

ENERGY ACT 2013

EXPLANATORY NOTES

SUMMARY AND BACKGROUND

3. This Act establishes a legislative framework for delivering secure, affordable and low carbon energy.
4. At its core is the need to ensure that, as older power plants are taken offline, the United Kingdom remains able to generate enough energy to meet its needs even if demand increases. Doing this while also decarbonising requires significant investment in new infrastructure to be brought forward – over £100 billion – and new schemes to be integrated to ensure this investment comes forward.

Part 1: Decarbonisation

5. **Part 1** of this Act gives the Secretary of State a power, by order, to set or amend a decarbonisation target range – being a target range for the level of carbon intensity of the electricity generation sector in the United Kingdom. Carbon intensity is a measure of the amount of carbon dioxide (or other greenhouse gases) produced per unit of electricity generated. The earliest year that a decarbonisation target range could be set for is 2030, and the power to set this target range cannot be exercised until the United Kingdom’s fifth carbon budget is set (expected to be in 2016, based on the timescales for carbon budgets as set out in the Climate Change Act 2008). Prior to setting a decarbonisation target range, the Secretary of State is required to consider a number of factors set out in the Act, and to consult the devolved administrations in Northern Ireland, Scotland and Wales. Once a decarbonisation target range has been set, the Secretary of State has a duty to ensure that the upper end of the target range is not exceeded, to report to Parliament on the policies and proposals to meet a target range, and to publish an annual statement on the carbon intensity of electricity generation in the United Kingdom.

Part 2: Electricity Market Reform

6. Electricity Market Reform, the cornerstone of this Act, was first set out in a White Paper in July 2011. Its provisions have now expanded to cover everything in Part 2 of the Act. References to ‘the Authority’ refer to the Gas and Electricity Markets Authority.

Chapter 1: General considerations

7. This Chapter sets out the objectives of Electricity Market Reform (“EMR”) that the Secretary of State will have regard to when carrying out the key EMR functions (contracts for difference, the capacity market and related functions within Part 2 of the Act).
8. The EMR objectives to which the Secretary of State will have regard are: the carbon reduction targets as set out in the Climate Change Act 2008, which include a 34% reduction by 2020 and 80% reduction by 2050; the decarbonisation target range duty in Part 1 of the Act (which applies when a target range has been set); the need to ensure a security of electricity supply (including through diversification of our energy mix);

the cost to consumers; and the legally binding EU targets for 15% of United Kingdom energy to be supplied from renewable sources by 2020.

9. This Chapter also imposes a duty on the Secretary of State to lay before Parliament each year a report setting out how the Secretary of State has carried out his or her functions under Part 2.

Chapter 2: Contracts for difference

10. The contract for difference (CFD) aims to tackle the lack of investment in low carbon electricity generation allowing the Government to achieve its objectives under the Electricity Market Reform to:
 - ensure the future security of electricity supplies,
 - drive the decarbonisation of our electricity generation, and
 - minimise costs to the consumer.
11. The CFD provides developers of eligible low carbon electricity generation with a long term contract that provides for a stable revenue stream which facilitates investment in low carbon. Most CFDs will be allocated by the operator of the national electricity transmission system (currently National Grid Electricity Transmission PLC) who will determine the eligibility of the applicant and issue a notification, in line with the regulations to be made by the Secretary of State, to the CFD counterparty to offer a contract to the eligible generator. In the longer term allocation of CFDs and strike prices, see paragraph 12, will be determined by a competitive process. In exceptional cases the Secretary of State will allocate CFDs to individual projects which have been individually negotiated. Such individual negotiations are likely to take place where the standard terms of a CFD might not be suited and will need to be tailored to the circumstances of the project. Where the Secretary of State has individually negotiated a CFD he or she will then direct the CFD counterparty to offer such contracts. Thereafter the CFD counterparty will be in a commercial relationship with the generators, governed by the terms of the CFD.
12. In most cases the mechanism will work by setting a “strike price” (a price per unit of electricity generated) which will be at the level determined to be necessary to support the particular technologies supported by the scheme. The contracts will also refer to a “reference price” which is a price which attempts to reflect the wholesale electricity price at a particular time. Generators will sell their generation into the market (as normal) and, where the strike price exceeds the reference price, the counterparty will pay the generators the difference between the strike price and the reference price. The combination of the payment from the CFD counterparty, and the revenue from the sale of electricity, should ensure that a generator broadly receives the strike price.
13. When the reference price is above an agreed strike price, payments will be made by the generator to the CFD counterparty. This clawback is aimed at ensuring that generators only receive the revenue necessary to support them. When the reference price is below an agreed strike price, payments will be made by the generator to the CFD counterparty. There may be variations on this “two-way” CFD model in order to support different types of generation whilst still retaining sensible incentives to generate.
14. The cost of the contracts to the CFD counterparty will be met by licensed electricity suppliers (both those licensed in Great Britain and those licensed in Northern Ireland) and it is anticipated that the costs of the CFD counterparty itself will be met from the same source. Suppliers in turn are likely to pass such costs onto consumers. Where the CFD counterparty receives payments back from generators under the contracts these will be passed on to suppliers.
15. Aspects of the operation of the CFD counterparty will be regulated by the Secretary of State. This is designed to ensure the protection of suppliers and ultimately consumers.

