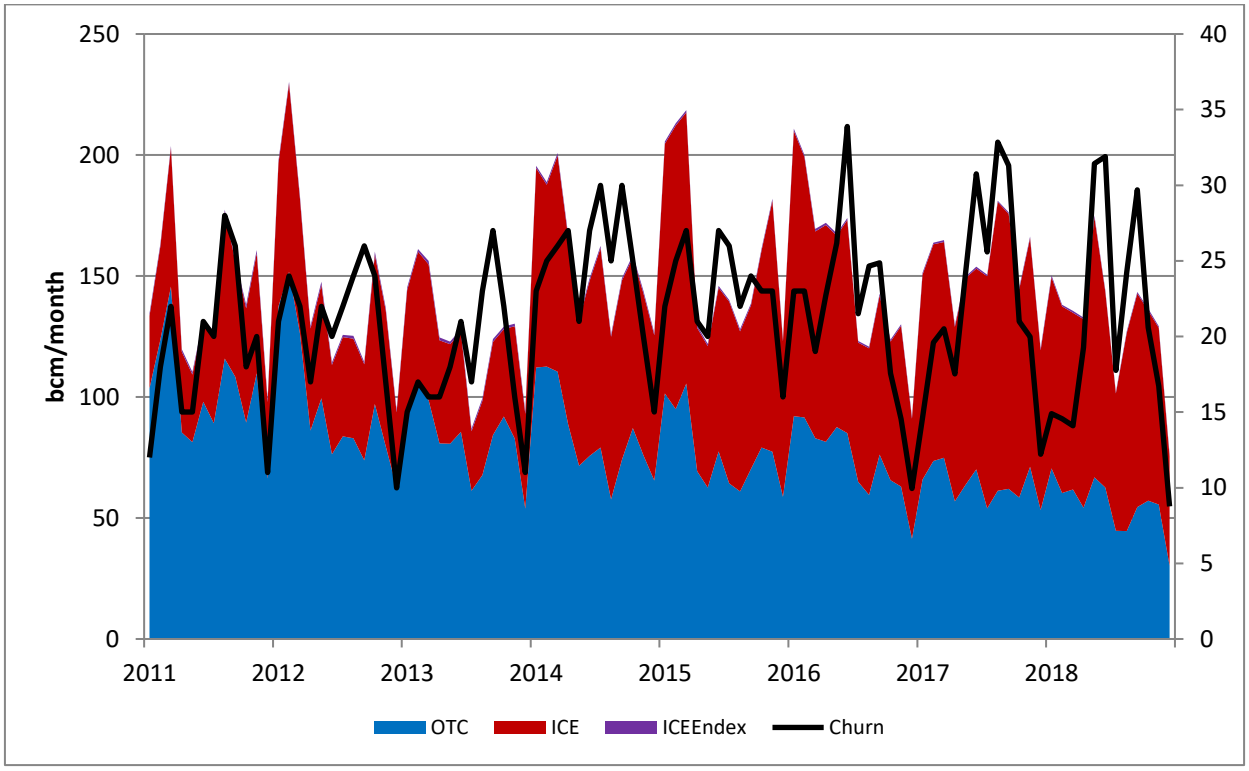
Source: ICIS Energy, Ofgem

Liquidity

Traded volumes and churn decreased in 2018 compared with 2017[142]. Traded volumes decrease by 14% year-on-year to 1,591bcm, with annual average churn decreasing from 23 to 20. The share of total traded volume of GB gas on the exchange (ICE Futures Europe) remained similar to 2017 at 58% in 2018.

[141] Price data from ICIS Energy.
[142] Based on data from London Energy Brokers' Association, ICE and National Grid plc.

Figure 15: NBP trading volumes and churn, 2011 to 2018



Source: Combined data from LEBA, ICE, ICE Endex, Bloomberg and National Grid plc

Transparency

REMIT

REMIT is a key tool in ensuring the transparency of prices within the wholesale energy market. For further information, please refer to section 3.2.1.

Market opening and competition

Market integration

The GB gas market is well integrated with both European and global gas markets. The IUK interconnector connects GB with Belgium, while the BBL connects GB with the Netherlands. GB has three LNG terminals, the Isle of Grain, South Hook and Dragon.

On 1 October 2018, all long-term capacity contracts on the IUK interconnector expired. Shippers wanting to use IUK have to book capacity on a more dynamic shorter-term basis (e.g. annual, monthly, daily products). From July 2019, IUK could also face competition on export flows with the introduction of reverse flow on BBL. The BBL company has proposals on offering 7GWh/h (around 15 million cubic metres/day) of reverse flow capacity from Britain to the Netherlands.

In 2018, the UK imported 46.7bcm of gas and exported 7.6bcm, making it a net importer of 39.2bcm. Pipeline imports from the Netherlands and Belgium increased by 45% and 21% respectively year-on-year while LNG imports increased by 7.5%[143]. Imports from Norway decreased by 8% year-on-year.

[143] Source: Department for Business, Energy & Industrial Strategy Energy Trends 2018 Table ET 4.3

Market concentration

The GB market receives its gas supplies from a variety of different sources comprising indigenous supplies from the UK Continental Shelf, imports from Norway (via the Vesterled, Langeled and Tampen Link pipelines), imports from Continental Europe (via IUK and BBL) and from the LNG market (via the above terminals). With this diversification of supply also comes a diversity of shippers on the wholesale market.

For the interconnectors, originally nine shippers acquired capacity rights in IUK for 20 years from 1 October 1998 through to 30 September 2018. Currently, 25 shippers hold primary capacity rights[144]. For BBL, there are currently 15 shippers[145].

For LNG, six shippers (BP, Centrica, Engie, Uniper, Iberdrola and Sonatrach) import gas through the Isle of Grain.[146] The South Hook Terminal is owned by a UK joint venture of Qatar Petroleum (67.5%), ExxonMobil (24.15%) and Total (8.35%). Dragon LNG is owned by two shareholders, Shell and Petronas.

4.2.2 Retail markets

As mentioned in previous section 3.2.2, a large amount of Ofgem's engagement with the retail energy market does not distinguish between the electricity and gas sectors - it is considered as a whole. Where Ofgem does assess the electricity and gas retail markets separately, the information has been documented in sections 3.2.2 and 4.2.2 respectively.

4.2.2.1 Monitoring the level of prices and the effectiveness of market opening and competition

Market structure

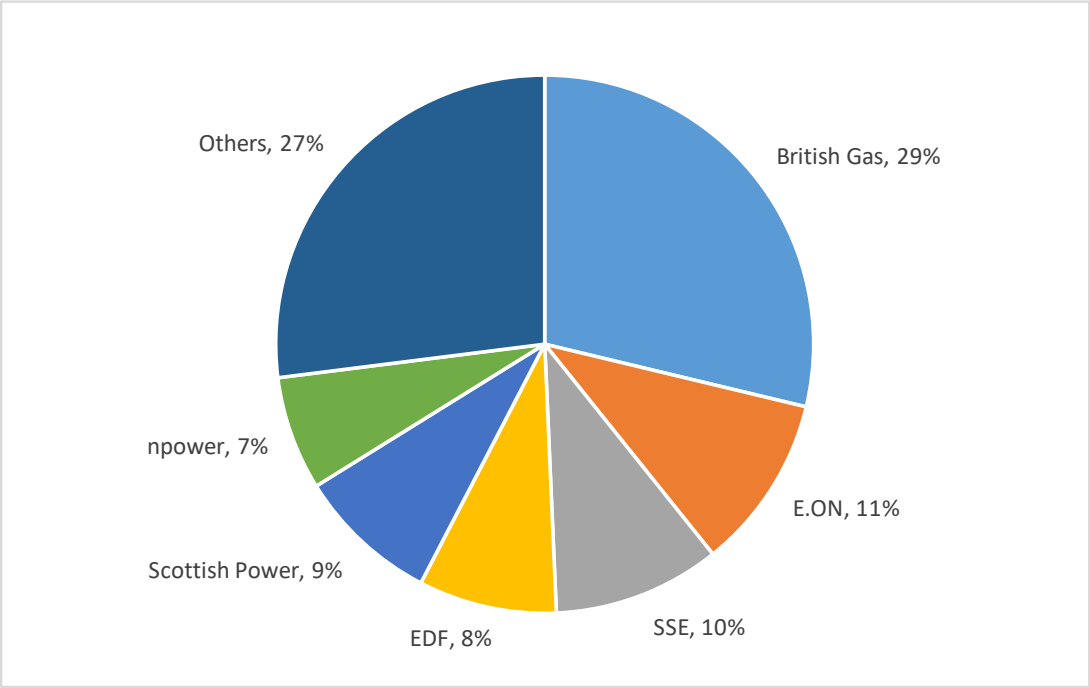
Domestic market

In December 2018, there were 60 active domestic gas suppliers (i.e. in addition to 6 large suppliers there were also 54 small and medium sized suppliers), 3 fewer compared to December 2017. At the same time, there were around 23.4 million domestic gas customers.

Before the full introduction of competition in 1999, British Gas had a monopoly to supply all domestic gas customers in GB. The majority of the domestic gas supply market in GB is now accounted for by British Gas and by the five large vertically integrated electricity suppliers. As Figure 16 opposite shows, these suppliers accounted for 73% of gas supply to domestic customers, down from 78% in 2017. The combined market shares of smaller suppliers has increased by 5 percentage points relative to December 2017, to 27%.

[144] Shippers are listed on IUK's website (accessed in May 2019): http://www.interconnector.com/access-services/products-services/current-shippers/
[145] Shippers are listed on BBL's website (accessed in May 2019): http://www.bblcompany.com/commerce/shippers-list.
[146] Shippers are listed on the Isle of Grain's LNG terminal website (accessed in April 2018): http://grainlng.com/who-are-we/our-customers/

Figure 16: GB domestic gas suppliers' market shares, December 2018



Source: Ofgem analysis of Xoserve reports.

Non-domestic market shares[147]

Non-domestic markets were liberalised earlier than domestic markets and have seen higher rates of entry and exit, resulting in a large number of suppliers, lower concentration and greater presence of suppliers besides the 6 largest domestic suppliers.

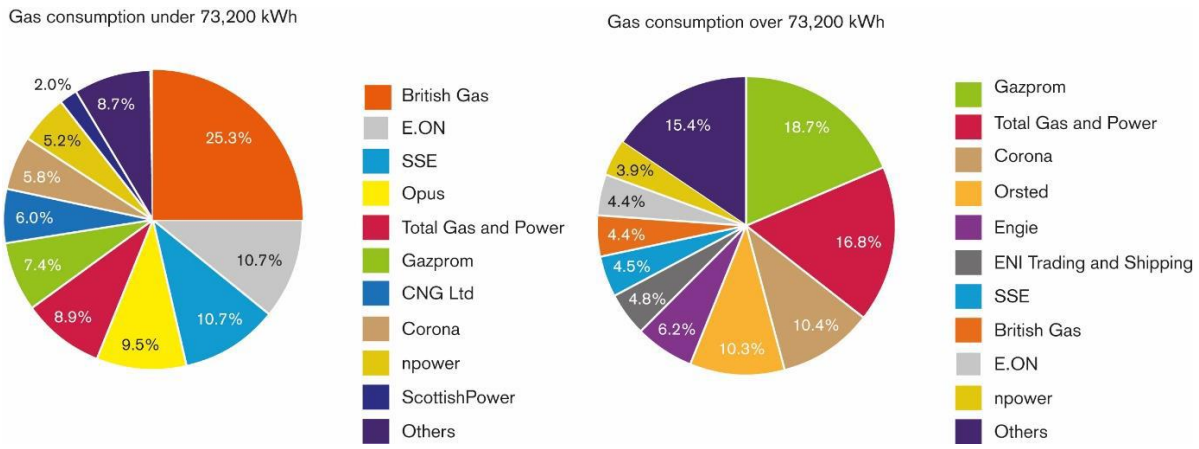
In December 2018, there were 68 non-domestic gas suppliers on the market. In addition to 6 largest suppliers also present in domestic market, there were also 62 independent suppliers (i.e. suppliers that entered the market since liberalisation). During 2018, three suppliers entered the non-domestic gas market, while two suppliers exited the market.

During 2018, large suppliers have generally continued to lose ground across all non-domestic customer types, and other suppliers have reinforced their positions, especially in the segment of larger businesses.

