EXPLANATORY NOTES

Explanatory notes to the Bill, prepared by the Department of Energy and Climate Change, are published separately as Bill 100—EN.

EUROPEAN CONVENTION ON HUMAN RIGHTS

Secretary Edward Davey has made the following statement under section 19(1)(a) of the Human Rights Act 1998:

In my view the provisions of the Energy Bill are compatible with the Convention rights.

Energy Bill

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Make provision for or in connection with reforming the electricity market for purposes of encouraging low carbon electricity generation or ensuring security of supply; for the establishment and functions of the Office for Nuclear Regulation; about the government pipe-line and storage system and rights exercisable in relation to it; about the designation of a strategy and policy statement; for the making of orders requiring regulated persons to provide redress to consumers of gas or electricity; about offshore transmission of electricity during a commissioning period; for imposing further fees in respect of nuclear decommissioning costs; and for connected purposes.

BE IT ENACTED by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

PART 1

ELECTRICITY MARKET REFORM

CHAPTER 1

GENERAL CONSIDERATIONS

1 General considerations relating to this Part

(1) In exercising the function of making—
- (a) regulations under section 2;
- (b) an order under section 13;
- (c) a modification under section 16;
- (d) regulations under section 17;
- (e) a modification under section 25;
- (f) a modification under section 29;
- (g) an order under section 30;

the Secretary of State must have regard to the matters mentioned in subsection (2).

(2) The matters are—

(a) the duties of the Secretary of State under sections 1 and 4(1)(b) of the Climate Change Act 2008 (carbon targets and budgets);

(b) ensuring the security of supply to consumers of electricity;

(c) the likely cost to consumers of electricity;

(d) the target set out in Article 3(1) of, and Annex 1 to, the renewables directive (use of energy from renewable sources).

(3) In subsection (2)(d) "the renewables directive" means Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources.

CHAPTER 2

CONTRACTS FOR DIFFERENCE

2 Regulations to encourage low carbon electricity generation

(1) The Secretary of State may for the purpose of encouraging low carbon electricity generation make regulations about contracts for difference between a CFD counterparty and an eligible generator.

(2) A contract for difference is a contract—

(a) certain payments under which are to be funded by electricity suppliers (see further section 5), and

(b) which a CFD counterparty is required to enter into by virtue of section 6;

and such a contract is referred to in this Chapter as a "CFD".

(3) For the purposes of this Chapter—

"CFD counterparty" is to be construed in accordance with section 3(2);

"eligible generator" is to be construed in accordance with section 6(3);

"low carbon electricity generation" means electricity generation which in the opinion of the Secretary of State will contribute to a reduction in emissions of greenhouse gases;

"regulations" means regulations under this section.

(4) In subsection (3) "greenhouse gas" has the meaning given by section 92(1) of the Climate Change Act 2008.

(5) The provision which may be made by regulations includes, but is not limited to, the provision described in this Chapter.

(6) Regulations may—

(a) include incidental, supplementary and consequential provision;

(b) make transitory or transitional provision or savings;

(c) make different provision for different cases or circumstances or for different purposes;

(d) make provision subject to exceptions.

(7) Regulations are to be made by statutory instrument.

(8) An instrument containing regulations which make provision falling within section 5, 6 or 7 (whether or not also making any other provision) may not be

made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.

(9) Any other instrument containing regulations is subject to annulment in pursuance of a resolution of either House of Parliament.

3 Designation of a CFD counterparty

(1) The Secretary of State may by order made by statutory instrument designate an eligible person to be a counterparty for contracts for difference.

(2) A person designated under this section is referred to in this Chapter as a "CFD counterparty".

(3) A person is eligible if the person is—
  (a) a company formed and registered under the Companies Act 2006, or
  (b) a public authority, including any person any of whose functions are of a public nature.

(4) A designation may be made only with the consent of the person designated.

(5) More than one designation may have effect under this section.

(6) A designation ceases to have effect if—
  (a) the Secretary of State by order made by statutory instrument revokes the designation, or
  (b) the person withdraws consent to the designation by giving not less than 28 days' notice in writing to the Secretary of State.

(7) At any time after the first designation has effect, the Secretary of State must, so far as reasonably practicable, exercise the power to designate so as to ensure that at least one designation has effect under this section.

(8) Schedule 1 (which makes provision about schemes to transfer property, rights and liabilities from a person who has ceased to be a CFD counterparty to a person who is a CFD counterparty) has effect.

(9) As soon as reasonably practicable after a designation ceases to have effect the Secretary of State must make a transfer scheme under Schedule 1 to ensure the transfer of all rights and obligations under any CFD to which the person who has ceased to be a CFD counterparty was a party.

(10) Regulations may include provision about the period of time for which, and the circumstances in which, a person who has ceased to be a CFD counterparty is to continue to be treated as a CFD counterparty for the purposes of the regulations.

4 Duties of a CFD counterparty

(1) A CFD counterparty must act in accordance with—
  (a) any direction given by the Secretary of State or the national system operator by virtue of this Chapter;
  (b) any provision included in regulations.

(2) In this Chapter "national system operator" means the person operating the national transmission system for Great Britain (and for this purpose

"transmission system" has the same meaning as in EA 1989 - see section 4(4) of that Act).

5 Supplier obligation

(1) *Regulations must make provision for electricity suppliers to pay a CFD counterparty for the purpose of enabling the counterparty to make payments under CFDs.*

(2) *Regulations may make provision for electricity suppliers to pay a CFD counterparty for the purpose of enabling the counterparty—*

(a) *to meet such other descriptions of its costs as the Secretary of State considers appropriate;*

(b) *to hold sums in reserve;*

(c) *to cover losses in the case of insolvency or default of an electricity supplier.*

(3) *Regulations may make provision to require electricity suppliers to provide financial collateral to a CFD counterparty (whether in cash, securities or any other form).*

(4) Provision made by virtue of this section may include provision for—

(a) a CFD counterparty to determine the form and terms of any financial collateral;

(b) a CFD counterparty to calculate or determine, in accordance with such criteria as may be provided for by or under the regulations, amounts which are owed by an electricity supplier or are to be provided as financial collateral by an electricity supplier;

(c) the issuing of notices by a CFD counterparty to require the payment or provision of such amounts;

(d) the enforcement of obligations arising under such notices.

(5) Provision made by virtue of subsection (4)(b) may provide for anything which is to be calculated or determined under the regulations to be calculated or determined by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the regulations.

(6) Provision made by virtue of subsection (4)(d) may include provision—

(a) about costs;

(b) about interest on late payments under notices;

(c) about references to arbitration;

(d) about appeals.

(7) In this section "electricity supplier", subject to any provision made by regulations, means a person who is a holder of a licence to supply electricity under—

(a) section 6(1)(d) of EA 1989, or

(b) Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

6 Direction to offer to contract

(1) The Secretary of State or the national system operator may, in accordance with provision made by regulations, direct a CFD counterparty to offer to contract with a person specified in the direction, on terms specified in the direction.

(2) A person may be specified in a direction under subsection (1) only if that person is an eligible generator.

(3) Regulations must make provision defining who is an "eligible generator" for the purposes of a direction under this section.

(4) Regulations may make further provision about a direction under this section and in particular about—
  (a) the circumstances in which a direction may or must be given;
  (b) the terms which may or must be specified in a direction.

(5) Provision falling within subsection (4) may include provision for—
  (a) the determination of a matter on a competitive basis,
  (b) calculations or determinations to be made under the regulations, including by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the regulations.

(6) Regulations may make provision about appeals against a decision of the Secretary of State or the national system operator not to issue a direction by virtue of this section.

(7) A direction may not be given under this section in relation to an electricity generating station in Northern Ireland unless the Department of Enterprise, Trade and Investment consent to the direction.

(8) But regulations may, with the consent of that Department, include provision for circumstances in which consent under subsection (7) is not required.

(9) In subsection (7) "Northern Ireland" includes so much of the internal waters and territorial sea of the United Kingdom as are adjacent to Northern Ireland.

7 Payments to electricity suppliers

(1) Regulations may make provision about the amounts which must be paid by a CFD counterparty to electricity suppliers.

