

**Information Note**

**Regulatory options for supplying electricity to consumers**

This note was produced by Ofgem’s Innovation Link, a ‘one-stop-shop’ providing support about energy regulation to businesses looking to introduce innovative or significantly different propositions to the energy sector[[1]](#footnote-1). The purpose of this note is to help early-stage innovators considering entering the electricity supply market understand the regulatory options available to them.

This note is presented for information only, provides an overview and is not intended to cover every eventuality. Reading it is not a substitute for considering, for example, the supply licence and relevant legislation, or carrying out your own due diligence. It is your responsibility to assess compliance with regulatory requirements. Market participants have to deliver positive consumer outcomes, and this needs to be factored into all aspects of the business.

**Setting the scene**

# Electricity market overview

1. The electricity system is a complex, real-time arrangement of participants generating, transmitting, distributing, storing, supplying and consuming power. They are supported by a wide array of actors building, maintaining and servicing the physical and virtual infrastructures necessary for the system’s successful and continued operation.
2. In order to protect consumers and energy system participants, organisations seeking to supply electricity to consumers are generally required[[2]](#footnote-2) to hold an electricity supply licence under the Electricity Act 1989[[3]](#footnote-3). Ofgem oversees and administers the granting of supply licences in GB, which set out the obligations and terms under which licence holders must operate.
3. All licensees are required to comply with industry codes which are, broadly speaking, a number of highly detailed multi-party agreements. Both individually and collectively, the codes affect the shape of the electricity sector. Amongst other things, these codes (overseen in part by industry and in part by Ofgem) define the terms under which participants access the electricity networks and take part in the electricity market.
4. The management of flows on the electricity system is undertaken by National Grid in its role as the transmission system operator (SO). Power is traded on the wholesale market bilaterally between generators and suppliers (often years and months in advance), and on energy exchanges (days and hours in advance). This trading goes on up until one hour before delivery – the point known as ‘gate closure’. At this time, suppliers and generators have to notify the SO how much power they have contracted for, and how much they are forecasting they will need or be able to provide.
5. To avoid the system frequency[[4]](#footnote-4) falling or rising to unacceptable levels, the SO assesses whether more electricity will be generated than consumed (or vice versa). Through the ‘balancing mechanism’ the SO can take corrective action, by buying or selling electricity, to maintain balance in real-time.
6. The nature of electricity is such that generators may produce more or less energy than they have sold and customers may consume more or less energy than their supplier has purchased on their behalf. The discrepancies between contractual and actual (often-called physical) positions is reconciled through a process known as ‘settlement’.

# Electricity industry players

1. The following summarises the different parties and what they do. It’s not intended to be exhaustive and doesn’t cover every function, every player or all of the complex interactions between them. This document is only intended as a general introduction to illustrate what different players do, and shouldn’t be relied on as guidance on precisely what activities require a licence.
* **Generators** sell their power to suppliers (or large users) at a wholesale rate and feed it into the transmission or distribution system.
* **Suppliers** procure power wholesale and sell it on to consumers (household or business) in the retail market. They aggregate all of the costs of the electricity system’s supply chain for consumers. This includes the costs of generation, transport, system balancing, metering and government’s environmental and social programmes which are levied onto bills.
* The **System Operator** (SO) (National Grid) coordinates and directs electricity flows onto and over the transmission system, balancing generation and supply. The SO administers the balancing mechanism to manage the system in real-time. It contracts with sources of supply and demand to increase or decrease generation or usage when called upon.
* **Transmission Operators** (TOs) develop, operate and maintain a high voltage system within their onshore transmission areas (National Grid Electricity Transmission for England and Wales, Scottish Power Transmission for southern Scotland, and Scottish Hydro Electric Transmission, for northern Scotland and the Scottish islands groups).
* **Distribution Network Operators** (DNOs) develop, operate and maintain the distribution networks that physically connect most energy users, smaller generation units and the transmission system. While their role was largely limited to passing transmission-connected power to users, in recent years the requirement for DNOs to manage increasingly bidirectional traffic has grown, as smaller scale generation (and storage) connect to the distribution grids.
* **Non-Physical Traders** are organisations (like banks or specialised trading firms) without means to generate and without demand for electricity. They trade (buy and sell) electricity for profit.
* The **Data Communications Company** (DCC) manages the data and communications network connecting smart meters in homes and businesses to the systems of energy suppliers, network operators and other authorised service users of the network.