Figure 17 shows that in June 2018,[148] in the segment of small business customers (i.e. these with annual consumption of less than 73,200 kWh), international gas producers have a strong presence in this segment and particularly in the segment of large business customers (i.e. these with annual consumption of more than 73,200 kWh).

[147] The data presented in this report is based on number of supply points. However, it should be noted that the market shares by volume may show a slightly different picture as some suppliers may have a low number of supply points with high volumes of energy supplied through them.
[148] The latest publicly available market share data for the non-domestic market: https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

Figure 17: Market shares in non-domestic gas market, June 2018



Source: Ofgem analysis of Xoserve meter point data

Herfindahl–Hirschman Indices ('HHI')

The HHI measure of concentration shows that in 2018[149] gas markets were concentrated on the CMA's definition[150], with the market for domestic gas customers being the most concentrated:

- domestic – 1,279;
- non-domestic, consumption under 73,200 kWh – 1,148; and
- non-domestic, consumption over 73,200 kWh – 1,037.

The HHI fell in 2018 relative to 2017 in all three market segments (i.e. domestic, small business segments, large business segment).

Prices for domestic customers

Market forces determined most final customer prices in the GB retail energy markets in 2018. The customers with prepayment meters and customers in a receipt of a WHD were the two exceptions for 2018.[151]

There are also a number of other costs that influence how suppliers set retail gas prices, including wholesale energy costs and the costs of the UK government's environmental, social policies such as the Renewable Obligation, and the WHD, which can vary over time. As with electricity, Ofgem monitors domestic suppliers' gas prices across GB.

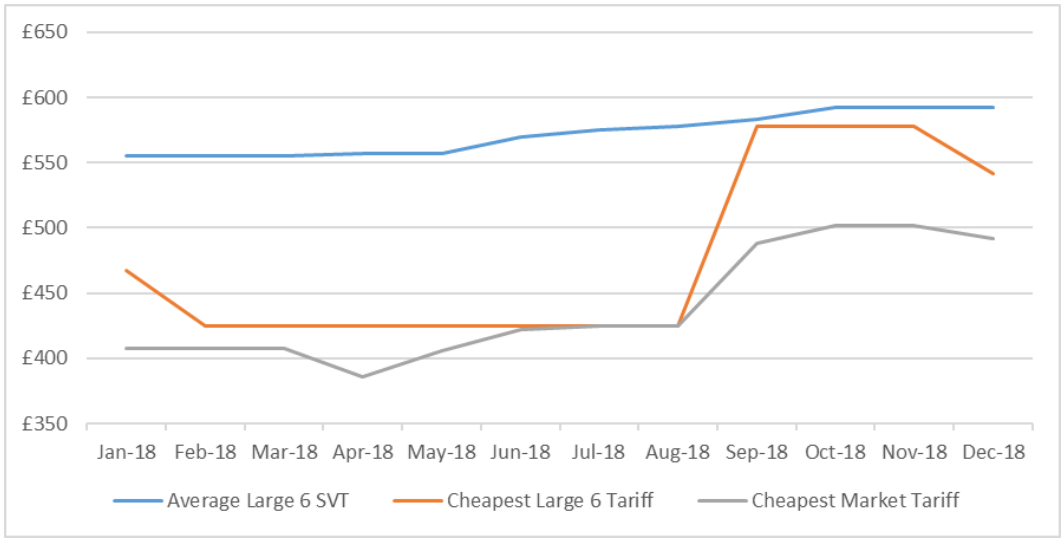
As in the electricity market, over the year suppliers continue to offer fixed tariffs with most fixed deals being priced at a discount relative to variable tariffs. Again as the electricity market, smaller suppliers generally offered the cheapest fixed deals.

Figure 18 shows the change in domestic gas bills based on incumbent SVT and cheapest tariffs across GB's gas market between January and December 2018. Over the year, the average annual gas SVT bill offered by the largest six suppliers increased by 7% (£37). The

[149] In December 2018 for domestic market and in June 2018 for non- domestic market.
[150] The CMA typically regards markets with HHI below 1000 as unconcentrated, markets with HHI between 1000 and 2000 as concentrated, and markets with HHI above 2000 as highly concentrated.
[151] See Sections 5.1 and 2.3.1 for details.

cheapest tariff on the market increased by 21% (£84). The price differential between the largest six suppliers' average SVT and their cheapest tariffs decreased over the year from £88 to £50. The differential between the largest six suppliers' average SVT and the cheapest market tariff decreased from £148 to £100.

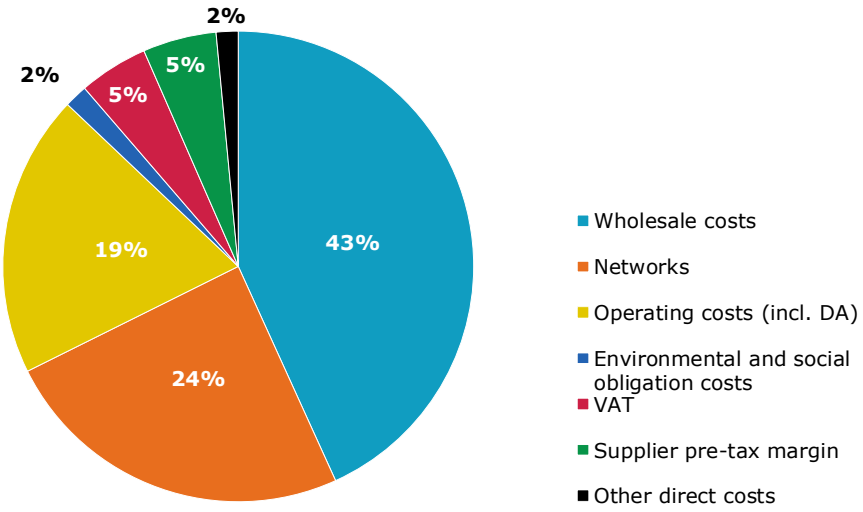
Figure 18: Domestic retail gas price levels, Jan – Dec 2018



Source: Ofgem analysis of Energyhelpline data
Notes: Price level is based on revised consumption level of 12,000 kWh per year

As well as monitoring domestic gas price levels, we also assess the extent to which particular costs have an impact on these bills. Suppliers face a range of costs that influence how they set retail electricity prices. These costs can vary within and between years, and include wholesale energy costs, the costs of UK Government environmental and social policies, transmission and distribution costs. Figure 19 shows the breakdown of the annual gas bill for a domestic customer on direct debit, with annual consumption of 12,000 kWh.

Figure 19: Domestic gas bill breakdown, 2018



Source: Ofgem analysis

Consumer engagement and experience

Domestic switching rates

Switching by domestic gas customers has been on the rise since 2014. In 2018, approximately 4.5m domestic customers switched their gas supplier, equivalent to 376,000 per month. This represents an annual switching rate of 19%, one percentage point higher than in 2017. This has been the highest annual switching rate since 2008. We also saw an increase in switching away from the six largest suppliers. On average 62% of customers that switched during 2017 moved to small or medium suppliers; a 4% increase relative to 2017.

The speed and reliability of switching is also important. In December 2018, the system average time to complete a switch increased slightly to approximately 18 days from 17 days in December 2017. Customer surveys are an additional source of information on the customer switching experience.

Non-domestic switching rates

There has been an increase of approximately 3% in the non-domestic gas switching rate. In October 2018, we published our quantitative survey on micro and small business customer engagement,[152] which covered both gas and electricity segments. We summarised the main findings of this survey in section 3.2.2.

Supply prices, investigations and measures to promote effective competition

Ofgem's work on recommendations on supply prices, investigations and measures to promote effective competition is cross-cutting and it applies to both the electricity and gas markets. Subsequently, it has been covered in more detail in the retail market overview in section 3.2.2.3.

4.3 Security of Supply

Under Article 5 of the Gas Directive, Member States have to ensure the monitoring of security of supply issues.

In GB, no single body is responsible for ensuring security of supply; we rely on the market to do this. However, Government sets overall energy policy on energy security, Ofgem is responsible for regulating the market, and National Grid as operator of the GB gas system has responsibility for ensuring that supply meets demand each day.

In November 2018, we published our joint SSSR[153] alongside BEIS. This was part of an obligation[154] on Government to report annually to Parliament on the availability of electricity and gas for meeting the reasonable demands of consumers in GB. The report concluded that GB's gas market has delivered security to date and is expected to continue to function well, with sufficient delivery capacity to meet demand. The report noted that sufficient gas is available from a combination of domestic, regional and global gas markets and the GB gas system is robust to all but the most extreme and unlikely combinations of infrastructure and supply shocks.

For more information on security of supply issues please see section 3.3 of this report.

[152] https://www.ofgem.gov.uk/system/files/docs/2018/10/micro_and_small_business_engagement_survey_2018_report.pdf
[153] https://www.gov.uk/government/publications/statutory-security-of-supply-report-2018
[154] Under section 172 of the Energy Act 2004 as amended by section 80 of the Energy Act 2011.

5. Consumer protection and dispute settlement in electricity and gas

Chapter Summary

The following chapter provides details of our consumer protection and dispute settlement work in both the GB gas and electricity sectors. This includes developments in the domestic and non-domestic sectors and further information on smart metering and smarter markets, our consumer vulnerability strategy and protecting consumers.

5.1 Consumer protection

According to Articles 37(1)(n) of the Electricity Directive 2009/72/EC and 41(1)(o) of the Gas Directive 2009/73/EC, Ofgem must help to ensure that customer protection measures are effective and enforced, especially when the new technology enters the market. Here, we report on the several aspects of current and future customer protection.

Price protection for domestic customers

The retail energy market has worked well for customers who actively choose their supplier, but it has not delivered good outcomes for those who remain on their supplier's default tariff. Ofgem's analysis, and the CMA's investigation of the energy market[155], has shown there is insufficient competitive constraint on the prices suppliers charge these customers. As a result, millions of customers are paying more than they should be. We are particularly concerned with the impact this has on vulnerable customers. These customers are more likely to find themselves on a default deal, and because of their circumstances, can suffer more harm as a result

As a result, on 2 February 2018, we widened the scope of the PPM cap[156] to a further one million customers in receipt of WHD, who were more likely than average to be vulnerable. The price cap for these customers was set at the same level as the existing PPM cap. To ensure the measure is proportionate and in line with EU legislation, the price cap for customers in receipt of WHD was a temporary measure and ended on 1 January 2019 when the wider default tariff cap entered into effect.[157]

The default tariff cap is one of the most significant market interventions in recent years. We estimated that it would save around £1 bn per year to 11 million customers on default price tariffs in Great Britain.

We have designed the default tariff cap to provide a high level of protection to those who do not to engage in the market, preventing unjustified price increases and ensuring default tariffs reflect more closely the underlying costs of supplying energy. When setting the level

[155] https://www.gov.uk/cma-cases/energy-market-investigation
[156] Following a recommendation by the Competition and Markets Authority (CMA), from 1 April 2017 the amount suppliers can charge prepayment meter customers on a non-fixed deal and without an interoperable smart meter is subject to a price cap (sometimes referred to as the 'safeguard tariff). This is a transitional measure running until December 2020, unless terminated earlier, when the roll-out of smart meters is expected to be completed.
[157] https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/implementation-cma-remedies/prepayment-meter-price-cap

of the cap, we have given careful consideration to improving efficiency, incentives to switch, enabling competition and financing efficient costs.

The default tariff cap is a temporary measure, which is intended to protect disengaged customers until the right market framework is in place for competition to be effective. From 2020, we will be carrying out an annual review of the market to assess if the conditions for effective competition are in place for a post-price cap market. This framework will form the basis of our recommendation to the Secretary of State, who will make the decision to extend the cap the following year or not. If it is decided to maintain the default tariff cap in place we will conduct the review in the following year again. The cap will cease to have effect at the end of 2023 at the latest. The PPM cap will continue to apply alongside the default tariff cap until 2020.

This means that in 2019, approximately 15 million customers will have direct price protection, which will ensure that these customers are protected from overcharging and that prices they pay more closely reflect the underlying cost of supplying energy.

Updating our Consumer Vulnerability Strategy

Supporting and protecting consumers in vulnerable situations is a key priority for Ofgem. We published our first Consumer Vulnerability Strategy in 2013.