(2) In this section "electricity supplier", subject to any provision made by regulations, means a person who is a holder of a licence to supply electricity under—
  (a) section 6(1)(d) of EA 1989; or
  (b) Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

8 Application of sums held by a CFD counterparty

(1) Regulations may make provision for apportioning sums—
  (a) received by a CFD counterparty from electricity suppliers under provision made by virtue of section 5;
  (b) received by a CFD counterparty under a CFD,

in circumstances where the CFD counterparty is unable fully to meet obligations under a CFD.

(2) Provision made by virtue of subsection (1) may include provision about the meaning of "unable fully to meet obligations under a CFD".

(3) *Regulations may make provision about the application of sums held by a CFD counterparty.*

(4) *Provision made by virtue of subsection (3) may include provision that sums are to be paid, or not to be paid, into the Consolidated Fund.*

9 Information and advice

(1) Regulations may make provision about the provision and publication of information.

(2) Provision made by virtue of subsection (1) may include provision—

(a) for the Secretary of State to require the national system operator to provide advice to the Secretary of State;

(b) for the Secretary of State to require a CFD counterparty, the Authority, the Northern Ireland Authority for Utility Regulation or the Northern Ireland system operator to provide advice to the Secretary of State or any other person specified in the regulations;

(c) for the Secretary of State to require a CFD counterparty, the national system operator, the Authority, the Northern Ireland Authority for Utility Regulation, the Northern Ireland system operator or a generator who is party to a CFD to provide information to the Secretary of State or any other person specified in the regulations;

(d) for the national system operator to require information to be provided to it by a CFD counterparty, a generator who is party to a CFD or the Northern Ireland system operator;

(e) for a CFD counterparty to require information to be provided to it by electricity suppliers or the Northern Ireland system operator;

(f) for the classification and protection of confidential or sensitive information;

(g) for the enforcement of any requirement imposed by virtue of paragraphs (a) to (f).

(3) In subsection (2)—

(a) "Northern Ireland system operator" means the holder of a licence under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1));

(b) "electricity supplier", subject to any provision made by regulations, means a person who is a holder of a licence to supply electricity under—

(i) section 6(1)(d) of EA 1989; or

(ii) Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

(4) The prohibition on disclosure of information by—

(a) section 105(1) of the Utilities Act 2000;

(b) Article 63(1) of the Energy (Northern Ireland) Order 2003 (S.I. 2003/419 (N.I.6));

does not apply to a disclosure required by virtue of this section.

10 Functions of the Authority

Regulations may make provision conferring functions on the Authority for the purpose of offering advice to, or making determinations on behalf of, a party to a CFD.

11 Regulations: further provision

(1) Regulations may make provision—

(a) to require a CFD counterparty to enter into arrangements or to offer to contract for purposes connected to a CFD;

(b) specifying things that a CFD counterparty may or must do, or things that a CFD counterparty may not do;

(c) conferring on the Secretary of State further powers to direct a CFD counterparty to do, or not to do, things specified in the regulations or the direction.

(2) Provision made by virtue of subsection (1)(b) or (c) includes provision requiring consultation with, or the consent of, the Secretary of State in relation to—

(a) the enforcement of obligations under a CFD;

(b) a variation or termination of a CFD;

(c) the settlement or compromise of a claim under a CFD;

(d) the conduct of legal proceedings relating to a CFD;

(e) the exercise of rights under a CFD.

12 Enforcement

(1) Regulations may make provision for requirements under the regulations to be enforceable—

(a) by the Authority as if they were relevant requirements on a regulated person for the purposes of section 25 of EA 1989;

(b) by the Northern Ireland Authority for Utility Regulations as if they were relevant requirements on a regulated person for the purposes of Article 41A of the Energy (Northern Ireland) Order 2003 (S.I 2003/419 (N.I. 6)).

(2) Provision made by virtue of subsection (1)(a) may include provision about the enforcement of requirements imposed on the national system operator.

(3) Provision made by virtue of subsection (1)(b) may be made in relation only to the enforcement of requirements imposed on the holder of a licence under Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

13 Order for maximum cost and targets

(1) The Secretary of State may by order provide for—

(a) the power to give a direction under section 6 not to be exercisable if a maximum cost incurred or to be incurred by a CFD counterparty has been reached (such cost to be calculated in accordance with provision made by or under the order);

(b) a power for the Secretary of State to direct the national system operator not to give a direction by virtue of this Chapter if the Secretary of State

believes that by virtue of the direction being given a cost greater than the maximum cost provided for by the order would be incurred;

(c) any other targets to be met or taken into account by the national system operator in the giving of directions under this Chapter.

(2) If more than one designation has effect under section 3, the reference in subsection (1)(a) is a reference to all CFD counterparties.

(3) Provision made by virtue of subsection (1)(a) may provide for anything which is to be calculated under the order to be calculated by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the order.

(4) Provision made by virtue of subsection (1)(c) may include targets relating to—

(a) the means by which electricity is to be generated;

(b) the generating capacity of electricity generating stations;

(c) the geographical location of electricity generating stations.

(5) An order under this section is to be made by statutory instrument and a statutory instrument containing an order may not be made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.

14 Consultation

(1) Before making regulations under this Chapter or an order under section 13 the Secretary of State must consult—

(a) the Scottish Ministers,

(b) the Welsh Ministers,

(c) the Department of Enterprise, Trade and Investment,

(d) any person who is a holder of a licence to supply electricity under section 6(1)(d) of EA 1989,

(e) any person who is a holder of a licence under Article 10(1)(b) or (c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)) (transmission or supply licence),

(f) the Authority,

(g) the national system operator, and

(h) such other persons as the Secretary of State considers it appropriate to consult.

(2) The requirement to consult may be satisfied by consultation before, as well as consultation after, the passing of this Act.

15 Shadow directors, etc.

Neither the Secretary of State nor the national system operator is, by virtue of the exercise of a power conferred by or by virtue of this Chapter, to be regarded as—

(a) a person occupying in relation to a CFD counterparty the position of director;

(b) being a person in accordance with whose directions or instructions the directors of a CFD counterparty are accustomed to act;

(c) exercising any function of management in a CFD counterparty;

(d) a principal of a CFD counterparty.

16 Licence modifications

(1) The Secretary of State may modify—

(a) a condition of a particular licence under section 6(1)(a), (b) or (c) of EA 1989 (generation, transmission and distribution licences);

(b) the standard conditions incorporated in licences under that provision by virtue of section 8A(1A) of that Act;

(c) a document maintained in accordance with the conditions of licences under that provision, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may make a modification under subsection (1) only for the purpose of—

(a) conferring functions on the national system operator in connection with its functions by or by virtue of this Chapter;

(b) allowing or requiring services to be provided to a CFD counterparty;

(c) enforcing obligations under a CFD.

(3) Provision included in a licence, or in a document or agreement relating to licences, by virtue of the power under subsection (1) may in particular include provision of a kind that may be included in regulations.

(4) Before making a modification under this section, the Secretary of State must consult—

(a) the Scottish Ministers,

(b) the Welsh Ministers,

(c) the holder of any licence being modified,

(d) any person who is a holder of a licence to supply electricity under section 6(1)(d) of EA 1989,

(e) any person who is a holder of a licence to supply electricity under Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)),

(f) the Department of Enterprise, Trade and Investment,

(g) the Authority, and

(h) such other persons as the Secretary of State considers it appropriate to consult.

(5) Subsection (4) may be satisfied by consultation before, as well as by consultation after, the passing of this Act.

CHAPTER 3

CAPACITY MARKET

17 Power to make electricity capacity regulations

(1) The Secretary of State may by regulations make provision for the purpose of providing capacity to meet the demands of consumers for the supply of electricity in Great Britain.

(2) Regulations under this section are referred to in this Chapter as "electricity capacity regulations".

(3) In subsection (1) "providing capacity" means providing electricity or reducing demand for electricity; and electricity capacity regulations may make further provision about the meaning of "providing electricity" or "reducing demand for electricity".

(4) The provision that may be made in electricity capacity regulations includes, but is not limited to, the provision described in this Chapter.

(5) In this Chapter "national system operator" means the person operating the national transmission system for Great Britain (and for this purpose "transmission system" has the same meaning as in EA 1989 - see section 4(4) of that Act).

18 Capacity agreements

(1) Electricity capacity regulations may make provision about capacity agreements.