Chapter 3: Capacity Market

16. The Capacity Market is being introduced to mitigate future risks to the security of electricity supplies.
17. Since 2011, 8% of generating capacity has closed under the Large Combustion Plant Directive. A further 10-12% of current power generating capacity is due to close over the coming decade, and more intermittent (wind) and inflexible (nuclear) generation is being built to replace it. These changes to our market create an investment challenge, in particular for plant which will be needed during periods of peak demand or still days, but which would operate less often than now and therefore have less certain revenues. This uncertainty could lead to underinvestment and, as a consequence, uncomfortably low levels of reliable capacity.
18. This legislation therefore provides for the introduction of the Capacity Market to provide an insurance policy against the possibility of future blackouts – for example during cold, windless periods – with the aim of helping to ensure that consumers continue to receive reliable electricity supplies at an affordable cost.
19. Under the Capacity Market, a forecast will be made of future peak electricity demand. This will then be used to determine the level of reliable capacity that is needed to ensure security of supply in a future period. Providers of capacity (either electricity generation or other non-generation technologies such as demand side response) will compete against each other in capacity auctions held four years and one year ahead of the year capacity is expected to be in place, should it be needed. Those who are successful in the auction will receive a guaranteed revenue stream for providing capacity. This is separate to any revenues that they receive through the electricity market. If the capacity providers are unable to provide the capacity when it is needed they will face penalties (referred to as capacity incentives). The Capacity Market will therefore ensure sufficient reliable capacity is available by providing revenue to incentivise investment in new capacity or existing capacity to remain open.

Chapter 4: Investment contracts

20. The provisions in this Chapter are aimed at addressing the risk of hiatus in investment in low carbon electricity generation before the CFD regime (“the enduring regime”) is fully established under the regulation-making powers provided for in Chapter 2 of Part 2 of the Act. Therefore, the provisions here are transitional in the sense in that they are intended to relate to arrangements entered into during a relatively short period. Investment contracts must have been entered into by the Secretary of State by 31st December 2015, or if earlier the date on which regulations made under section 10(3) first define “eligible generator” (i.e. the type of electricity generator who may benefit from a CFD under the enduring regime) – see *paragraph 1(1)(a)* of Schedule 2.
21. “Investment contracts” are contracts with an electricity generator entered into by the Secretary of State (see *paragraph 1(1)* of Schedule 2). Key characteristics include that a contract must contain an obligation for the parties to make payments to each other based on the difference between a strike price and a reference price in relation to electricity generated (see *paragraph 1(1)(c)*), that this obligation must be conditional upon Schedule 2 coming into force (where the contract is entered into before then) – see *paragraph 1(2)* and that the contract has been laid before Parliament together with a statement about certain matters (see *paragraph 1(1)(d), (5)* and *(6)* and section 5(2)). For example, the statement must set out that the Secretary of State is of the opinion that payments which would be made under the contract would encourage low carbon electricity generation (see *paragraph 1(6)(a)*).
22. The Act (see Part 4 of Schedule 2) makes provision for investment contracts to be transferred to a CFD counterparty when one has been designated under section 7(1), or alternatively to a person designated by the Secretary of State as an investment contract counterparty. Once the CFD counterparty has been designated, and certain

other conditions have been satisfied, the Secretary of State will be under a duty to transfer investment contracts to the CFD counterparty.