# Selling electricity to consumers

1. There is a range of options available to parties that are looking to sell electricity to consumers. These are summarised in the table below.

| **Option** | **Features** |
| --- | --- |
| Licensed supplier | * Licence granted by Ofgem[[5]](#footnote-5) to permit the supply of electricity to domestic and / or non-domestic premises in GB.
* A licence application fee applies[[6]](#footnote-6).
* Licensees have to become a party to and comply with the relevant industry codes.
* Responsibilities include consumer protection, social and environmental obligations.
* Suppliers with a domestic supply licence are required to offer terms to all domestic consumers that make a valid request[[7]](#footnote-7).
* A restricted supply licence may be applied for, although we will consider, amongst other things, whether it can be justified in terms of public interest.
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| Licence Lite supplier | * Party applies for an electricity supply licence (as above) and requests Ofgem approval not to become party to some of the industry codes.
* Code responsibilities are delivered via a commercial relationship with another (third party) licensed supplier (TPLS).
* The licence lite supplier remains fully licensed and responsible for compliance with all other elements of their licence.
* Reduces entry and operational costs by outsourcing some code compliance to another licensed supplier.
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| Licence exempt supplier | * Legislation allows supply without a licence up to certain thresholds and in particular circumstances.
* Exempt supplier may need to make arrangements with a licensed supplier (to perform industry compliant functions).
* Exempt supplier is subject to legislative requirements which are based on key customer-facing requirements from the conditions of the electricity supply licence (eg, giving customers contractual information, regular bills and notice of price increases).
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| White label | * Partnership between licensed supplier and third party to offer branded tariffs.
* Models vary, but the white label acts as an agent (and therefore under the control of) a licensed supplier (eg, if they carry out activities involving customer acquisition or other customer interactions).
* Licence requirements, including code compliance and consumer protection, sit with the licensed supplier.
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| Sleeving | * Licensed supplier provides commercial peer-to-peer services for participants (generator and consumer(s)).
* Often used by organisation with own-generation on one site seeking to supply load on another site across the public network.
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## Licensed supply

1. An electricity supply licence can be sought for non-domestic premises or both non-domestic and domestic premises. The electricity supply licence is designed to ensure that licensees operate within the entire electricity market in ways that facilitate wholesale market trading, deliver real-time system balancing, enable retail competition and deliver consumer protection.
2. Suppliers buy electricity in the wholesale market either through bilateral contracts with generators (power purchase agreements - PPAs), through brokers, over an energy exchange or within their own company, if they own generation assets. As with any market, wholesale electricity prices fluctuate, as does consumer demand. Therefore, a challenge for small-scale new suppliers is determining their hedging strategy against future price fluctuations. There are parties offering hedging services to such new entrants.
3. The supply licence covers activities including (but not limited to) the sale of electricity to consumers and conditions attached to the licence include both operational and customer-facing requirements.
4. The supply licence is not a static document and is subject to change[[8]](#footnote-8). For example, through our Future of Retail Market Regulation (FRR) work we are reviewing the supply licence with a view to moving towards more principles-based regulation[[9]](#footnote-9). Our Forward Work Plan[[10]](#footnote-10) for 2017/2018 says we will “be keeping under review the arrangements we have for licensing suppliers and will learn lessons from any supplier insolvencies over the period”.
5. The licence also sets out the supplier’s obligations in relation to industry codes. The codes underpin the electricity wholesale and retail markets. As shown below, licensees are required to either become a party to and comply with the codes, or just comply with the codes. Each code has its own code administrator and may have specific market entry requirements:

| **Codes (party & comply)** | **Description** |
| --- | --- |
| * [Balancing and Settlement Code (BSC)](https://www.elexon.co.uk/reference/market-entry/)
 | Governs the arrangements for electricity balancing and settlement in Great Britain. |
| * [Connection and Use of System Code (CUSC)](http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Connection-and-Use-of-System-Code/)
 | Contractual framework and charging methodologies for connection to and use of the national electricity transmission system. |
| * [Distribution Connection and Use of System Agreement (DCUSA)](http://www.dcusa.co.uk/)
 | Arrangements and charging methodologies for connection to and use of the electricity distribution networks. |
| * [Master Registration Agreement (MRA)](http://www.mrasco.com/)
 | Mechanisms to enable suppliers to transfer customers, including terms for the provision of Metering Point Administration Services Registrations. |
| * [Smart Energy Code (SEC)](https://www.smartenergycodecompany.co.uk/)
 | Terms for the provision of the Data Communication Company’s services, and provisions to govern the management of smart metering. |

| **Codes (comply)** | **Description** |
| --- | --- |
| * [Distribution Code](http://www.dcode.org.uk/)
 | Technical aspects of the connection and use of distribution networks, including relationship between a distribution licensee and users of its system (for planning / operational purposes, in normal and emergency circumstances). |
| * [Grid Code](http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-Code/)
 | Covers all material technical aspects relating to connections to, operation and use of the national electricity transmission system. |