(2) Subject to any further provision made under this Chapter, a capacity agreement is an instrument by virtue of which—

(a) the holder of the capacity agreement ("the capacity provider") may be required to provide capacity;

(b) all electricity suppliers may be required to make payments ("capacity payments") to or for the benefit of capacity providers;

(c) capacity providers may be required to make payments ("capacity incentives") to or for the benefit of all electricity suppliers.

(3) Provision included in electricity capacity regulations for the purposes of subsection (2) may make provision about the meaning of "electricity supplier".

(4) Provision included in electricity capacity regulations by virtue of subsection (1) may include provision about—

(a) the terms of a capacity agreement;

(b) the circumstances in which, and the process by which, a capacity agreement may or must be issued;

(c) the persons who may be capacity providers;

(d) the circumstances in which capacity must be available;

(e) the duration of a capacity agreement;

(f) the means by which capacity payments or capacity incentives are to be calculated;

(g) a person or body who is to administer the settlement of capacity payments or capacity incentives ("a settlement body");

(h) the enforcement of the terms of a capacity agreement;

(i) the resolution of disputes relating to a capacity agreement;

(j) the circumstances in which a capacity agreement may be terminated or varied;

(k) the circumstances in which a capacity agreement may be assigned or traded.

(5) Provision falling within subsection (4) includes provision—

(a) conferring on the national system operator the function of issuing capacity agreements;

(b) relating to the outcome of a capacity auction (see section 19);

(c) about any conditions that must be satisfied by or in relation to a person before that person may enter a capacity auction or become a capacity provider;

(d) about any matters in relation to which a person must satisfy the national system operator before the person may enter a capacity auction or become a capacity provider.

(6) Provision made by virtue of this section may include provision requiring a person to consent to the inspection of plant or premises, either before or after that person becomes a capacity provider.

19 Capacity auctions

(1) Electricity capacity regulations may make provision for the determination on a competitive basis of who may be a capacity provider (referred to in this Chapter as a "capacity auction").

(2) Provision included in electricity capacity regulations by virtue of subsection (1) may include provision—

(a) for the national system operator to run a capacity auction;

(b) about the circumstances in which a capacity auction may or must be held;

(c) about the amount of capacity in relation to which a determination may be made;

(d) about the intervals at which a capacity auction may or must be held;

(e) about the process by which a capacity auction may or must be run;

(f) about the manner in which the Secretary of State may decide whether and how to exercise any function in relation to capacity auctions;

(g) about appeals relating to eligibility for, or the outcome of, capacity auctions.

(3) Provision falling within subsection (2)(a) may include provision—

(a) requiring the national system operator to prepare and publish rules or guidance about capacity auctions;

(b) about any process to be followed in preparing and publishing any such rules or guidance.

(4) Provision falling within subsection (2)(c) may confer on the Secretary of State or the Authority (but not on any other person) the function of deciding the amount of capacity in relation to which a determination may be made.

(5) Provision falling within subsection (2)(f) may include provision about—

(a) the frequency with which a decision will be made and reviewed;

(b) the persons who will be consulted before a decision is made;

(c) the matters to be taken into account in reaching a decision.

20 Settlement body

(1) *Electricity capacity regulations may make provision for payments to be made by electricity suppliers or capacity providers to a settlement body (see section 18(4)(g)) for the purpose of enabling the body—*

(a) *to meet such descriptions of its costs as the Secretary of State considers appropriate;*

(b) *to hold sums in reserve;*

(c) *to cover losses in the case of insolvency or default of an electricity supplier or capacity provider.*

(2) *Electricity capacity regulations may make provision to require electricity suppliers or capacity providers to provide financial collateral to a settlement body (whether in cash, securities or any other form).*

(3) Provision made by virtue of this section may include provision for—

(a) a settlement body to determine the form and terms of any financial collateral;

(b) a settlement body to calculate or determine, in accordance with such criteria as may be provided for by or under the regulations, amounts which are owed by an electricity supplier or capacity provider or are to be provided as financial collateral by an electricity supplier or capacity provider;

(c) the issuing of notices by a settlement body to require the payment or provision of such amounts.

(4) Provision made by virtue of subsection (3)(b) may provide for anything which is to be calculated or determined under the regulations to be calculated or determined by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the regulations.

21 Functions of the Authority or the national system operator

Electricity capacity regulations may make provision to confer functions on the Authority or the national system operator.

22 Other requirements

(1) Electricity capacity regulations may impose requirements otherwise than under a capacity agreement.

(2) The persons on whom requirements may be imposed by virtue of subsection (1) include—

(a) any person who is a holder of a licence under section 6(1) of EA 1989;

(b) any other person carrying out functions in relation to capacity agreements;

(c) any other person who is, or has ceased to be, a capacity provider.

(3) Requirements which may be imposed by virtue of subsection (1) include requirements—

(a) relating to the manner in which functions are to be exercised;

(b) relating to restrictions on the use of generating plant;

(c) relating to participation in a capacity auction;

(d) relating to the inspection of plant or property.

23 Electricity capacity regulations: information and advice

(1) Electricity capacity regulations may make provision about the provision and publication of information.

(2) Provision included in electricity capacity regulations by virtue of subsection (1) may include provision—

(a) for the Secretary of State to require the Authority, the national system operator or any other person specified in the regulations to provide information or advice to the Secretary of State or any other person so specified;

(b) for the Authority or the national system operator to require information to be provided to it by any person specified in the regulations for any purpose so specified;

(c) for the Secretary of State to require capacity providers and electricity suppliers to share information about the operation of capacity agreements with each other or with any other person so specified;

(d) for the publication by any person so specified of any information or advice so specified;

(e) for the classification and protection of confidential or sensitive information.

(3) The prohibition on disclosure of information by section 105(1) of the Utilities Act 2000 does not apply to a disclosure required by virtue of this section.

24 Enforcement and dispute resolution

(1) Electricity capacity regulations may make provision about the enforcement of any obligation or requirement imposed by the regulations.

(2) Provision in electricity capacity regulations about enforcement or the resolution of disputes may include provision conferring functions on any public body or any other person.

(3) Provision made by virtue of this section may include provision—

(a) about powers to impose financial penalties;

(b) for requirements under the electricity capacity regulations to be enforceable by the Authority as if they were relevant requirements on a regulated person for the purposes of section 25 of EA 1989;

(c) about reference to arbitration;

(d) about appeals.

25 Licence modifications for the purpose of the capacity market

(1) The Secretary of State may, for any purpose related to provision that is made by this Chapter, or any purpose for which provision may be made under this Chapter, modify—

(a) a condition of a particular licence under section 6(1)(a) to (e) of EA 1989 (generation, transmission, distribution, supply and interconnector licences);

(b) the standard conditions incorporated in licences under those provisions by virtue of section 8A of that Act;

(c) a document maintained in accordance with the conditions of licences under those provisions, or an agreement that gives effect to a document so maintained.

(2) A modification under this section may in particular include a modification—

(a) to provide for a new document to be prepared and maintained in accordance with the conditions of a licence;

(b) to provide for an agreement to give effect to a document so maintained;

(c) to confer functions on the national system operator.

(3) Provision included in a licence, or in a document or agreement relating to licences, by virtue of the modification power may in particular include provision of any kind that may be included in electricity capacity regulations.

(4) Before making a modification under this section, the Secretary of State must consult—

(a) the holder of any licence being modified,

(b) the Authority, and

(c) such other persons as the Secretary of State considers it appropriate to consult.

(5) Subsection (4) may be satisfied by consultation before, as well as by consultation after, the passing of this Act.

26 Amendment of enactments

The Secretary of State may by regulations, for the purpose of or in connection with any provision made by or by virtue of this Chapter—

(a) amend or repeal section 47ZA of EA 1989 (annual report by Authority on security of electricity supply);

(b) amend section 172 of the Energy Act 2004 (annual report on security of energy supplies);

(c) amend section 25 of and Schedule 6A to EA 1989 (enforcement of obligations of regulated persons);

(d) make such provision amending, repealing or revoking any other enactment as the Secretary of State considers appropriate in consequence of provision made by or by virtue of this Chapter.