The energy market is at a key juncture. Important developments include expected growth in the use of renewable technologies, smart meters and other data-driven technologies, and electric vehicles. These developments will bring innovative consumer offerings and new business models, and the domestic retail market may look very different in the future.

We want to see an inclusive energy market, where consumers in vulnerable situations are not left behind and are able to take advantage of the opportunities provided by the evolving market. We are therefore updating our Consumer Vulnerability Strategy. In June 2019, we published our updated draft Consumer Vulnerability Strategy for consultation.[158] When finalised, the strategy will build upon the already extensive work delivered under our 2013 Consumer Vulnerability Strategy and will set out our priorities to help protect gas and electricity consumers in vulnerable situations until 2025.

Investigating customers with prepayment meters who self-disconnect

Self-disconnection occurs when PPM customers experience an interruption to their electricity or gas supply due to a lack of credit on their meter. Closely associated with this is self-rationing for PPM customers. This is when customers may deliberately limit their energy use to save money, or restrict spending in other essential areas in order to keep their meter topped up.

We are concerned about the impact of self-disconnection and self-rationing on PPM customers and the level of support provided to these customers. In November 2018, we launched a call for evidence to gather information on the scale of the problem, quality of support and supplier practices in this area.[159] We will publish our findings and proposed follow up actions in 2019.

Protecting customers who have a prepayment meter force-fitted[160]

In January 2018, Ofgem introduced a new licence condition to protect customers when a supplier is considering force-fitting a PPM by using a court warrant. We were concerned that

[158] Ofgem (2019) Draft Consumer Vulnerability Strategy 2025
[159] Ofgem (2018) Prepayment self-disconnection and self-rationing - a call for evidence
[160] For more information see Ofgem's decision to cap prepayment warrant charges for indebted customers.

previously suppliers were failing to identify vulnerable customers during the warrant process, charging vulnerable customers excessive costs and that there was inconsistency in warrant charges across suppliers. Measures introduced include:

- a prohibition of the use of warrant on PPM installations for people for whom the experience would be severely traumatic (e.g. due to mental health issues);
- a prohibition on suppliers levying warrant-related charges in certain cases related to customers in vulnerable situations (e.g. customers in severe financial difficulty);
- a cap on the amount of warrant charges at £150 in all other cases; and
- a proportionality principle covering costs and actions of suppliers for all customers in the debt recovery process.

These measures are designed to protect all customers, including the most vulnerable, from experiencing unnecessary hardship due to having a meter installed under warrant. We have sent a strong message to suppliers that using a warrant to install a PPM is a last resort. They must step in early stage to help customers manage debt through repayment plans.

Identifying vulnerable customers better[161]

In August 2017, Ofgem decided to amend the Standards of Conduct (SoC)[162] for both domestic and non-domestic customers. This is part of Ofgem's wider move to rely more on enforceable principles rather than detailed rules to regulate supply businesses. As part of these reforms, Ofgem introduced a broad vulnerability principle to the domestic SoC. The vulnerability principle signals that suppliers must have special regard to domestic customers in vulnerable situations so they are not at a disadvantage in accessing the benefits of the energy market. Suppliers now need to make an extra effort to identify and respond to the needs of those in vulnerable situations to comply with the SoC and treat all their customers fairly.

Working with other regulators to better identify vulnerable customers and share data[163]

Ofgem has been collaborating with other sectoral regulators in Great Britain to explore how making better use of data can help identify customers in vulnerable situations across the energy and water sectors.

In November 2018, the UKRN published a follow-up policy report,[164] which reviewed the progress made in the last year by energy and water companies against these expectations. We considered the learnings from a pilot project in which energy and water companies in the North West of England gained explicit consent from customers to share their priority services register data and considered the challenges in moving this initiative towards a national roll out in 2020.

The pilot shows that there has been significant progress towards cross-sector data sharing, but continued progress will be needed for a successful roll-out in 2020. Key challenges include the requirement for effective training of front line staff, technical issues in matching data sets, and data accuracy. Evidence shows that human interaction is key in gaining customer

[161] For more information, see Ofgem's decision to change the Standards of Conduct.
[162] These are enforceable overarching rules aimed at ensuring licensees, and their representatives in the case of domestic suppliers, treat each domestic and microbusiness customer fairly
[163] For more information, see: UKRN cross-sector project: Making better use of data follow-up report
[164] For more information see: Making better use of data to identify customers in vulnerable situations: A follow-up report

consent to share data and it will be essential that staff across all companies are given sufficient training to be able to articulate the benefits of data sharing and maintain enthusiasm ahead of national roll out.

There is evidence of ongoing collaboration between water and energy companies but there is still considerable scope for companies to go further in working collaboratively and across sectors, including working more with trusted charities and local partners and considering and adopting best practice from other sectors.

The report also set out the next steps that industry needs to take to continue making progress to improve services for their customers in vulnerable situations. Regulators will continue to explore what further help is needed for customers in vulnerable situations and how collaborating on utilising data can support these customers. The aim is to implement sector wide data sharing by 2020.

Reporting on how well suppliers are supporting vulnerable customers

Domestic suppliers continue to submit social obligations data to us, which includes data on debt levels and debt repayments, PPMs, disconnection rates and help for customers in vulnerable situations. This data helps us to:

- check that suppliers are complying with our rules;
- challenge poor performance;
- encourage and share good practice; and
- inform future policy.

Every year, Ofgem publishes a report on how well suppliers perform against their social obligations. We do this to make suppliers' performance transparent, encourage improvement and innovation, and build trust in the market. The vulnerability report presents a view on the extent to which vulnerable customers are experiencing positive outcomes in the energy market. It provides information on inclusive services, such as registration on Priority Service Register (PSR)[165] and gas safety checks, affordability and debt (such as debt prevention, debt repayment and switching rates), and staying on supply (such as PPM and (self) disconnections). The data is presented alongside good practice case studies from suppliers, customer cases from Citizens Advice,[166] research carried out by customer groups and Ofgem. In 2018 we included performance information on how network companies are supporting customers in vulnerable situations. We also shared good practice to enable suppliers and network companies to learn from one another. Our latest quarterly and annual data as well as the vulnerability report can be found on our website.[167]

As a result of highlighting good practice and poorer performance, we have seen real improvements in suppliers' practices since we started collecting this data via social obligations in 2006.

[165] A free service provided by suppliers and network operators to customers that are of pensionable age, are disabled or chronically sick, have a long-term medical condition, have a hearing or visual impairment or additional communication needs snare or are in a vulnerable situation.
[166] Citizens Advice is a network of 316 independent charities throughout the United Kingdom that give free, confidential information and advice to assist people with money, legal, consumer and other problems.
[167] https://www.ofgem.gov.uk/about-us/how-we-work/working-consumers/protecting-and-empowering-consumers-vulnerable-situations/consumer-vulnerability-strategy/consumer-vulnerability-strategy-social-obligations-reporting-sor

Disconnections for debt

Social obligation reporting also requires suppliers to provide us with information about debt and disconnections for debt for domestic customers. Monitoring supplier performance in this area allows us to identify issues of concern with supplier performance and take action. Disconnecting a customer's energy supply should be a last resort and avoided wherever possible. Disconnections for debt are now extremely rare in GB, with 17 disconnections for debt recorded in 2017. The latest data related to domestic energy debt and disconnection is published on our website.[168]

Introducing a principles-based Priority Services Register to better support vulnerable customers[169]

We modified the PSR rules that came into effect on and from 1 January 2017 to require companies to be proactive in identifying customers who would benefit from PSR services, expanded eligibility criteria to include vulnerable customers, and to provide flexibility to offer innovative services. Being on the PSR gives customers access to certain non-financial services free of charge (such as a way to identify representatives, meter reads and sending communications to a nominated person).

- Network operators still have to provide specific services to ensure a minimum level of protection for customers who are at particular risk of detriment in the event of interruption of supply. Suppliers and network operators are free to provide any other additional priority services of a similar nature to customers they consider require them.

- Companies must record and share relevant data about their customers with identified vulnerability needs within the parameters of wider data protection and/or privacy laws. Suppliers and network companies must share this data amongst each other.

Suppliers must take all reasonable steps to promote the PSR so that more customers are aware of the support available. Where possible, companies should collaborate with customer groups and other third parties to develop customer advice and information on priority services in order to improve awareness.

Guaranteed Standards of Performance

The reforms of the supplier Guaranteed Standards of Performance undertaken in 2015[170] took effect in January 2016. [171] They set the levels of service for electricity and gas suppliers to achieve when making and keeping appointments, replacing domestic credit and PPMs (faulty or otherwise) and, where necessary, reconnecting supplies.

Most guaranteed standards apply only to domestic customers. Only the Guaranteed Standard on making and keeping appointments applies to both domestic and microbusiness customers. Every time a supplier fails to meet a Guaranteed Standard it must pay compensation of £30

[168] https://www.ofgem.gov.uk/data-portal/customer-service
[169] For more information see Ofgem's decision to modify the Priority Service Register licence conditions.
[170] https://www.ofgem.gov.uk/sites/default/files/docs/2015/11/gosp_reforms_-_consultation_response_10th_nov_final_0.pdf
[171] Electricity and Gas (Standards of Performance) (Suppliers) Regulations 2015 were made by the Authority and received Ministerial consent. The new Regulations apply since 1 January 2016 and have been published at: http://www.legislation.gov.uk/uksi/2015/1544/contents/made

to the affected customer within 10 working days (or face an additional £30 payment to that customer).

In June 2018, we published a consultation on introducing new Guaranteed Standards that directly compensate customers where they suffer an erroneous transfer or a delay to switching, final billing, or credit repayment on switching. In November 2018, we published our final decision,[172] which came into force on 1 May 2019. We believe this will create incentives to ensure suppliers improve their switching performance and make switching more reliable.

Customer insight and engagement

In 2018, we commissioned and published a range of customer research projects to inform policy decisions and ensure the customer perspective is at the heart of our regulatory processes. We listened to cusmers through regular quantitative surveys, our qualitative consumer forum (the Consumer First panel) and bespoke qualitative research projects. Examples from our work in 2018 include:

- quantitative research with micro and small business consumers[173] to track their engagement and satisfaction with the energy market;

- quantitative research with domestic consumers[174] to help with our understanding of how market engagement changes over time. This work included an update of our consumer segmentation which helps understand the variations in consumer attitudes and behaviour and a study to determine the relative impact of different components of energy deals on consumer choice of supplier. The latter was an important input to policy decisions around the default tariff cap;

- A new tracking study to measure domestic consumers' perceptions about the quality of service in the energy market, awareness of the default tariff cap and other energy issues;[175]

- Ofgem's Consumer First Panel (of domestic consumers) discussed a range of key policy issues, including topics such as consumer understanding of network chargingand their opinions about the default tariff cap.

During 2018, Ofgem's Behavioural Insight Unit continued to focus on building the organisation's understanding of customers' behaviour. It designed a programme of work to understand the barriers to active engagement in the domestic retail energy market and developed a series of tailored and targeted communications using insights from behavioural science. It tested the impact of these communications on switching behaviour in a series of randomised controlled trials.

The majority of the trials focused on prompting engagement among customers on default tariffs. They fell into two main categories:

- communications signposting customers to three cheaper tariffs (Cheaper market offers trials); and

[172] https://www.ofgem.gov.uk/system/files/docs/2018/12/way_forward_on_supplier_guaranteed_standards_or_switching_and_si_consultation_on_a_statutory_instrument_to_bring_them_into_force.pdf
[173] https://www.ofgem.gov.uk/system/files/docs/2018/10/micro_and_small_business_engagement_survey_2018_report.pdf
[174] https://www.ofgem.gov.uk/publications-and-updates/consumer-engagement-survey-2018
[175] https://www.ofgem.gov.uk/publications-and-updates/consumer-perceptions-energy-market-q4-2018

- communications sign posting customers to one alternative exclusive tariff that is with bespoke on-line or phone support provided by a third party switching service. The tariff offered as a collective switch tariff available exclusively to participants and negotiated via auction by Ofgem (we referred to these processes as "collective switch trials").

These trials involved a selection of energy suppliers[176] and were carried out under the gas and electricity Standard Licence Condition 32a). The trial results demonstrated that behaviourally informed interventions can be highly effective at increasing switching amongst disengaged customers.

Energy Best Deal (domestic customers)

The successful partnership with Citizens Advice delivering the Energy Best Deal continued in 2018. The campaign provides Citizens Advice advisers and other advice workers with the training needed to deliver face-to-face advice to lower income households on energy rights and how to get the best from their energy deal.