## Licence Lite

1. Licence Lite[[11]](#footnote-11) is an option available to electricity suppliers. It was originally developed for independent generators seeking to enter the electricity supply market. It was designed to help new (often smaller parties) meet the high-cost and high-competency elements of the supply licence. The regulatory costs incurred from complying with the industry codes are not scalable; often require significant up-front investment and ongoing resourcing which, for small entrants, adds major overheads.
2. Licence Lite allows a licensed electricity supplier to enter into an agreement with another third party licensed supplier (TPLS) to take care of complying with some of the more costly and technically challenging elements of the supply licence.
3. An aspiring Licence Lite supplier (LLS) would apply for an electricity supply licence along with a request for a Licence Lite direction. The direction relieves the LLS of the obligation to be a party to the industry codes set out at SLC11.2 of the supply licence (as listed below). The LLS is required to comply with all other licence conditions and obligations.
4. The SLC11.2 codes are detailed below. Links to the codes and their administrators can be found in the table at paragraph 13:
* Master Registration Agreement (MRA).
* Distribution Connection and Use of System Agreement (DCUSA).
* Connection and Use of System Code (CUSC).
* Balancing and Settlement Code (BSC).
1. To secure a direction, the LLS would need to have a robust commercial agreement (known as a Supplier Services Agreement – SSA) with a TPLS to deliver their responsibilities under SLC11.2. The Licence Lite Guidance sets out what the SSA must contain. The type of requirements it must cover include:
* Legal basis of the relationship between the suppliers.
* Duration of the agreement.
* Service specification.
* Responsibilities and obligations of both the LLS and TPLS.
* Arrangements to identify the LLS’ supply points / volumes in industry systems.
* Information exchange and data protection arrangements.
* Payment arrangements and dispute resolution.

## Exempt electricity supply (no licence)

1. The Electricity Act 1989 allows electricity companies, who meet certain criteria, to be exempt from having an electricity generation, transmission, distribution or supply licence. These arrangements are set out in the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001. A summary of these arrangements and responses to frequently asked questions was published in 2013 (updated June 2017) by the then Department for Energy and Climate Change[[12]](#footnote-12) (now the Department for Business, Enterprise and Industrial Strategy – BEIS).
2. In terms of supply, Schedule 4 of the Order sets out specific circumstances in which a party can undertake supply without having to apply for a licence: these are the four ‘classes’ of exempt supply. If an organisation is satisfied that it meets the requirements it can supply electricity – approval is not sought from Ofgem or BEIS. An overview of the four classes is provided below. Interested parties should consult the Order directly[[13]](#footnote-13).
* **Class A (small suppliers)**: allows for the supply of up to 5MW of self-generated electricity (but no more than 2.5MW to domestic premises).
* **Class B (resale):** resale of electricity supplied (by exempt or licensed supplier) to premises (such as a landlord to its tenants). The maximum price at which electricity may be resold is the same price as that paid for it by the reseller, including any standing charge[[14]](#footnote-14).
* **Class C (on-site supply)**: allows the supplyof self-generated electricity (either exclusively or in combination with power procured from a licensed supplier) to consumers that are ‘on-site’ according to the definitions in the Order.
* **Class D** (**offshore supply)**: offshore-generated power supplied to offshore premises.
1. A party may qualify for exemption by falling within more than one Class. Our view is that, for instance, Class B allows for the provision of some on-site supply (class C) up to a limit of 10% of the total electricity supplied.
2. The Secretary of State may also consider applications for exemption for individual generation, distribution or supply activities that do not fall under class exemption. This is known as ‘individual exemption’, although BEIS guidance says that the “Department considers that in most cases it is not appropriate to grant exemption from the requirements of supply or distribution licence. This is because it is rarely considered appropriate for these activities not to be subject to the full terms of licensing regime”[[15]](#footnote-15).
3. Protection measures for customers served by exempt suppliers are provided for in legislation[[16]](#footnote-16). The legislation sets out the duties of exempt suppliers in matters such as change of supplier / switching arrangements, customer contracts, customer information and dispute determination.
4. While an exempt supplier is not subject to the same consumer protection obligations required through the licensing framework, an exempt supplier is subject to protection provisions provided for through general consumer protection law. Much of the relevant consumer law is intended to ensure that services are provided with reasonable care and skill, that information provided is accurate and not false or misleading, and that organisations act fairly towards consumers. The government-backed Business Companion website[[17]](#footnote-17) has been created to help businesses understand what consumer law considerations might apply to their activities.
5. Where an exempt supplier’s activities take place over, or connect to the public network, it is effectively part of an interconnected GB-wide electricity system. Its activities may, therefore, affect network flows and actions required to keep the system in balance. This means that the exempt supplier may need to have in place suitable arrangements with industry partners so that its activities meet established standards and the appropriate charges can be levied.
6. In these circumstances, the exempt supplier would need to have an agreement with a licensed energy supplier to carry out these duties on their behalf. This is similar to the supplier partnership in a Licence Lite model but in this case, one of the suppliers holds a licence, the other doesn’t (with Licence Lite, both suppliers are licensed). The commercial agreement (often called an Exempt Supply Services Agreement) could include the following types of services to be provided by the licensed supplier:
* **Network use**: making an agreement with the DNO for passing on the costs of using the public network.
* **Network connection**: affirmation to the DNO of an ‘agency relationship’ between the exempt and licensed suppliers for purposes of the National Terms of Connection agreement.
* **Metering**: appointment of meter service provider / registrar and provision of data retrieval, data processing and data aggregation services.
* **Balancing services**: procuring extra power to make good any shortfall the exempt supplier cannot meet: ‘top-up’ (the supply / sale of electricity on a continuing or regular basis) and ‘back-up / stand-by’ (the supply / sale of electricity on a periodic or intermittent basis). And, ‘spill’ arrangements to sell-on any excess generation not used by the exempt supplier’s customers.