27 Principal objective and general duties

Sections 3A to 3D of EA 1989 (principal objective and general duties) apply in relation to functions of the Authority conferred by or by virtue of this Chapter as they apply in relation to functions under Part 1 of that Act.

28 Regulations under Chapter 3

(1) Regulations under this Chapter may—

(a) include incidental, supplementary and consequential provision;

(b) make transitory or transitional provision or savings;

(c) make different provision for different cases or circumstances or for different purposes;

(d) make provision subject to exceptions.

(2) Before making any regulations under this Chapter, the Secretary of State must consult—

(a) the Authority,

(b) any person who is a holder of a licence to supply electricity under section 6(1)(d) of EA 1989,

(c) such other persons as the Secretary of State considers it appropriate to consult.

(3) Subsection (2) may be satisfied by consultation before, as well as consultation after, the passing of this Act.

(4) Regulations under this Chapter must be made by statutory instrument.

(5) An instrument containing (whether alone or with other provision)—
  (a) the first set of electricity capacity regulations;
  (b) regulations which make provision amending or repealing a provision of an enactment contained in primary legislation,

may not be made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.

(6) A statutory instrument to which subsection (5) does not apply and containing regulations under this Chapter is subject to annulment in pursuance of a resolution of either House of Parliament.

CHAPTER 4

CONFLICTS OF INTEREST AND CONTINGENCY ARRANGEMENTS

29 Modifications of transmission and other licences: business separation

(1) The Secretary of State may modify—
  (a) a condition of a particular licence under section 6(1)(a) to (e) of EA 1989 (generation, transmission, distribution, supply and interconnector licences);
  (b) the standard conditions incorporated in licences under those provisions by virtue of section 8A of that Act;
  (c) a document maintained in accordance with the conditions of licences under section 6(1)(a) to (e) of that Act, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may make a modification under subsection (1) only for the purpose of imposing measures for or in connection with securing an appropriate degree of business separation between the carrying on of—
  (a) system operation functions (or any particular such function), and
  (b) any other functions (including, in a case where a measure relates to a particular system operation function, other system operation functions).

(3) "System operation functions" are—
  (a) functions authorised under a transmission licence of co-ordinating and directing the flow of electricity onto and over a transmission system by means of which the transmission of electricity takes place, and
  (b) EMR functions.

(4) A degree of business separation is "appropriate" for the purposes of subsection (2) if the Secretary of State determines it to be necessary or desirable as a consequence of the conferral of EMR functions.

(5) In making that determination, the Secretary of State must have regard to the extent to which a measure of the kind mentioned in subsection (2) may affect the efficient and effective carrying on of system operation functions and other functions authorised under a transmission licence.

(6) The measures referred to in subsection (2) include, in particular, measures for or in connection with securing any of the following—

(a) the body corporate that carries on EMR functions does not carry on other functions;

(b) limitations are in place in respect of the control or influence that may be exercised over that body by another group undertaking (within the meaning of the Companies Acts - see section 1161 of the Companies Act 2006);

(c) separations are in place between—

(i) the locations where system operation functions, and other functions, are carried on;

(ii) the information technology systems used for the purposes of the carrying on of system operation functions and other functions;

(d) the accounting arrangements in relation to system operation functions are separate from those in relation to other functions;

(e) persons who participate in the carrying on of system operation functions do not participate in the carrying on of other functions;

(f) persons with access to information obtained in the carrying on of system operation functions do not have access to information obtained in the carrying on of other functions.

(7) The power conferred by subsection (1) may be exercised so as to impose a requirement on a person holding a transmission licence—

(a) to prepare annual reports about how measures within subsection (2) have been put in place for the year in question, and

(b) to submit such reports to either or both of the Secretary of State and the Authority.

(8) Before making a modification under subsection (1), the Secretary of State must consult—

(a) the holder of any licence being modified,

(b) the Authority, and

(c) such other persons as the Secretary of State considers it appropriate to consult.

(9) Subsection (8) may be satisfied by consultation before, as well as by consultation after, the passing of this Act.

(10) In this section—

"EMR functions" means functions conferred by or by virtue of Chapter 2 (contracts for difference) or Chapter 3 (capacity market);

"transmission", "transmission licence" and "transmission system" have the same meaning as in Part 1 of EA 1989.

30 Power to transfer EMR functions

(1) The Secretary of State may by order provide that EMR functions carried out by the national system operator are instead to be carried out by an alternative delivery body.

(2) An order under subsection (1) may be made only if—

(a) the national system operator has requested the making of the order,

(b) an energy administration order is in force in relation to the national system operator,

(c) the unsatisfactory performance condition is met (see subsection (3)),

(d) it appears to the Secretary of State necessary or desirable to make the order as a result of a change, occurring after the coming into force of this section, in the persons having control of the national system operator (see subsection (4)), or

(e) it otherwise appears to the Secretary of State necessary or desirable to make the order in connection with furthering the purposes of—

(i) encouraging low carbon electricity generation (within the meaning of Chapter 2), or

(ii) providing capacity to meet the demands of consumers for the supply of electricity in Great Britain.

(3) The unsatisfactory performance condition is met if—

(a) it appears to the Secretary of State that the national system operator has been failing to carry out its EMR functions in an efficient and effective manner,

(b) the Secretary of State has given notice in writing to the national system operator providing particulars of the failure,

(c) a period of at least 6 months has passed since the giving of the notice, and

(d) it appears to the Secretary of State that the failure so specified is continuing.

(4) "Control", in relation to the national system operator, means the power of a person to secure—

(a) by means of the holding of shares or the possession of voting power in relation to the national system operator or any other body corporate, or

(b) as a result of any powers conferred by the articles of association or other document regulating the national system operator or any other body corporate,

that the affairs of the national system operator are conducted in accordance with the person's wishes.

(5) The Secretary of State must, subject to subsection (6), consult the national system operator before making an order under subsection (1) on the grounds mentioned in subsection (2)(e).

(6) Subsection (5) does not apply where the Secretary of State considers the urgency of the case makes it inexpedient to consult the national system operator before making the order.

(7) Where an EMR function has previously been transferred from the national system operator to an alternative delivery body by an order under subsection (1), the Secretary of State may by a further order provide that the function is instead to be carried out by—

(a) a different alternative delivery body, or

(b) the national system operator.

(8) "Alternative delivery body", in relation to an order under subsection (1) or (7), means such person as may be specified in the order.

(9) An order under subsection (1) or (7) that specifies as the alternative delivery body a person other than the Secretary of State requires the consent of that person.

(10) An order under subsection (7) providing for EMR functions to be carried out by the national system operator requires the consent of the national system operator.

(11) In this section—

"EMR functions" means functions conferred on the national system operator by or by virtue of Chapter 2 (contracts for difference) or Chapter 3 (capacity market);

"energy administration order" has the same meaning as in Chapter 3 of Part 3 of the Energy Act 2004 (see section 154(1) of that Act);

"national system operator" means the person operating the national transmission system for Great Britain (and for this purpose "transmission system" has the same meaning as in EA 1989 - see section 4(4) of that Act).

31 Orders under section 30: fees and other supplementary provision

(1) A transfer of functions order may provide for an alternative delivery body to require fees to be paid for, or in connection with, the performance of any EMR functions conferred on the body by virtue of the order.

(2) The amount of any such fee is the amount specified in, or determined by or in accordance with, the order.

(3) A transfer of functions order may relate—

(a) to all EMR functions that the national system operator or the alternative delivery body is carrying out, or

(b) only to such of those functions as are specified in the order.

(4) A transfer of functions order may—

(a) include incidental, supplementary and consequential provision;

(b) make transitory or transitional provision and savings;

(c) make different provision for different cases or circumstances or for different purposes.

(5) Consequential provision made under subsection (4)(a) may amend, repeal or revoke any provision made by or under an Act, whenever passed or made (including this Act).

(6) A transfer of functions order is to be made by statutory instrument.

(7) A statutory instrument containing a transfer of functions order is subject to annulment in pursuance of a resolution of either House of Parliament.

(8) Schedule 2 (which confers power on the Secretary of State to make transfer schemes in connection with the making of transfer of functions orders) has effect.

(9) If the Secretary of State makes a transfer of functions order under which any EMR functions of the national system operator are transferred to an alternative delivery body, the Secretary of State must consider the extent to which (if at all) a licence modification power should be exercised as a consequence of the national system operator ceasing to carry out the functions that are transferred.