Future retail regulation

We have committed over time to rely more on general principles rather than detailed prescriptive rules about how companies should run their businesses.

In 2018, we continued moving towards regulating the retail energy market through enforceable principles, and making less use of detailed prescriptive rules. This provides for licence conditions that allow for changes and innovation in a rapidly changing industry, while making sure that customers are protected. We worked closely with stakeholders on how to make the transition a success. We held workshops and events, and published papers to take stakeholders with us as we progressed our thinking.

We challenged suppliers to change how they operate, and to focus more on delivering good customer outcomes, including through compliance engagement where appropriate.

Over the past year, we streamlined the standard licence conditions for gas and electricity supply licences by removing some of the prescription, which should allow suppliers to innovate more in their tariff offerings and some aspects of the supplier-customer communication (e.g. bills, contracts etc.). We issued a statutory consultation[177] and took a decision on domestic supplier-customer communications rulebook reforms.[178] As a result, we introduced five enforceable principles to supplement the existing Standards of Conduct and Supply Licence Condition 25 (i.e. informed choices principles). We also removed prescription in priority areas such (e.g. bills, price increase notice and statement of renewal terms) and removed the requirement for suppliers to provide annual statements altogether. This will strengthen customer protection, while at the same time making it easier for suppliers to innovate and come up with better ways of doing things.

Appointment of Supplier of Last Resort

The 'Supplier of Last Resort' (SoLR) process ensures continuity of supply for customers of a failed energy supplier through the appointment of another supplier (the SoLR) to take on responsibility for supplying those customers. This process also protects the failed supplier's customer credit balances, with the SoLR honouring these balances. Without Ofgem's

[176] https://www.ofgem.gov.uk/system/files/docs/2017/01/decision_selection_criteria_0.pdf
[177] https://www.ofgem.gov.uk/system/files/docs/2018/09/statutory_consultation_-_domestic_supplier-customer_communications_rulebook_reforms.pdf
[178] https://www.ofgem.gov.uk/system/files/docs/2018/12/final_decision_-_customer_communications_rule_changes.pdf

intervention, customers would need to pursue the failed supplier through the insolvency process for repayment of any credit balance they had built up with the failed supplier and those customers are unlikely to receive all (or possibly any) of this money back from the failed supplier.

In 2018, a number of energy suppliers failed. While some left the market through commercial arrangements agreed with other suppliers, Ofgem appointed SoLRs in respect of eight of those suppliers, which covered approximately 560,000 customers.

Through this process, we were able to effectively protect the customers affected by the insolvency of the energy companies. The speed with which the situations were resolved (often in the course of a matter of days) ensured that the costs to the rest of industry were kept to a minimum and broader confidence in the energy market was maintained.

Smart metering

Smart meters give customers near real time information on energy use – expressed in pounds and pence – which enables customers to better manage their energy use, can help them make changes to reduce their energy consumption to save money. They will also bring an end to estimated billing, so customers are only billed for the energy they have used.

Smart meters are able to record and export consumption data each half-hour. This will allow customers to be settled using this data which will open up new sources of flexibility and new ways in which customers can engage with the market. This could have a number of benefits for customers:

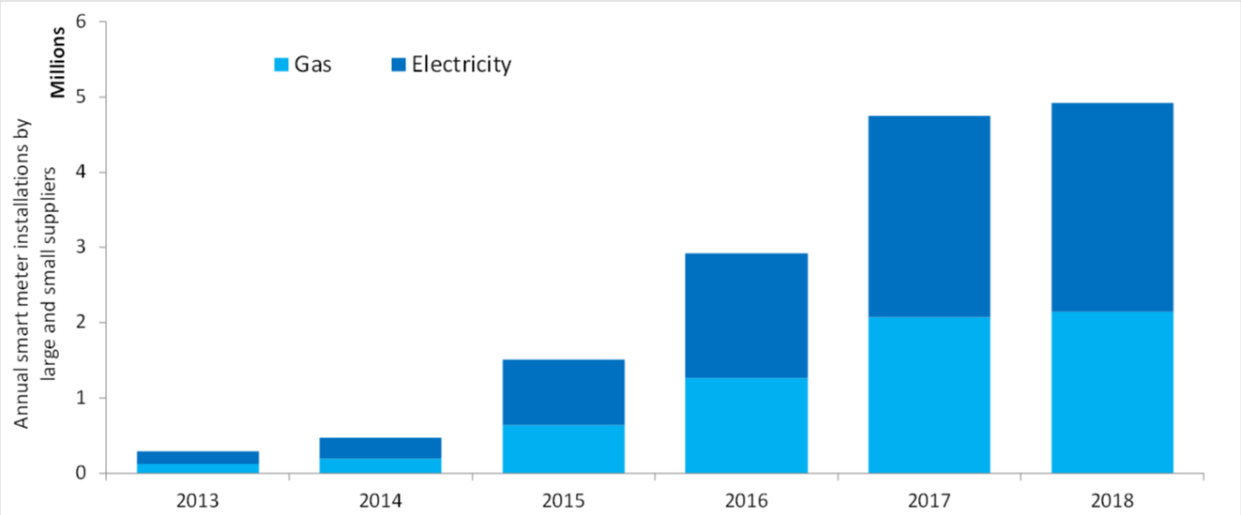
- make the settlement arrangements more efficient, reducing barriers to entry to the market, for example reducing credit/collateral requirements;
- facilitate uptake of smart tariffs to incentivise consumers to shift load away from peak periods, reducing consumer bills;
- promote innovation and competition in the energy market by facilitating Demand Side Response,[179] flexibility and innovative business models;
- shift demand away from system peak, helping to alleviate security of supply concerns and reducing the need for network reinforcement. This will deliver increasing benefits as the share of intermittent, inflexible and distributed generation grows; and
- allow suppliers to forecast demand more accurately, supporting competition and reducing costs.

Licence conditions require suppliers to take 'all reasonable steps' to ensure that smart metering systems are installed in homes and small businesses by the end of 2020.

As of 28 March 2019, over 13.8 million smart and advanced meters were operating across homes and businesses in Great Britain.

[179] The way in which consumers can engage with the energy system, turning up or down their consumption, in response to signals, such as price. Consumers (the 'demand-side') can sign up to special tariffs and schemes which reward them for changing how and when they use electricity (known as DSR).

Figure 20: Annual domestic smart metering installation activity



Installation activity	2013		2014		2015		2016		2017		2018	
	Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec
Small	-	-	-	-	137,500	147,500	4,700	7,000	72,500	88,600	87,000	107,800
Large	121,000	171,400	189,200	279,700	504,600	718,400	1,264,900	1,648,600	1,998,700	2,586,200	2,054,900	2,668,300
All	121,000	171,400	189,200	279,700	642,100	865,900	1,269,600	1,655,600	2,071,200	2,674,800	2,141,900	2,776,100

Source: Department for Business, Energy and Industrial Strategy (BEIS)

Ofgem continued throughout the reporting period to provide independent advice and expertise for the government's smart meter implementation programme. We now play a key role in monitoring and, where appropriate, enforcing compliance with the new regulatory obligations relating to smart meters to ensure that the interests of customers remain protected during the transition period to smart metering.

Regulating the Data and Communications Company (DCC)

The DCC provides the centralised smart metering communications infrastructure across Great Britain which allows energy suppliers, network operators and other authorised users to send and receive information from smart meters.

Ofgem monitors the DCC to ensure it abides by its licence conditions. Our monitoring includes annual *ex post* price control arrangements and the approval of DCC's charging statements. Our role is to ensure that DCC's costs are incurred economically and efficiently.

The majority of the DCC infrastructure went live on 8 November 2016, and full functionality was available in spring 2017. We implemented an Operational Performance Regime for DCC in April 2018 to drive DCC's performance measures.[180] We expect to regularly review the regime to ensure it is fit for purpose.[181]

The rollout of smart metering has the potential to make retail energy markets work better for customers. However, this will require reforms to the arrangements that govern how market participants interact with each other and customers. We are continuing to progress

[180] As a monopoly, the DCC needs incentives, which mimic competitive pressure, to ensure it efficiently manages its costs whilst delivering an appropriate quality of service. The operational incentive arrangement for DCC is called the Operational Performance Regime.
[181] https://www.ofgem.gov.uk/publications-and-updates/decision-dcc-s-operational-performance-regime

work to deliver necessary changes to supplier process, the electricity settlement process and customer empowerment and protection.
Electricity settlement

Reforming the existing electricity settlement process will attribute the costs of supply more accurately across the day, incentivising suppliers to offer new products and services that will help consumers to use electricity at times of day when it is cheaper to generate and transport.

Currently, the majority of customers in GB are settled on a 'non-half-hourly' basis using estimates of when electricity is consumed based on a profile of the average customer, because most sites do not have meters that can record consumption every half hour.

To realise the benefits of the smart meter roll-out more fully, we are seeking to introduce market-wide half-hourly settlement. In August 2018, we published a second iteration of the business case for settlement reform (the Outline Business Case) which included a draft economic assessment.[182] The draft assessment indicates substantial potential benefits, suggesting that our decision on the project should centre on when and how, rather than whether, market-wide settlement reform should be introduced.

5.2 Dispute Settlement

Under Article 37(11) of the Electricity Directive any party that has a complaint against a transmission or distribution system operator in relation to that operator's obligation under the Directive may refer the complaint to the regulatory authority. Each regulatory authority is required to issue a decision within two months following receipt of the complaint. That period may be extended by two months where additional information is sought by the regulatory authority. That extended period may be further extended with the agreement of the complainant. Member States are required to ensure that regulatory authorities have the powers to enable them to make such decisions.

Under Article 41(11) of the Gas Directive any party that has a complaint against a transmission, storage, LNG or distribution system operator in relation to that operator's obligation under the Directive may refer the complaint to the regulatory authority. Each regulatory authority is required to issue a decision within two months following receipt of the complaint. That period may be extended by two months where additional information is sought by the regulatory authority. That extended period may be further extended with the agreement of the complainant. Member States are required to ensure that regulatory authorities have the powers to enable them to make such decisions.

Sections 44B-D of the Electricity Act set out our determination functions and procedures under Article 37 of the Electricity Directive. These sections were inserted by the Electricity and Gas (Internal Markets) Regulations 2011. Under Section 44C, any dispute that is referred to us for determination is determined by us or, if we think fit, by an arbitrator appointed by us. The decision is binding on the parties to the dispute. However, any party can seek a judicial review of our decision. No new Article 37 disputes were raised in 2017.

Sections 27B-D of the Gas Act set out our determination functions and procedures under Article 41 of the Gas Directive. These sections were inserted by the Electricity and Gas (Internal Markets) Regulations 2011. Under Section 27C, any dispute that is referred to us for determination is determined by us or, if we think fit, by an arbitrator appointed by us. The decision is binding on the parties to the dispute. However any party can seek a judicial review of our decision. No Article 41 disputes were raised in 2017.

[182] https://www.ofgem.gov.uk/publications-and-updates/market-wide-settlement-reform-outline-business-case

Northern Ireland National Report 2019

About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.

Our vision

To ensure value and sustainability in energy and water.

Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.

Contents

1 Foreword

Consumers are central to what we do as the regulator of Northern Ireland energy enterprises.

A new milestone was reached last year when new, more competitive and efficient market arrangements were introduced in the wholesale electricity market (the Single Electricity Market – SEM). Working closely with our regulatory colleagues in the Commission for Regulation of Utilities (CRU), system operators, government departments and industry, the new SEM went live on 1 October 2018. The successful introduction of the SEM highlights the key role regulation plays in making sure important developments such as this can be delivered, aimed at ensuring real value for consumers.

We also facilitated the further growth of the natural gas network. As well as new consumers now connected in the west and further work ongoing, expansion continues to east Down and new towns such as Whitehead. Consequently, more consumers than ever across Northern Ireland can now choose natural gas, with all the benefits that this brings over oil in particular.

Rising international wholesale energy prices early in the year led to increases in both gas and electricity tariffs. Increased prices are never good news for consumers. We continue to be vigilant to make sure any price rises are justified and any fall in wholesale costs are reflected in consumer bills as soon as possible.