## White labels

1. A white label is an organisation that partners with a licensed supplier to offer electricity (and / or gas) using its own brand. The white label is, therefore, both a separate organisation (to the energy supplier) and the branded energy supply.
2. The white label is not a supplier and does not need to apply for a licence or become a party to or comply with the industry codes. The white label effectively acts as an agent (and therefore under the control of) a licensed supplier. The white label’s activities operate within the parameters of the licence and industry arrangements of its licensed partner supplier. The licensed supplier is ultimately responsible for ensuring that the white label’s activities comply with its supply licence.
3. Arrangements vary, with some white labels delivering consumer-facing activities (such as billing and communications), while for others, these services are wholly provided by the partner supplier. Irrespective of the consumers’ relationship with the white label provider, the legal relationship between the customer and the licensed energy supplier remains unchanged. It must be obvious to customers, from early in the sales process, that it would be the licensed supplier who would actually be supplying electricity[[18]](#footnote-18).

## Sleeving

1. Sleeving is another form of commercial service offered by some suppliers. It has commonly been used by entities (corporates, public authorities, industrial and commercial facilities) with on-site generation who want to use the public distribution network to supply another of their sites, or another consumer(s) (sometimes this is called peer-to-peer).

1. The generator and the customer (they can be the same entity) agree terms and then secure the services of a licensed electricity supplier to transport their power over the public network. As well as a fee to transport the power, suppliers can also offer other industry services such as providing top-up and back-up / stand-by power if the generator is short (facilities may be off-line), or selling ‘spill’ if the generator produces more power than their customer needs.
2. As with the white label model, the peer-to-peer relationship operates within the parameters of the licence and industry arrangements of the licensed partner supplier.
1. For more information about the Innovation Link and how to contact us, please see our [website](https://www.ofgem.gov.uk/about-us/how-we-engage/innovation-link). [↑](#footnote-ref-1)
2. Certain class exemptions to the requirement to hold a licence exist. This is explained later in this note. [↑](#footnote-ref-2)
3. The Electricity Act 1989 is available [here](http://www.legislation.gov.uk/ukpga/1989/29/contents).