(10) In subsection (9) "licence modification power" means a power conferred by section 16, 25 or 29 to modify—

(a) a condition of a transmission licence granted to the national system operator under section 6(1)(b) of EA 1989,

(b) the standard conditions incorporated in such licences under section 8A of that Act, or

(c) a document maintained in accordance with the conditions of such licences, or an agreement that gives effect to a document so maintained.

(11) In this section—

"alternative delivery body", "EMR functions" and "national system operator" have the same meaning as in section 30;

"transfer of functions order" means an order under section 30(1) or (7).

32 Energy administration orders

(1) The Energy Act 2004 is amended as follows.

(2) In section 154 (energy administration orders), in subsection (3) for "section 155" substitute "—

(a) section 155(1), and

(b) section 155(9) (if and to the extent that section 155(9) applies in relation to the company)."

(3) In section 155 (objective of an energy administration), after subsection (7) insert—

"(8) Subsection (9) applies if the company in relation to which an energy administration order is made has functions conferred by or by virtue of—

(a) Chapter 2 or 3 of Part 1 of the Energy Act 2013, or

(b) an order made under section 30 of that Act (power of Secretary of State to transfer certain functions).

(9) The objective of an energy administration (in addition to the objective mentioned in subsection (1)) is to secure—

(a) that those functions are and continue to be carried out in an efficient and effective manner; and

(b) that it becomes unnecessary, by one or both of the means mentioned in subsection (2), for the energy administration order to remain in force for that purpose.

(10) The duty under section 154(3), so far as it relates to the objective mentioned in subsection (9)—

(a) applies only to the extent that securing that objective is not inconsistent with securing the objective mentioned in subsection (1);

(b) ceases to apply in respect of any function of a company if an order is made under section 30 of the Energy Act 2013 as a result of which the function is transferred from that company to another person."

CHAPTER 5

INVESTMENT CONTRACTS

33 Investment contracts

Schedule 3 (which makes provision about investment contracts) has effect.

CHAPTER 6

ACCESS TO MARKETS ETC

34 Power to modify licence conditions etc: market participation and liquidity

(1) The Secretary of State may modify—

(a) a condition of a particular licence under section 6(1)(a) or (d) of EA 1989 (generation and supply licences);

(b) the standard conditions incorporated in licences under those provisions by virtue of section 8A of that Act;

(c) a document maintained in accordance with the conditions of licences under section 6(1)(a) or (d) of that Act, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may exercise the power in subsection (1) only for the following purposes—

(a) facilitating participation in the wholesale electricity market in Great Britain, whether by licence holders or others;

(b) promoting liquidity in that market.

(3) Modifications made by virtue of that power may include—

(a) provision imposing obligations in relation to the sale or purchase of electricity, including, in particular, obligations as to—

(i) the terms on which electricity is sold or purchased, and

(ii) the circumstances or manner in which electricity is sold or purchased;

(b) provision imposing restrictions on the sale or purchase of electricity to or from group undertakings;

(c) provision imposing obligations in relation to the disclosure or publication of information.

(4) For the purposes of subsection (3)(b), electricity is sold to or purchased from a group undertaking if the transaction is between undertakings one of which is a group undertaking in relation to the other.

For this purpose, "undertaking" and "group undertaking" have the same meanings as in the Companies Acts (see section 1161 of the Companies Act 2006).

35 Power to modify licence conditions etc to facilitate investment in electricity generation

(1) The Secretary of State may modify—

(a) a condition of a particular licence under section 6(1)(d) of EA 1989 (supply licences);

(b) the standard conditions incorporated in licences under that provision by virtue of section 8A of that Act;

(c) a document maintained in accordance with the conditions of licences under section 6(1)(d) of that Act, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may exercise the power in subsection (1) only for the purpose of facilitating investment in electricity generation by promoting availability of arrangements for the sale of electricity generated.

(3) Modifications made by virtue of that power may include provision imposing obligations in relation to arrangements for the purchase of electricity including, in particular, obligations in relation to—

(a) the terms of any such arrangements, including the terms on which electricity is purchased, and

(b) the circumstances or manner in which any such arrangements are made or offered.

36 Licence modifications under sections 34 and 35: further provisions

(1) A modification of a licence under section 34(1) or 35(1) may in particular include a modification—

(a) to provide for a new document to be required to be prepared and maintained in accordance with the conditions of such a licence;

(b) to provide for an agreement to give effect to a document so maintained.

(2) Before making modifications under section 34(1) or 35(1), the Secretary of State must consult—

(a) the holder of any licence being modified,

(b) the Authority, and

(c) such other persons as the Secretary of State considers it appropriate to consult.

(3) Subsection (2) may be satisfied by consultation before, as well as by consultation after, the passing of this Act.

CHAPTER 7

THE RENEWABLES OBLIGATION: TRANSITIONAL ARRANGEMENTS

37 Transition to certificate purchase scheme

(1) EA 1989 is amended as follows.

(2) After section 32M insert—

"32N The certificate purchase obligation

(1) The Secretary of State may make a certificate purchase order.

(2) A certificate purchase order is an order which imposes the certificate purchase obligation on—

(a) the purchasing body of GB certificates;

(b) the purchasing body of NI certificates.

(3) The certificate purchase obligation is that—

(a) the purchasing body of GB certificates must pay the redemption value of a GB certificate to the person presenting it;

(b) the purchasing body of NI certificates must pay the redemption value of a NI certificate to the person presenting it.

(4) The purchasing body of GB certificates is—

(a) the Authority, or

(b) such other eligible person as may be designated by the order as the purchasing body of GB certificates.

(5) The purchasing body of NI certificates is—

(a) the Northern Ireland authority, or

(b) such other eligible person as may be designated by the order as the purchasing body of NI certificates.

(6) A person is an "eligible person" for the purposes of designation under subsection (4)(b) if the person is—

(a) a CFD counterparty at the time when the designation is made, or

(b) the Secretary of State.

(7) A person is an "eligible person" for the purposes of designation under subsection (5)(b) if the person is a CFD counterparty at the time when the designation is made.

(8) Subsection (3) is subject to sections 32O to 32Z1.

32O Further provision about the certificate purchase obligation

(1) A certificate purchase order may make provision generally in relation to the certificate purchase obligation.

(2) A certificate purchase order may, in particular—

(a) specify the redemption value of certificates or provide for how the redemption value is to be calculated;

(b) provide for different redemption values for successive periods of time;

(c) authorise the adjustment of redemption values from time to time for inflation by a method specified in the order (including by reference to a specified scale or index, as it has effect from time to time, or to other specified data of any description);

(d) require the relevant purchasing body or the Secretary of State (if not the relevant purchasing body) to publish the redemption value of certificates by a specified deadline;

(e) provide for the manner in which a certificate is to be presented to the relevant purchasing body;

(f) provide for the certificate purchase obligation in relation to certificates issued in respect of electricity generated—

(i) using specified descriptions of renewable sources,

(ii) by specified descriptions of generating stations,

(iii) in specified ways, or

(iv) in other specified cases or circumstances,

to apply only up to a specified number of the certificates that are presented for payment in any specified period;

(g) provide that certificates in respect of electricity generated—

(i) using specified descriptions of renewable sources,
(ii) by specified descriptions of generating stations,
(iii) in specified ways, or
(iv) in other specified cases or circumstances,

are to be issued only up to such number of certificates in any specified period as may be specified or determined in accordance with the order;

(h) provide that the certificate purchase obligation is not to apply on presentation of a certificate unless—

(i) the certificate is presented by such a deadline as may be specified or determined in accordance with the order, and

(ii) any other specified conditions are met (whether in relation to the certificate, the person presenting it or other matters);

(i) provide for how the relevant purchasing body is to determine whether specified conditions are met;

(j) provide that the certificate purchase obligation in relation to a certificate is to be discharged by such a deadline as may be specified or determined in accordance with the order;

(k) authorise the relevant purchasing body to determine the manner in which payments under the certificate purchase obligation are to be made;

(l) authorise the relevant purchasing body to deduct from payments specified descriptions of fees or charges incurred in making the payments;

(m) provide for a certificate purchase levy (see section 32P);

(n) authorise the Secretary of State to make payments for the purpose of enabling the certificate purchase obligation to be discharged;

(o) impose such other obligations, or confer such other functions, on the relevant purchasing body as the Secretary of State considers appropriate.