23. The provisions in Chapter 4 will provide a tool that may be used to avert any investment hiatus because they will enable the Secretary of State to give effect to investment contracts entered into before the establishment of the enduring regime (including contracts entered into before enactment of the Act). They do this by providing various powers and authorisations, particularly relating to the financing of obligations under investment contracts (see [paragraphs 7 and 20](#) of Schedule 2). In containing these particular provisions relating to investment contracts, the Act can provide a timely and significant measure of confidence regarding the revenue stream that a project is to receive, to enable investors/developers to make positive final investment decisions in relation to low carbon electricity generation projects in advance of the enduring regime.

Chapter 5: Conflict of interest and contingency arrangements

24. This Chapter gives the Secretary of State power to amend the national system operator's transmission licence to introduce business separation or ring-fencing measures. There are valuable synergies from the national system operator taking on the electricity market reform delivery role. However, it could also give rise to conflicts of interest with the system operator's existing roles in the electricity market, for example as owner of the transmission network, and its other commercial interests such as businesses in carbon capture and storage, interconnection and offshore wind transmission. DECC has been working with the Authority to assess potential conflicts of interest and published a report on proposed mitigation measures in April 2013.
25. This Chapter also provides the Secretary of State with a power to transfer the electricity market reform delivery functions from the national system operator to a new delivery body. Finally, it amends the duties of energy administrators under the special administration regime in the Energy Act 2004 to ensure the continued delivery of electricity market reform functions.

Chapter 6: Access to markets etc.

26. Wholesale market liquidity is an important feature of a competitive market. It provides market participants with a route to market, risk management opportunities and investment and operational signals. Liquidity is important to the success of the electricity market reform programme and in attracting the investment required in the Great Britain generation market over the next ten years. A more liquid market would facilitate market entry, improve competition and increase the robustness of the contracts for difference (CFD) reference price.
27. The electricity market in Great Britain is characterised by low levels of liquidity with especially poor liquidity in the forward markets. The Authority first identified liquidity as a significant barrier to entry in its 2008 Energy Supply Probe and has undertaken a number of market assessments and consulted on a range of proposals since then. In April 2013 the Authority took a "minded to" decision to intervene in the wholesale electricity market to improve liquidity. The Authority consulted on the detailed design of the 'Secure & Promote' package in June 2013. The Authority has now taken an "in principle" decision to proceed with the package with a view to a final decision in January 2014 and implementation in early 2014.
28. Independent developers have played an important role in delivering new capacity in the renewable and gas generation sectors and could play a key role in meeting the Government's goals and deliver essential investment and competition in the future, provided market conditions are right. Independent developers usually require a long-term contract for the sale of their power (a Power Purchase Agreement (PPA)) with a credit-worthy counterparty before lenders will provide finance for a project, as it provides comfort that revenues are reasonably secure and risks will be appropriately managed.

29. Responses to a DECC call for evidence in May 2012 showed that the market for PPAs has shifted and generators are finding it difficult to secure PPAs on terms that will meet the requirements of their financiers. The measures set out in the Act, particularly the Contracts for Difference, will reduce the risks that independent generators face and should improve the situation. However, there is a risk that the PPA market may not respond in the way the Government expects and that a more targeted intervention is necessary.
30. The powers in this Chapter enable the Government to intervene in the market to address the problem of low levels of liquidity in the wholesale power market and the difficulties faced by independent generators in securing long-term contracts for the sale of their electricity. They allow the Secretary of State to modify the conditions of electricity generation and electricity supply licences and their related codes to address low liquidity and facilitate participation in the GB market. They also allow the Secretary of State to modify the conditions of electricity supply licences and their related codes to facilitate investment in electricity generation by means of a power purchase agreement scheme, which is a scheme to promote the availability to electricity generators of PPAs.