 [↑](#footnote-ref-3)
4. The frequency at which the electricity system operates is managed to specific tolerances. This is to ensure that, for example, the appliances and machinery that connect to the system operate effectively, and to ensure the integrity of the system’s physical assets (such as the transmission and distribution wires). System frequency is a continuously changing variable that is determined and controlled by the second-by-second balance between system demand and total generation. If demand is greater than generation, the frequency falls while if generation is greater than demand, the frequency rises. [National Grid](http://www2.nationalgrid.com/uk/services/balancing-services/frequency-response/) has a licence obligation to control frequency within the limits specified in the 'Electricity Supply Regulations', i.e. ±1% of nominal system frequency (50.00Hz) save in abnormal or exceptional circumstances. National Grid must, therefore, ensure that sufficient generation and / or demand is held in automatic readiness to manage all credible circumstances that might result in frequency variations. [↑](#footnote-ref-4)
5. In recent years, a number of suppliers have entered the market by buying an already licensed and compliant supply business from a third party. These third parties can also provide ongoing operational services. [↑](#footnote-ref-5)
6. Information about how to apply for a licence is available [here](https://www.ofgem.gov.uk/licences-industry-codes-and-standards). [↑](#footnote-ref-6)
7. This requirement can be subject to exceptions, for example under Standard Licence Condition SLC 22.7. See the electricity supply licence [here](https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions). [↑](#footnote-ref-7)
8. To keep in touch with changes to the standard conditions of the electricity supply licence, see [here](https://www.ofgem.gov.uk/licences-codes-and-standards/licences/notices/modification-notices). All proposed licence changes will be consulted upon and will be available [here.](https://www.ofgem.gov.uk/consultations)  [↑](#footnote-ref-8)
9. The way electricity is supplied to Britain’s homes and businesses is changing. To ensure these changes benefit consumers, we need to rely less on one-size-fits-all prescriptive rules and more on principles in the way we regulate. Prescriptive rules are not a sustainable way of responding to risks and opportunities in the market. Principles put responsibility on suppliers to think carefully about how to deliver good consumer outcomes in different situations. Unlike prescriptive rules, principles do not need modifying to respond to new problems. Through our FRR work, we are continuously reviewing the supply licence to identify areas better suited to a principles-based approach. More information about FRR and changes to the supply licence is available [here](https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/future-retail-market-regulation). [↑](#footnote-ref-9)
10. Our 2017/18 Forward Work Plan is available [here](https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-2017-18). [↑](#footnote-ref-10)
11. A Licence Lite factsheet is available [here](https://www.ofgem.gov.uk/sites/default/files/docs/2015/04/482_an_introduction_to_licence_lite_factsheet_web_0.pdf). The Licence Lite operating guidance is available [here](https://www.ofgem.gov.uk/sites/default/files/docs/2015/04/licence_lite_slc_11.3_operating_guidance_0.pdf). [↑](#footnote-ref-11)
12. More information about exemptions and the frequently asked questions note is available [here](https://www.gov.uk/guidance/electricity-licence-exemptions). [↑](#footnote-ref-12)
13. The 2001 Order is available [here](http://www.legislation.gov.uk/uksi/2001/3270/contents/made). [↑](#footnote-ref-13)
14. Ofgem has the power to set the maximum retail price (MRP) through direction. General guidance for resellers is available [here](https://www.ofgem.gov.uk/publications-and-updates/resale-gas-and-electricity-guidance-maximum-resale-price-updated-october-2005). Ofgem is able to decide how the MRP provisions apply and in 2014, we [decided](https://www.ofgem.gov.uk/ofgem-publications/86573/mrpdecision.pdf) that they shall not apply to the resale of electricity from charge points for use by electric vehicles (EVs). [↑](#footnote-ref-14)
15. “Electricity Generation, Distribution and Supply Licence Exemptions – FAQs”, BEIS, 2017, p5: [here](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/617786/Exemption_FAQs_updated_June_2017rg.pdf). [↑](#footnote-ref-15)
16. The [Electricity and Gas (Internal Markets) Regulations 2011](http://www.legislation.gov.uk/uksi/2011/2704/made) set out changes to UK legislation to enact the EU 3rd package reforms. Specifically, schedule [2ZB](http://www.legislation.gov.uk/uksi/2011/2704/schedule/2/made) sets out the duties of exempt suppliers. [↑](#footnote-ref-16)
17. The Business Companion website is available [here](https://www.businesscompanion.info/). [↑](#footnote-ref-17)
18. Through our FRR work we are reducing the level of prescription in the supply licence. Standard Licence Condition (SLC) 25 of the electricity supply licence deals with sales and marketing rules. In June 2017, we replaced the majority of prescription from this condition with a package of enforceable principles; these apply to the supplier and their representatives. More information about these changes is available [here](https://www.ofgem.gov.uk/system/files/docs/2017/04/slc_25_decision_document_0.pdf). [↑](#footnote-ref-18)