(3) Once the redemption value in relation to a certificate is paid (less any deductions permitted under the order by virtue of subsection (2)(l)), the certificate purchase obligation in relation to that certificate is discharged (and the certificate is not to be presented for payment again).

(4) For the purposes of carrying out its functions under a certificate purchase order, the relevant purchasing body may—

(a) require a person presenting a certificate to provide such information or documentation as the body may reasonably need for such purposes, and

(b) determine the form in which, and the time by which, such information or documentation is to be supplied.

(5) The certificate purchase obligation does not apply in relation to a certificate unless the person presenting the certificate has complied with any requirements imposed under subsection (4).

32P Certificate purchase levy

(1) *A certificate purchase order may provide for a certificate purchase levy to be charged in connection with the provision of payments to the relevant purchasing body.*

(2) *A certificate purchase levy is a levy —*
- (a) *charged in respect of supplies of electricity that have been, or are expected to be, made in each specified period, and*
- (b) *payable in respect of each such period by persons who make, or are expected to make, the supplies.*

(3) The order may (without limiting the generality of section 32Y(1)(d)) provide for different rates or different amounts of levy to be charged—
- (a) in different cases or circumstances;
- (b) in relation to different specified periods.

(4) The order may secure that the levy is not to be charged in respect of particular descriptions of supplies of electricity.

(5) The order may provide for amounts of the levy received in respect of any period to be applied for the purpose of discharging the certificate purchase obligation in another period.

(6) The order may, in particular, make provision about any of the following matters—
- (a) what is a supply of electricity for the purposes of the levy;
- (b) when a supply of electricity is, or is expected to be, made for those purposes;
- (c) who makes, or is expected to make, a supply of electricity for those purposes;
- (d) the rates or amounts of the levy, or how such rates or amounts are to be determined;
- (e) payment of the levy, including deadlines for payment in respect of each period and interest in respect of late payment;
- (f) administration of the levy;
- (g) audit of information (whether by the administrator of the levy or a third party) including requirements for audits to be paid by the person whose information is subject to the audit;
- (h) provision of information, including its provision to third parties in specified circumstances;
- (i) enforcement of the levy;
- (j) insolvency of persons liable to pay the levy;
- (k) reviews and appeals;
- (l) the functions of the administrator in connection with the levy.

(7) The administrator of the levy, in the case of persons who make, or are expected to make, supplies of electricity in Great Britain, is—
- (a) the Authority, or
- (b) such other eligible person as may be designated by the order as the administrator in the case of such persons.

(8) The administrator of the levy, in the case of persons who make, or are expected to make, supplies of electricity in Northern Ireland, is—
- (a) the Northern Ireland authority, or

(b) such other eligible person as may be designated by the order as the administrator in the case of such persons.

(9) A person is an "eligible person" for the purposes of designation under subsection (7)(b) if the person is—

(a) a CFD counterparty at the time when the designation is made, or

(b) the Secretary of State.

(10) A person is an "eligible person" for the purposes of designation under subsection (8)(b) if the person is—

(a) a CFD counterparty at the time when the designation is made, or

(b) the Northern Ireland department.

(11) In a case where a person liable to pay the levy has made any overpayment or underpayment (whether arising because an estimate turns out to be wrong or otherwise), provision under subsection (6)(e) may require the amount of the overpayment or underpayment (including interest) to be set off against, or added to, any subsequent liability of the person to pay the levy.

(12) In a case where the amount received in respect of levy payments for a period falls short of the amount due for that period, provision under subsection (6)(e) or (j) may include a requirement on persons liable to pay the levy to make further payments, by the time and in the circumstances specified, of an amount calculated in the manner specified or determined in accordance with the order.

(13) Provision under subsection (6)(h) may provide for the administrator to determine the form in which any information that a person is required to give is to be given and the time by which it is to be given.

(14) Provision under subsection (6)(i) may—

(a) if the Authority is the administrator, apply sections 25 to 28 in relation to a requirement in respect of the levy imposed under the order on a person who is not a licence holder as if the person were a licence holder;

(b) in any other case, include provision for the imposition of penalties if a requirement in respect of the levy is breached (whether financial or not, but not including the creation of criminal offences).

32Q Use of levy payments

(1) Amounts payable in respect of the certificate purchase levy are to be paid to the administrator of the levy.

(2) Amounts received by the administrator under subsection (1) must be paid to—

(a) the purchasing body of GB certificates, or

(b) the purchasing body of NI certificates,

in accordance with such provision as may be contained in the order.

(3) Amounts paid to a purchasing body under subsection (2) may be used by that body only for the purpose of discharging the certificate purchase obligation.

(4) The order may contain further provision about—

(a) the calculation of amounts received by the administrator that are to be paid to a relevant purchasing body;

(b) the time by which the administrator must make payments of such amounts to a relevant purchasing body;

(c) the manner in which any such payments are to be made;

(d) how amounts are to be dealt with for the purposes of subsection (2) where the administrator and a relevant purchasing body to whom they are to be paid are the same person.

(5) Subsections (2) to (4) are subject to subsections (6) to (10).

(6) The order may provide for amounts received by the administrator under subsection (1) to be used by the administrator to make payments—

(a) into the Consolidated Fund in respect of costs (or a proportion of costs) which have been or are expected to be incurred—

(i) by the Authority,

(ii) by the Secretary of State, or

(iii) by a relevant designated person,

in connection with the performance of functions conferred by or under sections 32N to 32Z1;

(b) into the Consolidated Fund of Northern Ireland in respect of costs (or a proportion of costs) which have been or are expected to be incurred—

(i) by the Northern Ireland authority, or

(ii) by the Northern Ireland department,

in connection with the performance of functions conferred by or under sections 32N to 32Z1.

(7) For the purposes of subsection (6)(a), "relevant designated person" means a person who is designated—

(a) as the purchasing body of GB certificates by virtue of being an eligible person within section 32N(6)(a) (CFD counterparty);

(b) as the purchasing body of NI certificates by virtue of being an eligible person within section 32N(7) (CFD counterparty);

(c) as an administrator of the levy by virtue of being an eligible person within section 32P(9)(a) or (10)(a) (CFD counterparty).

(8) The order—

(a) may exclude amounts of a specified description from being used as mentioned in subsection (6);

(b) may prevent the administrator using amounts to make payments in respect of costs of a specified description.

(9) The purchasing body of GB certificates must, if directed to do so by the Secretary of State, pay into the Consolidated Fund any amounts received under subsection (2) that it would (but for the direction) be able to use under subsection (3) for the purpose of discharging the purchase obligation in respect of GB certificates.

(10) The purchasing body of NI certificates must, if directed to do so by the Secretary of State, pay into the Consolidated Fund of Northern Ireland any amounts received under subsection (2) that it would (but for the

direction) be able to use under subsection (3) for the purpose of discharging the purchase obligation in respect of NI certificates.

(11) In this section "the order", in relation to the certificate purchase levy, means the certificate purchase order that imposes the levy.

32R Designation of a CFD counterparty as purchasing body or administrator

(1) This section applies in relation to the designation of a person who is a CFD counterparty—

(a) as a relevant purchasing body under section 32N(4)(b) or (5)(b), or

(b) as the administrator of the levy under section 32P(7)(b) or (8)(b).

(2) A designation may be made only with the consent of the person designated.

(3) A designation does not cease to have effect if the person's designation as a CFD counterparty ceases to have effect by virtue of section 3(6)(a) or (b) of the Energy Act 2013.

(4) A designation ceases to have effect if—

(a) the Secretary of State by order revokes the designation, or

(b) the person withdraws consent to the designation by giving not less than 3 months' notice in writing to the Secretary of State.

(5) The Secretary of State may by order make transitional provision in connection with a designation ceasing to have effect.

(6) An order under subsection (5) may in particular make provision about how obligations, imposed by virtue of a certificate purchase order on a person whose designation ceases to have effect, are to be discharged in any period before or after the time when the designation ceases to have effect.