Chapter 7: The renewables obligation: transitional arrangements

31. The Renewables Obligation (RO) is the main financial mechanism by which Government incentivises deployment of large scale renewable electricity projects in the United Kingdom. It came into effect in 2002 in England and Wales and in Scotland and in 2005 in Northern Ireland. Banding – whereby different technologies receive different levels of support – was introduced in April 2009. In April 2010, the end date of the RO in Great Britain was extended from 2027 to 2037.
32. [Chapter 2](#) of Part 2 contains powers for a contract for difference scheme (CFD) which would be made available to new renewable generation. Once the CFD becomes available, the EMR White Paper proposed a transition phase where new renewable generating stations would be able to choose between the RO or a CFD.
33. The EMR White Paper proposed that the transition phase would end on 31st March 2017, after which the RO would be closed to new generating capacity. The RO would continue to operate for the generating capacity which accredited under it before it closed to new generating capacity.
34. In order to reduce the risk of volatility in the value of a renewables obligation certificate in the final years of the RO, the EMR White Paper proposed that from 2027 the obligation on electricity suppliers to submit renewables obligation certificates should be replaced by an obligation on a body, such as the Authority, to purchase the certificates at a fixed price. The EMR Technical Update proposed that the cost of purchasing the certificates should be funded by a levy on electricity suppliers. This Chapter provides powers for the Secretary of State to implement these proposals.

Chapter 8: Emissions performance standard

35. The Emissions Performance Standard (EPS) imposes an “emissions limit duty” on operators of new fossil-fuel plant. The duty requires operators of a fossil-fuel plant to ensure that the plant does not emit more than a specified amount of carbon dioxide (CO₂) in each year of their operation, thereby reinforcing the existing policy (set out in national policy statements designated under the Planning Act 2008: National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)) that no new coal-fired power plant should be consented unless equipped with carbon capture and storage (CCS) technology.
36. The Chapter establishes the EPS as an annual limit, equivalent to 450g of CO₂ per kilowatt hour of electricity for a plant operating at baseload. For the purpose of the EPS, “baseload” is assumed as a plant operating at full output for 85% of the operating hours available in a year. The annual limit is in the form of an annual mass of emissions, i.e.

tonnes of CO₂ per annum. The limit is around half the level expected of new coal plant when operating unabated, which is nearly 800g/kWh. It is, however, above the level of modern combined cycle gas-fired power plant, which operate at below 400g/kWh.

37. The provisions in this Chapter, in addition to setting out the emissions limit duty, also provide for the circumstances in which it may be suspended or modified and provides powers for an appropriate national authority to make arrangements for establishing a monitoring and enforcement regime. They also provide that carbon capture and storage projects will be exempted from the emissions limit duty for a period of 3 years commencing from the start of operation of the CCS system. The exemption is available until end 2027.
38. The EPS is also included under section 66, which requires the Secretary of State to carry out a review of much of Part 2, as soon as is reasonably practicable, five years after Royal Assent, and report his or her conclusions to Parliament.

Part 3: Nuclear Regulation

Chapter 1: The ONR's purposes

39. **Chapter 1** of Part 3 sets out the purposes of the Office for Nuclear Regulation (“ONR”). These five purposes define the areas of responsibility of the ONR and where it will be able to exercise functions. The ONR’s purposes also serve to shape the purposes for which the Secretary of State can make regulations under Chapter 2.

Chapter 2: Nuclear regulations

40. **Chapter 2** provides powers to the Secretary of State to make nuclear regulations so the legislative framework can allow for flexibility in the regulation of the nuclear industry and for the regime to react effectively in this evolving area.

Chapter 3: Office for Nuclear Regulation

41. **Chapter 3** establishes the ONR as a body corporate. The Chapter sets out how the ONR will be structured and explains how it will operate, including: the constitution of the ONR Board; how the organisation will report and be accountable for its activities and delivery of its objectives; and its financial arrangements.

Chapter 4: Functions of the ONR

42. The provisions in this Chapter confer on the ONR a variety of powers and duties. These functions reflect a number of the roles which the ONR is to perform. Its primary role is to regulate the nuclear industry in the areas set out in its five purposes.

Chapter 5: Supplementary

43. This Chapter covers a range of supplementary matters. These include staff and property transfers, supplementary provision relating to criminal offences under Part 3 of the Act and minor and consequential amendments to existing legislation.