Developments in the wider environment have also continued to have a significant impact on our work. There are uncertainties around the UK's exit from the European Union. We have been working closely with government, industry and stakeholders to manage the uncertainties and make sure the wholesale, all-island market can continue to operate effectively.

We could not do our job effectively without the ongoing engagement and co-operation of those who work with us or have an interest in what we do. We are grateful for the continued support of the Department for the Economy (DfE – for energy matters).

During the last year our board also met with a number of regulated utilities and stakeholders as we continued our engagement activities across Northern Ireland.

Our new five-year Corporate Strategy was published in March 2019 following extensive dialogue with all interested parties. Our 2019- 2024 strategy focuses on protecting and empowering consumers through three strategic objectives that will deliver real and tangible benefits for energy consumers across Northern Ireland. The strategy sets out challenging but achievable commitments that can only be met by working collaboratively and openly with our stakeholders.

Finally, it is important for me to recognise the commitment and invaluable contributions from my board colleagues in what has been another very busy year. We would like to thank Richard Rodgers and Bill Cargo for their contributions as they stepped down from the board. As a board, we would also like to express our appreciation and gratitude to the entire UR team for their dedication, commitment and all that has been achieved this year.

Bill Emery
Chairman

2 Main developments in the gas and electricity markets

Placing consumers at the centre, we developed a new Corporate Strategy 2019-2024, which was subsequently published at the end of March 2019. The new strategy's overarching purpose is to protect and empower all consumers by:

(1) Promoting markets that deliver effective competition, informed choice and fair outcomes;

(2) Enabling 21st century networks; and,

(3) Enabling security of supply and a low carbon future.

The potential impact of the UK's exit from the EU on our energy markets has been a significant focus of our work. The operational arrangements of the SEM and potential impact on the gas and water markets has required substantial analysis and consideration.

Extensive contingency planning has been undertaken with key stakeholders in Northern Ireland, Dublin, London and Brussels in an attempt to address numerous potential risks. This has included a range of mitigation measures, high-level contingency SEM market designs as well as more detailed, technical specifications on how these designs might be implemented.

We have engaged extensively with the UK government, relevant departments, CRU, market participants and other key stakeholders in order to minimise the impact of these risks.

We have published a range of information to ensure market participants are informed and prepared should the UK exit the EU in the absence of a withdrawal agreement. This work continues as further negotiations continue

2.1 Electricity

Along with the Commission for Regulation of Utilities (CRU – formerly known as the Commission for Energy Regulation) we developed and delivered the Integrated Single Electricity Market (I-SEM) in 2018. The new Single Electricity Market (SEM) delivers benefits to consumers, ensures power is efficiently used on the system, supports security of supply and allows for improved and efficient interconnection. The SEM ensures there is greater transparency around the costs of generation ensuring appropriate costs for consumers. Further development of new generation on the island of Ireland has increased investment and competition in the wholesale market.

The new SEM successfully went live on 01 October 2018. A significant amount of engagement took place with industry and market participants throughout the project. We continue to work, along with the system operators SONI and EirGrid, to ensure the market is functioning as efficiently and as effectively as designed. The Market Monitoring Unit (MMU), which is based at our offices, has expanded to respond to the new SEM and continues to monitor each of markets on a daily basis. The MMU has engaged with generators, suppliers and operators to ensure compliance with the market rules and encourage a competitive and efficient market.

Power NI is the regulated electricity supplier providing services to around 500,000 customers. In 2018 we reviewed the tariffs of Power NI (the regulated electricity supplier). This resulted in a price increase for domestic electricity customers of 13.8%. However, domestic electricity prices in NI are lower than both Great Britain (GB) and the Republic of Ireland (RoI).

2.2 Gas

We continue to promote the economic development of the natural gas industry in NI and made significant progress on extending the network in the past year.

Progress continued on the major works for the construction of the Gas to the West pipelines (serving Dungannon, Enniskillen, Omagh, Magherafelt and Cookstown). We expect this area to be substantially complete by the end of 2019.

Work on constructing the gas network to East Down continues. We have also approved the pipeline extension of the existing network to bring gas to the town of Whitehead. This work has been facilitated by our GD17 price control and provides for an additional £61m investment in the natural gas network. This will allow for around 29,000 more consumers to have access to natural gas and its benefits.

Once the Gas to the West, Gas to East Down, Whitehead and GD17 network developments are complete, around 70% of Northern Ireland consumers will have access to natural gas. By 2022 we expect that over 50% of Northern Ireland consumers will have connected to gas.

Our incentives on gas distribution network operators to make new connections continues to be successful. At the end of 2018 the number of consumers connected to the natural gas network is just under 260,000. This exceeds our 2014-2019 corporate strategy target to have 250,000 connections by March 2019

A regulated gas tariff review was also completed for SSE Airtricity in the Greater Belfast area. We approved an increase of 10.9% in October 2018.

In the Ten Towns gas distribution area we reviewed firmus energy’s tariffs and approved an increase of 12% in October 2018.

3 The electricity market

3.1 Network regulation

3.1.1 Unbundling

Report on TSO certification, DSO provisions regarding branding and resources and new developments regarding certification revisions

- Articles 10,11 2009/72/EC and Article 3 Regulation (EC) 714/2009
- Article 26

NIE Networks (NIEN, the transmission owner) applied for certification under Directive 2009/72/EC on 30 January 2013 on the grounds of Article 9(9) of the Directive. By the date of application NIEN ownership had been acquired by ESB which had extensive generation and supply interests in the SEM. The SEM Committee, which had determined that TSO certification was a SEM matter, issued its preliminary decision to the EC on 12 February 2013. This recommended certification subject to certain qualification measures including transfer of the transmission planning function from NIEN to System Operator Northern Ireland (SONI). The EC made a decision to approve the certification of SONI subject to the qualification measures in the SEM Committee preliminary decision and to some additional measures. The decision on certification for SONI was taken in June 2014, and the relevant licence changes have now been implemented.

Moyle Interconnector Limited, which owns the electricity interconnector between Northern Ireland and Scotland, applied for certification on the grounds of ownership unbundling on 25 January 2013. The SEM Committee issued a preliminary decision to the EC on 7 May 2013 recommending certification subject to certain qualification measures. The European Commission did not raise any objections to certification of Moyle Interconnector Limited as a fully unbundled TSO. The decision on certification for SONI was taken in June 2014, and the relevant licence changes have now been implemented.

3.1.2 Technical functioning

- Balancing services (Article 37(6)(b), Article 37(8))
- Security and reliability standards, quality of service and supply (Article 37(1)(h),)

Report relevant security and reliability regulation and data

- Monitoring time taken to connect and repair (Article 37(1)(m))

Clarify here at least if there is in your country a definition for "time to connect" for consumers and for producers

- Monitoring safeguard measures (Article 37(1)(t))
- RES regulatory framework: Report on connection, access and

dispatching regimes for RES-E, in particular on priority issues. Report also on the balancing responsibility for RES-E. (Article 11 Regulation (EC) 713/2009)

A new wholesale electricity market in Ireland (SEM) replaced the previous gross mandatory pool with multiple markets or auctions, each spanning different trading time frames, with separate (although related) clearing and settlement mechanisms, covering both energy and non-energy commodities. Balancing services are offered into the Balancing Market (BM) by generators and suppliers. A generator will be paid through the BM for additional energy used to balance the grid. SONI is obliged under its licence to take into account the quantity, nature and cost when purchasing System Support Services.

Monitoring of security and reliability standards, time taken to connect and repair and safeguard measures are currently conducted through licence compliance. Transmission licences are held by NIEN, Moyle and SONI.

The loss of load expectations statistic is used by SONI as a security standard, which is concerned with the likely number of hours of shortage in a year. The security standard for NI is 4.9 hours per annum and if this standard is exceeded it indicates a higher than acceptable level of risk.

The System Operator, SONI, annually publishes the Generation Adequacy Statement which provides its forecast of generation capacity and forecast electricity demand for the upcoming ten-years. This allows for the assessment of capacity margins and identifies areas in which these could be increased, which highlights area of potential future investment. Above all the Generation Capacity Statement provides an estimation of future security standards based on expected generation capacity margins[183]. In 2017 we modified SONI's licence to include a requirement for the company to develop a 10 year network development plan. Following a consultation which commenced in November 2018, SONI published a ten-year Transmission development plan.

3.1.3 Network tariffs for connection and access

- Article 37(1)(a), Article 37(6)(a), Article 37(8), Article 37(10), Article 37(12) , art 37(3)(c) and (d)

Report on relevant new tariff regulation provisions

- Prevention of cross-subsidies (Article 37(1)(f))

Specify the methodology used in tariff regulation (i.e. cost plus vs

[183] The All-Island Generation Capacity Statement for 2018 -2027 was published by the EirGrid Group – http://www.eirgridgroup.com/site-files/library/EirGrid/Generation_Capacity_Statement_2018.pdf

incentive regulation), the method of checking undertaking's cost data, methodology for allocation of costs to grid users and if benchmarking is used please describe methodology used by NRA

Electricity Suppliers in Northern Ireland pay a number of regulated charges which they pass on to their customers. Regulated charges for the use of the electricity distribution network in Northern Ireland and a levy known as the Public Service Obligation (PSO) are set by NIEN and SONI, and the maximum amount recoverable is approved by the Utility Regulator. The "Regulated Tariffs Values" for the tariff year beginning October 2018 was published by the Utility Regulator in September 2018[184], detailing the use of system tariffs for that year.

NIEN is the transmission network owner and also the distribution system owner and operator. The current five-year price control commenced in 2017. NIEN is allowed revenue and therefore annual Distribution Use of System tariffs (DUoS) are determined by the terms of this price control. It also receives a Use of System allowance (UoS) from the TSO. The allowed capital expenditure (CAPEX) is limited (e.g. replacement of assets.) with exceptional items individually approved by the regulator.

As part of our drive to introduce greater reputational incentives for our network companies to improve service for the consumer, the Consumer Engagement Advisory Panel (CEAP) continues to meet quarterly to monitor NIEN's consumer engagement. This will help inform the incentives set for the next price control period.

The CEAP includes representation from NIEN, CCNI and DfE. Whilst modelled on a similar grouping for water, the CEAP agreed new terms of reference to focus on delivering new 'actionable data' to monitor and inform continued improvement within the company.

We have a statutory duty to promote competition, where appropriate, in the generation, transmission, distribution and supply of electricity. Connections to the electricity grid by renewable developers and micro generators continue to be an area of extensive interest. We facilitated an alternative connection application and offer process which subsequently led to contestable competition for connections.

3.1.4 Cross-border issues

- Access to cross-border infrastructure, including the procedures for the allocation of capacity and congestion management

[184] https://www.uregni.gov.uk/sites/uregni/files/media-files/Regulated%20Entitlement%20Values%20-%20Information%20Note_0.pdf

(Article 37(6)(c), Article 37(8), Article 37(9), use of revenues for interconnectors (article 37(3)(f))

Report in particular on cases where specific cross-border cooperation between NRAs happened besides the general activity of the NRA in the frame of ACER/FG

- Monitoring technical co-operation between Community and third-country TSOs (Article 37(1)(s))
- Monitor TSO investment plans in view of TYNDP art 37(1)(g)
- Cooperation (Article 37(1)(c))

Other relevant cooperation agreements/activities of the NRA besides the RI

The Moyle Interconnector between Scotland and Northern Ireland lies within a Member State and has not previously been regarded as an interconnector for the purposes of the Electricity Directive. Nonetheless, Moyle has aimed to comply with the requirements of the directive regarding congestion management.

The interconnector owners are required to prepare relevant access arrangements in respect of the Interconnector. The purpose of these rules is to set out the auction mechanism including how participants can make an offer to acquire capacity units, together with the requirements on the Interconnector owner in terms of accepting an offer for capacity units from a participant. The access rules also address other areas including the curtailment approach should capacity become unavailable due to an outage.

Moyle Interconnector access rules are approved annually by both us and Ofgem with input from the regulator in the Republic of Ireland regarding the East-West Interconnector.

Compliance

- Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 37(1)(d)) and with the Guidelines (Article 39))

Which decisions/actions have been taken following binding decisions of the Agency or the Commission.