(7) Subsection (5) is not to be taken as limiting the power to make transitional provision in a certificate purchase order by virtue of section 32Y(1)(b).

32S GB certificates

(1) A certificate purchase order may (subject to subsection (3)) provide for the Authority to issue from time to time, in accordance with such criteria (if any) as are specified in the order, a certificate ("a GB certificate") to—

(a) the operator of a generating station, or

(b) if the order so provides, a person of any other description specified in the order.

(2) A GB certificate is to certify—

(a) the matters within subsection (4) or (5), or

(b) if the order provides that a certificate may certify the matters within subsection (6), (7), (8) or (9), the matters within that subsection.

(3) A GB certificate certifying that an amount of electricity has been generated from renewable sources in any period may not be issued if—

(a) a renewables obligation order is in force, and
(b) a renewables obligation certificate has been, or could be, issued under the order in respect of the generation in that period of the same electricity.

(4) The matters within this subsection are—
(a) that the generating station, or, in the case of a certificate issued otherwise than to the operator of a generating station, a generating station specified in the certificate, has generated from renewable sources the amount of electricity stated in the certificate, and
(b) that the electricity has been supplied by an electricity supplier to customers in Great Britain.

(5) The matters within this subsection are—
(a) that the generating station, or, in the case of a certificate issued otherwise than to the operator of a generating station, a generating station specified in the certificate, has generated from renewable sources the amount of electricity stated in the certificate,
(b) that the generating station in question is not in Northern Ireland, and
(c) that the electricity has been supplied by a Northern Ireland supplier to customers in Northern Ireland.

(6) The matters within this subsection are—
(a) that two or more generating stations have, between them, generated from renewable sources the amount of electricity stated in the certificate, and
(b) that the electricity has been supplied by an electricity supplier to customers in Great Britain.

(7) The matters within this subsection are—
(a) that two or more generating stations have, between them, generated from renewable sources the amount of electricity stated in the certificate,
(b) that none of them is a generating station in Northern Ireland, and
(c) that the electricity has been supplied by a Northern Ireland supplier to customers in Northern Ireland.

(8) The matters within this subsection are—
(a) that the generating station, or, in the case of a certificate issued otherwise than to the operator of a generating station, a generating station specified in the certificate, has generated from renewable sources the amount of electricity stated in the certificate, and
(b) that the electricity has been used in a permitted way.

(9) The matters within this subsection are—
(a) that two or more generating stations have, between them, generated from renewable sources the amount of electricity stated in the certificate, and
(b) that the electricity has been used in a permitted way.

(10) For the purposes of subsections (8) and (9), electricity generated by a generating station, or generating stations, of any description is used in a permitted way if—

(a) it is used in one of the ways mentioned in subsection (11), and

(b) that way is specified in the order as a permitted way—

(i) in relation to all generating stations, or

(ii) in relation to generating stations of that description.

(11) Those ways are—

(a) being consumed by the operator of the generating station or generating stations by which it was generated;

(b) being supplied to customers in Great Britain through a private wire network;

(c) being provided to a distribution system or a transmission system in circumstances in which its supply to customers cannot be demonstrated;

(d) being used, as respects part, as mentioned in one of paragraphs (a), (b) or (c) and as respects the remainder—

(i) as mentioned in one of the other paragraphs, or

(ii) as respects part, as mentioned in one of the other paragraphs and as respects the remainder as mentioned in the other;

(e) being used, as respects part, as mentioned in paragraph (a), (b), (c) or (d) and as respects the remainder by being supplied by an electricity supplier to customers in Great Britain or by a Northern Ireland supplier to customers in Northern Ireland, or both.

(12) Subsection (11) of section 32B (meaning of supply of electricity through a private wire network) applies for the purposes of subsection (11)(b) as it applies for the purposes of subsection (10)(b) of that section.

32T NI certificates

(1) A certificate purchase order may (subject to subsection (3)) provide for the Northern Ireland authority to issue from time to time, in accordance with such criteria (if any) as are specified in the order, a certificate ("a NI certificate") to—

(a) the operator of a generating station in Northern Ireland, or

(b) if the order so provides, a person of any other description.

(2) A NI certificate is to certify—

(a) the matters within subsection (4), or

(b) if the order provides that a certificate may certify the matters within subsection (5), (6) or (7), the matters within that subsection.

(3) A NI certificate certifying that an amount of electricity has been generated from renewable sources in any period may not be issued if—

(a) an order under Article 52 of the Energy (Northern Ireland) Order 2003 is in force, and

(b) a Northern Ireland RO certificate has been, or could be, issued under that order in respect of the same electricity.

(4) The matters within this subsection are—

(a) that the generating station, or, in the case of a certificate issued otherwise than to the operator of a generating station, a generating station in Northern Ireland specified in the certificate, has generated from renewable sources the amount of electricity stated in the certificate, and

(b) that it has been supplied by a Northern Ireland supplier to customers in Northern Ireland.

(5) The matters within this subsection are—

(a) that two or more generating stations in Northern Ireland have, between them, generated from renewable sources the amount of electricity stated in the certificate, and

(b) that it has been supplied by a Northern Ireland supplier to customers in Northern Ireland.

(6) The matters within this subsection are—

(a) that the generating station, or, in the case of a certificate issued otherwise than to the operator of a generating station, a generating station in Northern Ireland specified in the certificate, has generated from renewable sources the amount of electricity stated in the certificate, and

(b) that the electricity has been used in a permitted way.

(7) The matters within this subsection are—

(a) that two or more generating stations in Northern Ireland have, between them, generated from renewable sources the amount of electricity stated in the certificate, and

(b) that the electricity has been used in a permitted way.

(8) For the purposes of subsections (6) and (7), electricity generated by a generating station, or generating stations, of any description is used in a permitted way if—

(a) it is used in one of the ways mentioned in subsection (9), and

(b) that way is specified in the order as a permitted way—

(i) in relation to all generating stations, or

(ii) in relation to generating stations of that description.

(9) Those ways are—

(a) being consumed by the operator of the generating station or generating stations by which it was generated;

(b) being supplied to customers in Northern Ireland through a private wire network;

(c) being provided to a distribution system located in Northern Ireland, or to transmission system located in Northern Ireland, in circumstances in which its supply to customers in Northern Ireland cannot be demonstrated;

(d) being used, as respects part, as mentioned in one of paragraphs (a), (b) or (c) and as respects the remainder—

(i) as mentioned in one of the other paragraphs, or

(ii) as respects part, as mentioned in one of the other paragraphs and as respects the remainder as mentioned in the other;

(e) being used, as respects part, as mentioned in paragraph (a), (b), (c) or (d) and as respects the remainder by being supplied by a Northern Ireland supplier to customers in Northern Ireland.

(10) Paragraph (9) of Article 54 of the Energy (Northern Ireland) Order 2003 (meaning of supply of electricity through a private wire network) applies for the purposes of subsection (9)(b) as it applies for the purposes of paragraph (8)(b) of that Article.

32U Sections 32S and 32T: supplemental provision

(1) A certificate purchase order may provide—

(a) that no certificates are to be issued in respect of electricity generated in specified cases or circumstances, or

(b) that certificates are to be issued in respect of a proportion only of the electricity generated in specified cases or circumstances.

(2) In particular, provision made by virtue of subsection (1) may specify—

(a) electricity generated using specified descriptions of renewable sources,

(b) electricity generated by specified descriptions of generating station, or

(c) electricity generated in specified ways.

(3) Provision made by virtue of subsection (1)(b) may include—

(a) provision about how the proportion is to be determined;

(b) provision about what, subject to such exceptions as may be specified, constitutes sufficient evidence of any matter required to be established for the purpose of determining that proportion;

(c) provision authorising the relevant authority, in specified circumstances, to require an operator of a generating station to arrange—

(i) for samples of any fuel used (or to be used) in the generating station, or of any gas or other substance produced as a result of the use of such fuel, to be taken by a person, and analysed in a manner, approved by the relevant authority, and

(ii) for the results of that analysis to be made available to the relevant authority.

(4) In the case of electricity generated by a generating station fuelled or driven—

(a) partly by renewable sources, and

(b) partly by fossil fuel (other than waste which constitutes a renewable source),

only the proportion attributable to the renewable sources is to be regarded as generated from such sources.