Part 4: Government Pipe-Line and Storage System

44. The government pipe-line and storage system consists of around 2,500 kilometres of cross-country pipelines of differing diameters, together with storage depots, associated pumping stations, receipt and delivery facilities and other ancillary equipment. The system receives, stores, transports and delivers light oil petroleum products for military and civil users. In peacetime the military use amounts to only around 10% of the current throughput and 30% of the storage capacity of the system. It distributes 40% of aviation fuel within the United Kingdom.

45. The powers under which the system was constructed and under which rights were acquired in relation to it were many and various. Elements of the system were constructed on, or under, what was, or remains, publicly owned or acquired land. Much of the system, however, was constructed on or under private land. Some elements of the system were constructed on or under private land under statutory powers. Other elements were built by agreement with the landowner at the time.
46. [Part 4](#) makes provision relating to the government pipe-line and storage system, in particular: the rights of the Secretary of State in relation to that system; registration of those rights; compensation in respect of the creation of new rights or the exercise of rights; that the rights may be transferred; and, the application of the Pipe-lines Act 1962 to the system.

Part 5: Strategy and Policy Statement

47. [Part 5](#) of the Act introduces a new document, a strategy and policy statement, which will set out the Government's strategic priorities for the energy sector in Great Britain, describe the roles and responsibilities of various players who implement, or are affected by, GB energy policy and describe policy outcomes which are to be achieved by the Authority and the Secretary of State when regulating the sector. The strategy and policy statement will replace existing guidance for the Authority on social and environmental matters. These provisions implement the recommendations of the Government's review of the Authority published in July 2011.

Part 6: Consumer Protection and Miscellaneous

Consumer Protection

48. The provisions in this Chapter are aimed at directly supporting consumers' interests by reforming the tariffs available to them and providing a means of direct redress from energy companies. The provisions establish powers for the Secretary of State to establish a tariff regime for gas and electricity suppliers that will ensure consumers are on the cheapest deal from their supplier that meets their preferences. They allow the Secretary of State to extend the licence regime governed by the Authority to third-party intermediaries, such as switching websites. They also introduce a new enforcement power to require energy companies which breach licence conditions to provide redress to consumers.

Fuel Poverty

49. The sections amending the Warm Homes and Energy Conservation Act 2000 require a new objective for addressing fuel poverty in England to be set through secondary legislation, together with a target date for achieving the new objective. The Secretary of State is separately required to prepare and publish a strategy for achieving the new objective. The sections replace the existing provisions of section 2 of that Act insofar as they apply to England.

Feed-in Tariffs

50. The Feed-in tariff scheme established under sections 41 to 43 of the Energy Act 2008 currently applies to installations with a capacity of 5 megawatts or less. Section 146 confers a power on the Secretary of State to increase the specified maximum capacity of installations eligible for the scheme to 10 megawatts.

Offshore Transmission

51. Developers constructing an offshore generating station have the choice of also constructing the offshore transmission assets for the purposes of connecting the electricity generated to the National Electricity Transmission System (NETS), before transferring the assets to an Offshore Transmission Owner (OFTO) appointed through

*These notes refer to the Energy Act 2013 (c.32)
which received Royal Assent on 18 December 2013*

a competitive tender process (the generator build model). Section 4(1)(b) of the Electricity Act 1989 prohibits the transmission of electricity to any premises without a licence. Section 147 amends section 4 in respect of specific transmission activities to exclude offshore transmission during a commissioning period in certain circumstances.

Fees for services provided for energy resilience purposes

52. [Section 148](#) introduces a power for the Secretary of State to charge fees for services or facilities provided in the exercise of energy resilience powers.

Nuclear decommissioning costs

53. Under Chapter 1 of Part 3 of the Energy Act 2008 the Secretary of State can recover from prospective nuclear operators the costs incurred in obtaining advice in considering a funded decommissioning programme (“FDP”) once submitted to him or her for approval. The new provisions will extend the circumstances under which the Secretary of State can recover these costs when considering FDP proposals, related agreements and agreements for the disposal of hazardous nuclear waste.

Smoke and carbon monoxide alarms

54. [Section 149](#) introduces a power for the Secretary of State to make regulations imposing duties on landlords of residential properties in England to install smoke and carbon monoxide alarms in their properties. The section also makes provision about the enforcement of such duties.