- Compliance of transmission and distribution companies, system owners and electricity undertakings with relevant Community legislation, including cross-border issues (Article 37(1)(b), Article 37(1)(q), Article 37(3)(a),(b),(e) and Article 37(5) all but (a) and (c) + imposing penalties (Article 37(4)(d))

Report in particular on monitoring systems for TSO certification compliance and in the next future NC compliance. Report on other compliance cases and existing active monitoring methods

Compliance of transmission and distribution companies, system owners is through their licences. There are no issues to report.

3.2 Promoting Competition

3.2.1 Wholesale markets

The all-island Single Electricity Market is the combination of two separate jurisdictional electricity markets in Ireland and Northern Ireland and is governed by the SEMC. The SEMC comprises of representatives from: the Commission for Regulation of Utilities (CRU) for Ireland, the Utility Regulator and an independent member.

The new Single Electricity Market (SEM) went live on 1 October 2018 and ensures that the price of electricity charged to consumers reflects the costs of producing the electricity.

The SEM Committee meets monthly to take decisions on SEM matters. It comprises members of our board, the CRU Commissioners and two independent members.
The new SEM (known as I-SEM throughout the project development phase) was brought in to develop a new set of electricity trading arrangements to meet the requirements of the EU Target Model.

The new SEM comprises four ex-ante energy markets (two which are coupled with GB), a balancing market, two markets for financial instruments, and a market for capacity remuneration. The two ex-ante markets, coupled with GB are the Day-Ahead Market (DAM) and the Intraday 1 Market (IDM1). The DAM closes the day before delivery and the IDM operates in the interval between closure of the DAM and one hour before delivery. The IDM provides traders with the ability to adjust their positions as market conditions fluctuate closer to real time. There are two other Intraday Markets (2 and 3) as well as an Intraday Continuous Market (IDC). The trading day commences at 23:00 GMT and is pan-European for the DAM.
Before and into real time, the TSO calls on balancing services to keep the transmission system balance i.e. energy supply = energy demand. Energy balancing services are offered into the Balancing Market (BM) by generators (energy producers) and suppliers (energy consumers).

We also took steps to promote sustainability. The aim of the 'Delivering a Secure, Sustainable Electricity System' (DS3) Programme is to meet the challenges of operating the electricity system in a secure manner while achieving the 40% renewable electricity target by 2020. Levels of non- synchronous generation capacity is increasing i.e. wind and solar, and there is further interconnection to the all-island power system. It is necessary to measure and limit the non-synchronous penetration (SNSP) to ensure safe and prudent operation of the system.

The successful implementation of the DS3 programme to date has increased the operational limit and increased the levels of renewable generation the system can manage from 50% to 65%. One of the DS3 goals is to move the operational limit to 70% and then to 75%. We are also progressing with NIEN and SONI an increase to the generator interface protection settings associated with small scale generation. This will facilitate these higher levels of SNSP by ensuring generator compliance with Rate of Change of Frequency (RoCoF) to 1Hz/s.

Over the year system services were procured from service providers in Northern Ireland under the DS3 system services procurement process. Several DS3 system services industry forums and workshops were held to inform participants of the qualification trials, contracts and the DS3 programme transition plan to 2020. Alongside the CRU, we are working closely with SONI and EirGrid to develop cost control measures to ensure consumers are getting value for money from the increased provision of these system services.

3.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

- Article 37(1)(i),(j) (k), (l) (u) and Article 40 (3)

Report separately the three issues: prices, transparency and effectiveness of competition. In particular regarding prices report on fundamentals, price developments and liquidity. Regarding transparency report on the access to prices and on how robust prices are and if at national level transparency obligations regarding pricing exist.

Price

The new SEM market monitoring unit (MMU), based at our offices, continues to monitor the SEM.

The MMU continues to publish a public report on the Single Electricity Market (SEM) for each quarter with the first report of the new market published on 21 February 2019[185]. These reports provide a particular focus on recent trends in the market in relation to pricing, demand and system events.

The MMU continuously reviews generator participants' behaviour in the market, including investigations into the exercise of market power. It also monitors the compliance of market participants with the bidding code of practice and other market rules. The MMU is also the point of contact for participants who wish to register complaints relating to market behaviour.

[185] https://www.semcommittee.com/sites/semc/files/mediafiles/MMU%20public%20report%20Jan%2019_0.pdf

MMU quarterly reports - key facts

- The average daily price in the DAM was €73.93 which can be accounted for by significant increases in gas prices.
- 92% of total volumes are traded through the DAM.
- Gas continues to be the dominant fuel type since the SEM began.
- Levels of demand increased by 7 percent of the over the year.

The annual Capacity Payment Mechanism (CPM) was replaced by a Capacity Market (CM) in the new SEM. Unlike the CPM, capacity providers will only receive payments is they are successful in a capacity auction. The capacity requirements for a specific capacity year are determined by us alongside the Commission for Regulation of Utilities (CRU) in RoI. The capacity year commences at the start of the trading day on 30 September and ends at the end of the trading day on 30 September the following year.

In the long term, a Capacity Auction will be held four years (T-4) before a Capacity Year with additional Auctions for incremental capacity held closer to the Capacity Year i.e. in the year prior to the Capacity Year start (T-1).

The most recent auction for capacity was the 2022/2023 T-4 Capacity Auction. The results of this auction can be found here.

Transparency
The Market Operator for the SEM (SEMO) publishes all commercial and technical data relating to bids for any trading day daily.[186]

Market opening
Introducing incentives to help pool generation resources and reduce electricity usage is also an area where there have been developments.

During 2015-16 we moved forward the licensing arrangements for aggregated generator units (AGUs) and demand side units (DSUs). AGUs and DSUs have a role to play in the electricity market, providing some further flexibility on the system and a means to incentivise and access demand side management.

Effectiveness of competition
The SEM Committee publishes quarterly market monitoring reports which set out recent trends in the market in relation to pricing, demand, scheduling and forward

[186] http://www.sem-o.com

contract prices

A report on generators' financial performance is published annually.

3.2.2 Retail market

Please provide a brief illustration of the state of competition of retail market and the main changes in the recent year

Competition in the retail market was set up in Northern Ireland in a progressive way, starting with the non-domestic sector in 1999, and extending to the domestic market in 2007.

New suppliers entered the electricity market from June 2010 in the electricity market. Since then, more suppliers have been attracted to the Northern Ireland market. At the end of 2016, there were 8 active suppliers in the electricity sector, 6 of them operating in both, domestic and industrial sectors.

To keep the development of the retail energy sector in Northern Ireland under closer review, we regularly gather and analyse market information. Our duty to keep the development of the retail energy market under review was further enhanced by the IME3 directive which requires us to monitor how the market is working. In order to fulfil our statutory duties we also wish to provide consumers with access to clear and easily understood information on suppliers, products and tariff/service choices.

As part of the existing market monitoring we carry out in the gas and electricity retail sectors we publish quarterly reports (QTRs) at the end of February, May, August and November[187]. These reports deliver transparency for stakeholders and consumers and examine in detail essential indicators which are also used by other National Regulatory Authorities (NRAs) in Europe when monitoring their retail markets.

Our Retail Energy Market Monitoring (REMM) framework allows us to monitor the supply markets, inform policy and protect consumers. Data collection is progressing on track and we continue to make necessary revisions to how we monitor our energy markets. In 2018 we revised the way in which we monitor supplier statements of compliance to further enhance scrutiny and to make sure plans are implemented to address any compliance issues. We are currently progressing our Consumer Insight and Market Analysis workstream and are reviewing our REMM database to ensure we have an accurate and efficient data collection, data processing and data storage system. This will enhance our

[187] See for instance QTR for period to end of 2018 - https://www.uregni.gov.uk/sites/uregni/files/media-files/2018-11-30%20Transparency%20Report%20Q3%202018%20FINAL.pdf

reporting on retail market and consumer outcomes.

In both electricity and gas, a large share of domestic customers remain with the previous incumbent supplier. However, as the electricity market matures, the incumbent market share is gradually decreasing. Power NI's share in the electricity domestic market at end of March 2019 was 57%, compared with 58% last year.

We published a decision paper setting out measures that will make the small business energy market more transparent. This will make it easier for small business customers to engage in the market and promote competition. One of the specific proposals regarding tariff transparency for small businesses, (similar to that in the CMA report in GB), has been the development of a small business tariff comparison website by the Consumer Council of Northern Ireland (CCNI).

3.2.2.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

- Article 37(1)(i),(j),(k),(l),(u) and Article 40 (3)

Report separately the three issues: prices, transparency and effectiveness of competition. In particular regarding prices report on fundamentals, price developments and liquidity. Regarding transparency report on the access to prices and on how robust prices are and if at national level transparency obligations regarding pricing exist. Please report here separately dual fuel prices

In the monitoring of the energy retail market, the key indicators are: market shares, active suppliers in each market segment, market activity per market segment, rates of switching, domestic prices in Northern Ireland and a price comparison with other EU countries. Future work in terms of collecting and assessing further retail information will be included into this series of reports.

The customer complaints procedure in Northern Ireland is detailed on our website: www.uregni.gov.uk/consumer-information. In the first instance customers are asked to resolve any difficulty with their supplier. All domestic suppliers are required by licence to have a Code of Practice on complaint handling. This details a procedure to facilitate the fair and prompt settlement of complaints and disputes as well as a system for reimbursing or compensating complainants. They are also required under the licence to inform customers of the role and contact details of the Consumer Council Northern Ireland (CCNI)[188] both in contracts and on bills.

If customers are not satisfied with the supplier's handling of, or response to, a

[188] Consumer Council for Northern Ireland http://www.consumercouncil.org.uk/

complaint, they may ask CCNI to intervene on their behalf. The CCNI has statutory responsibility to assist energy customers with complaints at the second stage (after the supplier process has been exhausted).

We also deal directly with complaints and disputes, with regard to the transmission and distribution operator. Details of our process are given on our website www.uregni.gov.uk/publications/appeals_complaints_and_disputes_policy_updated_june_2013

With regard to complaints, IME3 has been implemented and all suppliers are fully compliant with the Code of Practice on Complaints Handling.

During the year we procured an external audit firm to undertake supplier audits (via site visits) on complaints handling. The audit has also reviewed REMM submissions against suppliers' internal records and sought evidence of suppliers' compliance with their Code of Practice on Complaints Handling Procedure.

We are reviewing the audit conclusions and engaging with suppliers on a one-to-one basis. A general report on the results of the audits will be published later this year.

- Article 37(1)(k)

We hold competition powers concurrently with the CMA. We have published competition guidelines which provide a framework for handling competition related matters and we continue to work closely with the CMA on all competition related matters.

We published our new approach to enforcement and financial penalties policy following consultation. Our enforcement procedure provides information on what to expect when we initiate an investigation or take enforcement action. The financial penalties policy covers both whether to impose a financial penalty and a process for determining the amount of the penalty. Several enforcement related actions were progressed in year.

- Article 37(1)(l)

The EU's IME3 directives set out a series of measures to make sure consumers are adequately protected in the energy markets.

We produced minimum standards in relation to four Energy Supplier Codes of Practices, which included:

- Code of Practice on Payment of Bills;
- Code of Practice on Provision of Services for persons who are of

Pensionable Age or Disabled or Chronically Sick;
- Code of Practice on Complaints Handling Procedure and;
- Code of Practice on Services for Prepayment Meter Customers.

All electricity and gas suppliers in NI already comply with these minimum standards in their Codes of Practice.
New market entrants to either the electricity supply market or the gas supply market in Northern Ireland must be compliant with these Codes.
We also have in place a mandatory Marketing Code of Practice. Suppliers must also ensure that they have a Code of Practice on the efficient use of gas/electricity which complies with the conditions of their licence.

We worked with other UK economic regulators to ensure our regulatory framework for consumer protection learns from best practice elsewhere. A new Code of Practice relating to energy theft was also introduced. This requires suppliers and network operators to work together on best practice approaches to investigating, handling and dealing with the outcome of energy theft.

The impact of energy brokers in Northern Ireland energy markets was also investigated and we liaised with various stakeholders to clarify the issues round ensuring consumer protection in relation to energy broker activities.

The Consumer Protection Strategy (CPS) was our strategy and action plan designed to bring about an enhanced level of domestic consumer protection for electricity, gas and water consumers in NI. The CPS was launched in early 2016 and committed to a formal review following year two of project delivery.

We hosted a Consumer Summit in April 2018, providing an early opportunity for stakeholders to help shape our policy priorities for consumer protection for the next three years. We also held workshop discussions and many of the issues raised were reflected in our consultation proposals. This helped inform the review of the CPS.

As part of the development of our new Corporate Strategy (2019-2024), CPS review and stakeholder feedback, a new Consumer Protection Programme (CPP) was developed and launched at an event in April 2019.

From April 2019, the new CPP builds on the work of the CPS. It is a prioritised three year programme designed to provide enhanced protection to domestic electricity, gas and water consumers, especially those most vulnerable.

3.2.2.2 Recommendations on supply prices, investigations and measures to

promote effective competition

- Article 37(1)(o)

Report on recommendations at national level on supply prices and competition

Describe system of regulated prices (if they exist)

- Article 37(4)(b)

Report on investigations carried out, main results and possible measures adopted

Report on tariff deficit if it exists

Electricity supply licensees require transparency of customers' terms and conditions, including price. There conditions apply to all licensees and are legally binding. Electricity customers are guaranteed the right to be supplier under fair and transparent terms. They cannot be discriminated in terms of price and the regulatory framework includes legally binding supplier of last resort provisions.

We have the powers necessary to investigate and enforce effective competition and the functioning of the retail market. We regularly request information to the network and supply companies, and monitor the received data.

We regulate the end prices of the dominant former incumbent electricity supplier. Power NI is the regulated electricity supplier providing services to just under 500,000 customers. In 2018 we reviewed the tariffs of Power NI (the regulated electricity supplier. This resulted in a price increase for domestic electricity customers of 13.8%. However, domestic electricity prices in NI are lower than both Great Britain (GB) and the Republic of Ireland (RoI).

3.3 Security of supply (if and insofar as NRA is competent authority)

Implementation of safeguard measures Art. 42

The Fuel Security Code is designed as a Northern Ireland response to a Fuel Security Event. The Fuel Security Code currently in force in Northern Ireland under the Electricity (Northern Ireland) Order 1992 as amended (the 1992 Order) was drafted in 1992.

The objectives of the Fuel Security Code are to assist with the effective management of an event where primary fuel supplies for electricity generation are disrupted: a Fuel Security Event.

The Code enables Government to direct the electricity industry to provide information on power supplies and to take specific action to manage such disruption in a way to ensure as far as is reasonably practical.

3.3.1 Monitoring balance of supply and demand

- Article 4

SONI prepare an annual Generation Capacity Statement which covers both demand predictions and the generation margins. The latest statement published by Eirgrid in October 2018 showed:

- Electricity demand in Northern Ireland has been relatively flat in the last number of years.
- This is not currently forecasted to rise significantly in the near future
- The major influence on generation adequacy is change to the plant portfolio (and the adequacy assessment assumes that all capacity has been included unless notified)
- In the median demand scenario, Northern Ireland is within the security of supply standard set by the SEM Committee.
- However, if plant were to leave the market, then Northern Ireland could be in deficit

To view this most recent Generation Capacity Statement (2018) see:
http://www.eirgridgroup.com/site

Monitoring investment in generation capacities in relation to SoS

- Article 37(1)(r)

Operational network security

- Article 7 2005/89/EC

Investment in interconnection capacity for the next 5 yrs or more

- Article 7 2005/89/EC

Expected future demand and envisaged capacity for the next 5 years and 5-15 years
Article 7 2005/89/EC

In addition to the Generation Capacity Statement SONI publish a ten-year Transmission development plan.

3.3.2 Measures to cover peak demand or shortfalls of suppliers

- Article 4

The Generation Capacity Statement analyses the potential for the system to meet peak demand.

4 The gas market

4.1 Network regulation

4.1.1 Unbundling

- Articles 10,11 2009/73/EC Article 3 Regulation (EC) 715/2009
- Article 26

Report on TSO certification, DSO provisions regarding branding and resources and new developments regarding certification revisions. Report also on storage and LNG

NI has three Distribution System Operators (DSOs). Phoenix Natural Gas Limited is solely a Network Operator, with no supply business and firmus energy (Distribution) Limited continues to have an integrated supply business (firmus energy (Supply) Limited). firmus energy (Distribution) Limited however does not have at present , more than 100,000 connected customers, therefore it remains an integrated Distribution and Supply business. SGN is developing the distribution network to the west of NI, and connected its first customers in 2017. Construction began on the transmission pipeline which will underpin the further development of the gas distribution network in the west.

The arrangements for unbundling at the transmission level are being examined as necessary as part of the certification process required under the third energy package.

In relation to GNI (UK)'s application for certification as full ownership unbundled, the UR notified its Decision to the European Commission on 31st March 2016.
We have also continued to monitor the compliance of PTL and BGTL with their certification as full ownership unbundled and no issues arose.

4.1.2 Technical functioning

- Balancing services (Article 41(6)(b), Article 41(8))
- Security and reliability standards, quality of service and supply (Article 41(1)(h))

Report relevant security and reliability regulation and data

- Monitoring time taken to connect and repair (Article 41(1)(m))

Clarify here at least if there is in your country a definition for "time to connect" for consumers and for producers

- Monitoring access to storage, linepack and other ancillary services (Article 41(1)(n))
- Monitoring correct application of criteria that determine model of access to storage (Article 41(1)(s))

- Monitoring safeguard measures (Article 41(1)(t))

NI currently has no gas storage facilities; however Islandmagee Storage Limited is progressing plans to develop an underground natural gas storage facility in the Larne Lough area of Northern Ireland.

4.1.3 Network and LNG tariffs for connection and access

- Article 41(1)(a), Article 41(6)(a), Article 41(8), Article 41(10) and Article 41(12)

Report on relevant new tariff regulation provisions

- Prevention of cross-subsidies (Article 41(1)(f))

Specify the methodology used in tariff regulation (i.e. cost plus vs incentive regulation), the method of checking undertaking's cost data and if benchmarking is used please describe methodology used by NRA

- Regulated and negotiated access to storage 41(1)(s)

Report on the decisions adopted by MS

Distribution

Information is collected in relation to volumes, revenues and costs, split across relevant customer categories, which are then used to calculate appropriate tariffs. A combination of incentive-based regulation, along with performance-based outputs is implemented for distribution companies. A price control is applied, alongside a performance-based system, which is adjusted, via the "Uncertainty Mechanism" based on actual performance, with incentives included to encourage efficiency and network growth.

The current price control, referred to as GD17, is for a 6 year duration, for the period, 1 January 2017 – 31 December 2022. The final determination for the price control for the gas distribution companies – Phoenix Natural Gas (PNGL), firmus energy (fe) and SGN (Scotia Gas Networks) (called GD17) was published in September 2016. This builds on the progress delivered during the previous price control and covers costs which make up around 40% of the final customer gas bill. Our determination will result in a reduction in consumer bills. Industrial and commercial consumers will see the largest fall due to their higher consumption levels, but domestic bills will also reduce. In the firmus energy distribution area, domestic bills will fall by £16 per annum and domestic consumers in the PNGL distribution area will see an average £1 reduction. In its first price control, the new SGN distribution area will see charges for domestic consumers £33 less per annum than that originally submitted by the company.

Our final determination provides for:

- investment of £226 million in the gas network;
- sets targets for approximately 89,000 new gas connections;

- allows 1,377 km of additional gas pipelines to be built; and
- approximately a further 134,000 more customers will have gas outside their property meaning that 60% of NI properties will have access to the benefits of natural gas by 2022.

In terms of the regulatory period, the distribution system operators have licences extending 20 to 40 years. In terms of incentives, the network operators are incentivised to lay gas pipe in the most densely populated areas and receive additional allowances to maximise new domestic connections. DSOs provide information on tariffs and connection charges to market participants and other interested parties; this information is available on the website of the individual DSOs.

We have also published GT17, the price control for the four high pressure gas conveyance licence holders in NI for the period 1 October 2017 to 30 September 2022. The four licence holders are: GNI (UK) Limited (GNI (UK)), Premier Transmission Limited (PTL), Belfast Gas Transmission Limited (BGTL) and West Transmission Limited (WTL).

Key areas for the price control are controllable and uncontrollable operating expenditure, expenditure to replace or upgrade existing equipment where necessary as well as, for GNI (UK) and WTL, the rate of return.

The price control also set out an allowance for the single system operator and the Gas Market Operator Northern Ireland (GMO NI) went live on 1 October 2017.

Transmission

At the transmission level, the tariff is set using an entry exit methodology by us and tariff setting is overseen on an annual basis. The transmission tariffs are calculated by collecting forecast volumes, capacity bookings and revenue requirements from the power and distribution sectors at the beginning of the gas year. The individual submissions are then totalled and capacity and commodity tariffs are calculated for all sectors. A reconciliation process is applied at the end of the year when actual volumes, capacity and revenues are known.

The TSOs are also price controlled in NI. The GT17 price control was published in August 2017 covering and covers the period of 2017-2022. The regulatory approach to the price control depends upon the financing model under which the TSO operates.

To improve the rate at which certain pipelines are financed, we have employed a mutualised financing model where the normal regulatory control over any allowed operational expenditure accrued by the TSO has been removed. The resulting transfer of risk onto consumers, through potential inefficient operating costs, can be

limited through corporate governance licence conditions contained within the conveyance licence held by the TSO. One of which is a condition that, in the form of a shadow price control, allows us to review the level of operating expenditure forecast to be incurred by the TSO.

Where a more standard regulatory model is used, a 'pain-gain' mechanism is applied at the transmission level where TSOs can share in any capital expenditure efficiencies gained.

The GMO NI encompasses the four transmission system operators in Northern Ireland as a contractual joint venture. This single system of operation was implemented to deliver cost efficiencies and other benefits to consumers and users including a single network code, IT system and co-ordinated market arrangements. The previous arrangement with multiple system operators was a barrier for the Utility Regulator in minimising system operation costs for consumers.

LNG

We have no LNG facilities in NI.

4.1.4 Cross-border issues

- Access to cross-border infrastructure including allocation and congestion management (Article 41(6)(c), Article 41(8), Article 41(9), Article 41(10) and Article 41(12))

Report in particular on cases where specific cross-border cooperation between NRAs happened besides the general activity of the NRA in the frame of ACER/FG. Provide case study/data on standard contracts t.b.d by ACER (i.e. average cost/conditions of importing/exporting 1 MW). Only provide text explanations in the National Report as data are included in the data base.

- Cooperation (Article 41(1)(c))

Other relevant cooperation agreements/activities of the NRA besides the RI

- Monitoring investment plans and assessment of consistency with Community-wide network development plan Article 41(1)(g)

Along with the Commission for Regulation of Utilities (CRU) and Ofgem we worked together to coordinate the joint implementation of the EU network codes on Capacity Allocation Mechanism (CAM), Interoperability, and Balancing at the Moffat entry point. All three NRAs continue to monitor the development of the EU network codes and to assess the potential impact to their networks.

4.1.5 Compliance

- Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 41(1)(d)) and with the Guidelines (Article 43))

Which decisions/actions have been taken following binding decisions of the Agency or the Commission

- Compliance of transmission and distribution companies, system owners and natural gas undertakings with relevant Community legislation, including cross-border issues (Article 41(1)(b), Article 41(1)(r), Article 41 (3) and Article 41(5)) + imposing penalties (Article 41(4)(d))

Report in particular on monitoring systems for TSO certification compliance and in the next future NC compliance. Report on other compliance cases and existing active monitoring methods

Compliance of transmission and distribution companies, system owners is through their licences. There are no issues to report.

4.2 Promoting Competition

4.2.1 Wholesale markets

Please provide a brief illustration of the state of competition of wholesale market and the main changes in the recent year

All gas for NI is purchased at the UK NBP.

4.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

- Article 41(1)(i) , (j), (k) (l) (u) and Article 44(3)

Report separately the three issues: prices, transparency and effectiveness of competition. In particular regarding prices report on fundamentals, price developments and liquidity. Regarding transparency report on the access to prices and on how robust prices are and if at national level transparency obligations regarding pricing exist.

As above all gas for NI is purchased at the UK NBP.

4.2.2 Retail market

Please provide a brief illustration of the state of competition of retail market and the main changes in the recent year

The gas market in the Greater Belfast area has been open to competition to domestic customers since 2007. However, there were no competing suppliers in the domestic market until 2010. In this distribution licensed area there has been six active gas suppliers in the non-domestic sector during 2018: SSE Airtricity Gas

Supply (SSE Airtricity), firmus energy, Electric Ireland, Naturgy, Go Power and Flogas Natural Gas. In the Greater Belfast licensed area there has been two active gas suppliers in the domestic sector in 2017. SSE Airtricity is subject to a price control over the domestic and small I&C (industrial and commercial) customers who consume less than 2,500 therms per annum in the Greater Belfast area. A maximum average tariff is employed in these sectors for customers of SSE Airtricity.

Other suppliers are free to compete against this maximum average tariff. In the Greater Belfast area, market shares have remained relatively unchanged. SSE Airtricity's share in the domestic credit market is 82% and 73% for prepayment. firmus energy remains the only domestic supplier in the Ten Towns area.

The Ten Towns gas area opened to competition for large I&C (industrial and commercial) customers in October 2012. SSE Airtricity entered this market to compete against the incumbent firmus energy from 1 January 2013. The remainder of the market (small I&C customers and domestic customers) opened to competition from April 2015. There are now also 6 active suppliers in the Ten Towns I&C market, Electric Ireland, firmus, Flogas, Go Power, SSE Airtricity and Naturgy.

firmusenergy, the incumbent supplier, is the only domestic supplier in the Ten Towns area. In terms of market share by connections, firmus energy retains the majority of the small I&Cmarket with 60.4% share at the end of Q4 2018. The competing suppliers in the small I&C market, SSE Airtricity, Go Power and Flogas have been steadily increasing their market shares since entering the I&C market. At the end of Q4 2018, the collective market share of these three suppliers was 39.6%.

4.2.2.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

- Article 41(1)(i),(j) (k), (l) (u) and Article 44 (3)

Report separately the three issues: prices, transparency and effectiveness of competition. In particular regarding prices report on fundamentals, price developments and liquidity. Regarding transparency report on the access to prices and on how robust prices are and if at national level transparency obligations regarding pricing exist. Make reference to dual fuel if necessary.

SSE Airtricity Gas Supply (Northern Ireland) Limited (SSE Airtricity) has a regulated tariff for domestic and small industrial and commercial customers (using less than 2,500 therms per annum) in the Greater Belfast distribution network area.

Firmus Energy (Supply) Ltd (firmus energy) has a regulated tariff for domestic and

small industrial and commercial customers (using less than 25,000 therms per annum) in the Ten Towns distribution network area. In November 2017, following consultation it was decided to reduce the scope of firmus energy's price control to exclude non-domestic customers using between 2,500 and 25,000 therms, which will be effective from 1 April 2018.

We enter into a formal tariff review process with SSE Airtricity and firmus energy twice per year with a view to tariff changes being effective from 1st April and 1st October each year. We also monitor gas prices on an ongoing basis and an ad-hoc tariff review for SSE Airtricity and firmus energy may be initiated at any stage if the Utility Regulator considers that gas prices have increased or decreased enough to warrant a tariff review. We monitor the SSE Airtricity and firmus energy regulated tariff against the standard tariffs of other supply companies in NI, the UK and ROI. Transparency reports are published by us every quarter which provides comparisons of the gas tariffs in NI, GB and ROI.

During 2018 the SSE Airtricity and firmus energy regulated tariffs for domestic customers were similar or lower than the standard domestic tariff of the incumbent supplier, Bord Gais, in ROI and lower than the average of the big six suppliers in GB (based on their standard domestic tariffs). Supply companies in NI have a licence obligation to inform customers at least 21 days in advance of any change (increase or decrease) in the tariff. Suppliers are also required to provide advanced notification of when customer is coming to the end of a fixed term or discounted tariff period (no less than 28 days but no more than 42 days before).

We review the SSE Airtricity and firmus energy gas purchasing strategies each year and also receives regular gas purchasing reports from SSE Airtricity and firmus energy showing the volumes and cost of gas purchased for the short and long term future.

We also monitor the effectiveness of competition in the retail gas markets in NI. There are two retail markets in NI: the Greater Belfast market and the Ten Towns market. Competition in these markets is monitored by us on a quarterly basis and an analysis of the competition is published in our transparency reports: see https://www.uregni.gov.uk/sites/uregni/files/media-files/2019-02-28%20Transparency%20Report%20Q4%202018%20FINAL.pdf

- Article 41(1)(p)

Report on recommendations at national level on supply prices and competition

- Article 41(4)(b)

Report on main investigations, results and possible measures adopted

Report on tariff deficit if it exists

We determined, and published, price controls for SSE Airtricity and firmus energy which set out procedures which SSE Airtricity and firmus energy must comply with in setting tariffs. The price controls also set out a level of operating expenditure for each company for each year of the control which is then used when compiling the supply opex costs for the tariff. At each tariff change we publish a paper which provides detail on the various elements of the tariff, details of any over/under recovery which has been built up or lost in previous tariff periods and therefore incorporated into the new tariff and comparisons with tariffs in GB and ROI.

4.3 Security of supply (Article 5) (if and insofar as NRA is competent authority)

The Department of Energy and Climate Change (DECC) is the designated Competent Authority with respect to the security of supply for the UK Member State (as notified to the Commission under Regulation 994). As such a number of the requirements of Article 5 of Directive 2009/73/EC are carried out by DECC. However we do contribute to some of the elements identified below.

4.3.1 Monitoring balance of supply and demand

100% of Northern Ireland gas supplies are currently provided from Great Britain via the National Transmission System Exit Point at Moffat. As such the wider monitoring of UK demand and supply is largely carried out by DECC and National Grid. However the Transmission System Operators in Northern Ireland and the Republic of Ireland regularly engage with National Grid on demand and supply issues downstream of Moffat.

There are also a number of government and TSO groups that have been established between the UK and Ireland to facilitate communication on emergencies and security of supply. These groups also co-ordinate the work required under Regulation 994.

4.3.2 Expected future demand and available supplies as well as envisaged additional capacity

Forecast Total Volumes (mscm):-

Year	2017 /18	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27
Volume	1432	1415	1444	1542	1522	1608	1644	1636	1659	1668

All of NI gas supplies are currently provided from Great Britain via the NTS Exit Point at Moffat. As noted previously there is significant industry interest in developing gas storage facilities in the Larne area of NI which could strengthen security of supply within the region.

TSOs now annually produce a gas capacity statement which examines the ability of the gas network to meet future supply and demand scenarios over a ten year period. This assessment included the Islandmagee storage project and network extension to the West and North West as discussed above.

This approach ensures that any areas requiring investment are identified and addressed so that future demands on the system can be met. The capacity statement is published on the GMO website (see http://gmo-ni.com/).

4.3.3 Measures to cover peak demand or shortfalls of suppliers

- Art 41(1)(t): implementation of safeguard measures

The transmission companies in Northern Ireland have emergency arrangements in place to deal with either a physical disruption to the network or a restriction in gas supplies. The arrangements are a legal requirement and are contained within each TSO's Safety Case. The safety case outlines the emergency stages and the actions that are to be undertaken at each stage.

Additionally power stations are required to hold reserves of alternative fuels to enable fuel switching in the event of a restriction to gas supplies. The emergency measures are tested annually alongside the Republic of Ireland and Great Britain exercises.
Gas Supply licenses in NI also require that suppliers have access to gas supplies to meet peak demand during severe winter conditions.

5 Consumer protection and dispute settlement in electricity and gas

5.1 Consumer protection

- Compliance with Annex 1 (Article 37(1)(n)) and (Article 41(1)(o))
- Ensuring access to consumption data (Article 37(1)(p)) and (Article 41(1)(q))

Article 11A of the Electricity Order and Article 10A of the Gas Order provides the Authority with powers to impose conditions on licensees to give effect to this obligation. Part VI of the Energy Order provides the Authority with such enforcement powers as are necessary to compel compliance. The conditions which ensure that these consumer protection measures are adhered to are set out in part II of the electricity supply licences, Customer Related Conditions and Part 2 of the Gas Supply licences, Conditions Applicable to the Supply of Gas by the License Holder. The implementation of the third package has seen these conditions further enhanced.

We ensure customer access to consumption data via conditions in the gas and electricity supply licences. Licence Condition 38 and 44 in electricity supply licences and 2.19 and 2.28 in gas supply licences ensures that customers have access to, and are informed of their consumption and that information is provided in such detail and format as is approved by the Utility Regulator and the consumer representative body. Licence conditions were updated as a result of the third package to ensure that consumers are entitled to further detailed information on their electricity and gas consumption.

We have consulted on and implemented licence modifications under the EU Third Internal Energy Package. The licence modifications implemented under the EU Third Internal Energy Package also required Gas and Electricity suppliers to develop and publish Codes of Practice to enhance the consumer protection measures. During 2015, we further extended the consumer protection under the Codes of Practice by developing minimum standards for the Codes of Practice. This strengthened the consumer protection covered by all supplier Codes of Practice. The licence conditions ensure that customers are provided with access to their consumption data and transparent information in relation to tariffs, terms and conditions and complaints handling procedures. It also requires suppliers to offer customers a range of payment methods, to facilitate supplier transfers within 15 working days, and to provide a code of practice on provision of services for vulnerable customers. Licence conditions also set out timeframes for suppliers providing terms and conditions to new customers and for suppliers to give notice to customers at least 21 days prior to any changes to the terms (including price) being

made. Suppliers must also inform customers of their right to withdraw prior to when the terms of their contract are changing. Suppliers also have a licence condition requiring final bills to be issued to customers within six weeks from the date the change of supplier takes place.

The Consumer Protection Strategy (CPS) was our strategy and action plan designed to bring about an enhanced level of domestic consumer protection for electricity, gas and water consumers in NI. The CPS was launched in early 2016 and committed to a formal review following year two of project delivery.

As part of the development of our new Corporate Strategy (2019-2024), CPS review and stakeholder feedback, a new Consumer Protection Programme (CPP) was developed and launched at an event in April 2019.

From April 2019, the new CPP builds on the work of the CPS. It is a prioritised three year programme designed to provide enhanced protection to domestic electricity, gas and water consumers, especially those most vulnerable.

5.2 Dispute settlement

- Article 37(11), 37(5)(c), Article 37(4)(e)
- Article 41(11) and Article 41(4)(e)

Report on cases, in particular on major issues concerning network users (access tariffs, connection disputes/refusals...), including producers and consumers

As a direct result of Directive 2009/72/EC we were given the legal authority to act as a dispute resolution authority for certain matters in relation to electricity.
Prior to the implementation of the Directive into national law, we had been, and still are, able to determine certain complaints or disputes, such as disputes arising between an electricity distributor and any person requiring a connection to that distributor's distribution system.

On the implementation of the Directives, our dispute resolution remit was extended further, as now individuals and companies are able to refer certain disputes or complaints regarding the transmission and distribution of electricity in Northern Ireland to us for resolution.

In June 2011 we published our "Policy on the Resolution of Complaints, Disputes and Appeals". This sets out procedures which the Utility Regulator will generally follow when dealing with a complaint or dispute which it has been requested to

determine. This policy was amended in June 2013[189].
Under the Gas (NI) Order 1996 billing disputes must in the first instance be referred to the Consumer Council for Northern Ireland. The Consumer Council has 3 months in which to resolve the matter to the customers' satisfaction or the matter is referred to us. We have had no referrals during this period.

The Gas Market Operating Group (GMOG) was established by us to address any operational barriers to entry into the Greater Belfast gas market. The group was extended several years ago to cover the Greater Belfast gas market and the Ten Towns gas market. During 2015 the group was extended again to cover any retail related issues in relation to the gas market that is being developed for the West area. The group includes active representation from supply and distribution license holders, the DfE in NI, the Consumer Council in NI and the Utility Regulator. The GMOG identifies barriers to entry into the gas market in NI; these issues are then discussed with the group with a view to making a decision on the best way to address each issue.

We also initiated the set-up of a Gas Supplier Forum group. This group identifies any requirements for supplier to supplier agreements in relation to customer switching and overcoming supplier barriers to competition. Agreements are then drawn up to be included in the Supply Meter Point Agreement. This group includes active representation from gas supply licence holders, the Consumer Council NI and us; however the Distribution licence holders also attend to ensure all decisions made for supplier agreements will work in accordance with the distribution market rules.

There has been an increase in supplier licence compliance and investigatory work. We have a quasi-judicial role with regard to the determination of industry complaints and disputes. This year we have completed four of these matters.

189 http://www.uregni.gov.uk/publications/appeals_complaints_and_disputes_policy_updated_june_2013