(5) A certificate purchase order may specify—

(a) how the proportion referred to in subsection (4) is to be determined, and

(b) the consequences for the issuing of certificates if a generating station of the type mentioned in that subsection uses more than a specified proportion of fossil fuel during a specified period.

(6) Those consequences may include the consequences that no certificates are to be issued in respect of any electricity generated by that generating station during that period.

(7) A certificate purchase order may provide that ownership of a certificate may be transferred—

(a) only to persons of a specified description;

(b) only if other specified conditions are met.

(8) A certificate purchase order may specify circumstances in which the relevant authority may revoke a certificate before the certificate purchase obligation in respect of the certificate is discharged (whether before or after the certificate is presented for payment).

(9) A certificate purchase order must—

(a) prohibit the issue of GB certificates certifying that electricity has been supplied to customers in Northern Ireland by virtue of section 32S(5) or (7) where the Northern Ireland authority has notified the Authority that it is not satisfied that the electricity in question has been supplied to customers in Northern Ireland, and

(b) require the revocation of such a certificate if the Northern Ireland authority so notifies the Authority at a time between the issue of the certificate and its presentation for payment for the purposes of the certificate purchase obligation.

(10) A certificate purchase order may make provision requiring a person to whom a certificate is issued to pay to the relevant authority an amount equal to any amount that has been paid in respect of the certificate under the certificate purchase obligation if it appears to the authority that—

(a) the certificate should not have been issued to that person, and

(b) it is not possible to secure the recovery of such an amount by refusing to issue another certificate to the person.

(11) Provision under subsection (10) may include provision about enforcement and appeals.

(12) The Authority must pay any amounts it receives by virtue of subsection (10) into the Consolidated Fund.

(13) The Northern Ireland authority must pay any amounts it receives by virtue of subsection (10) into the Consolidated Fund of Northern Ireland.

32V Certificate purchase orders: amounts of electricity stated in certificates

(1) A certificate purchase order may specify the amount of electricity to be stated in each certificate, and different amounts may be specified in relation to different cases or circumstances.

(2) In particular, different amounts may be specified in relation to—

(a) electricity generated from different renewable sources;

(b) electricity generated by different descriptions of generating station;

(c) electricity generated in different ways.

(3) In this section "banding provision" means provision made in a certificate purchase order by virtue of subsection (1).

(4) Before making any banding provision, the Secretary of State must have regard to the following matters—

(a) the costs (including capital costs) associated with generating electricity from each of the renewable sources or with transmitting or distributing electricity so generated;

(b) the income of operators of generating stations in respect of electricity generated from each of those sources or associated with the generation of such electricity;

(c) the effect of paragraph 19 of Schedule 6 to the Finance Act 2000 (supplies of electricity from renewable sources exempted from the climate change levy) in relation to electricity generated from each of those sources;

(d) the desirability of securing the long term growth, and economic viability, of the industries associated with the generation of electricity from renewable sources;

(e) the likely effect of the proposed banding provision on the number of certificate issued by the relevant authority, and the impact this will have on consumers;

(f) the potential contribution of electricity generated from each renewable source to the attainment of any target which relates to the generation of electricity or the production of energy and is imposed by, or results from or arises out of, an EU obligation.

(5) For the purposes of subsection (4)(a), the costs associated with generating electricity from a renewable source include any costs associated with the production or supply of heat produced in connection with that generation.

(6) For the purposes of subsection (4)(b), an operator's income associated with the generation of electricity from a renewable source includes any income connected with—

(a) the acquisition of the renewable source;

(b) the supply of heat produced in connection with the generation;

(c) the disposal of any by-product of the generation process.

(7) After the first order containing banding provision is made by the Secretary of State, no subsequent order containing such provision may be made by the Secretary of State except following a review held by virtue of subsection (8).

(8) A certificate purchase order—

(a) may authorise the Secretary of State to review the banding provision at such intervals as are specified in or determined in accordance with the order, and

(b) may authorise the Secretary of State to review the whole or any part of the banding provision at any time when the Secretary of State is satisfied that one or more of the specified conditions is satisfied.

32W Section 32V: transitional provision and savings

(1) This section applies where a certificate purchase order contains banding provision.

(2) The order may provide for the effect of any banding provision made in an earlier such order to continue, in such circumstances as may be specified, in relation to—

(a) the electricity generated by generating stations of such descriptions as may be specified, or

(b) so much of the electricity as may be determined in accordance with the order.

(3) The order may provide for—

(a) the effect of any banding provision made in a renewables obligation order by virtue of section 32D(1) to apply, in such circumstances as may be specified, in relation to GB certificates as it applied in relation to renewables obligation certificates;

(b) the effect of any banding provision made in an order under Article 52 of the Energy (Northern Ireland) Order 2003, by virtue of Article 54B(1) of the Order, to apply, in such circumstances as may be specified, in relation to NI certificates as it applied in relation to Northern Ireland RO certificates.

(4) Section 32V(4) and (7) do not apply in relation to provision of the kind mentioned in subsection (2) or (3) above.

(5) Subsection (7) applies to a generating station in respect of which a statutory grant has been awarded if—

(a) the generating station is of a specified description, or

(b) the circumstances of the case meet specified requirements.

(6) The requirements specified under subsection (5)(b) may relate to the time when the grant was awarded (whether a time before or after the coming into force of this section).

(7) A certificate purchase order which contains banding provision may provide for the operation of that provision in relation to electricity generated by a generating station to which this subsection applies to be conditional upon the operator of the station agreeing—

(a) if the grant or any part of it has been paid, to repay to the person who made the grant ("the payer") the whole or a specified part of the grant or part before the repayment date,

(b) to pay to the payer interest on an amount repayable under paragraph (a) for such period, and at such rate, as may be determined in accordance with the order (which may confer the function of making the determination on a person), and

(c) if the grant or any part of it has not yet been paid, to consent to the cancellation of the award of the grant or part.

(8) For the purposes of subsection (7)—

(a) "the repayment date" means the date specified in or determined in accordance with the order, and

(b) the period for which interest is payable must not begin before the grant was paid or, if the repayment relates to an instalment of the grant, before the instalment was paid.

(9) In this section "statutory grant" means—

(a) a grant awarded under section 5(1) of the Science and Technology Act 1965 (grants to carry on or support scientific research), or

(b) any other grant which is payable out of public funds and awarded under or by virtue of an Act or other statutory provision (as defined by section 1(f) of the Interpretation Act (Northern Ireland) 1954).

(10) This section is without prejudice to section 32Y(1)(b).

32X Certificate purchase orders: information

(1) A certificate purchase order may provide for—

(a) the Authority to require a person to provide it with information, or with information of a particular kind, which in the Authority's opinion is relevant to the question whether a GB certificate is, or was or will in future be, required to be issued to the person;

(b) the Northern Ireland authority to require a person to provide it with information, or with information of a particular kind, which in the authority's opinion is relevant to the question whether a NI certificate is, or was or will in future be, required to be issued to the person.

(2) That information must be given to the relevant authority in whatever form it requires.

(3) A certificate purchase order may—

(a) require operators of generating stations generating electricity (wholly or partly) from biomass to give specified information, or information of a specified kind, to the relevant authority;

(b) specify what, for this purpose, constitutes "biomass";

(c) require the information to be given in a specified form and within a specified period;

(d) authorise or require the relevant authority to postpone the issue of certificates to the operator of a generating station who fails to comply with a requirement imposed by virtue of paragraph (a) or (c) until such time as the failure is remedied;

(e) authorise or require the relevant authority to refuse to issue certificates to such a person or to refuse to issue them unless the failure is remedied within a specified period.

(4) The relevant authority may publish information obtained by virtue of subsection (3).

(5) No person is required by virtue of this section to provide any information which the person could not be compelled to give in evidence in civil proceedings in the High Court or, in Scotland, the Court of Session.

32Y Certificate purchase orders: general provision

(1) A certificate purchase order may—

(a) make further provision as to the functions of the relevant authority in relation to matters dealt with by the order;

(b) make transitional provision and savings;

(c) provide for anything falling to be calculated or otherwise determined under the order to be calculated or determined by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the order;

(d) make different provision for different cases or circumstances.

(2) Provision made by virtue of subsection (1)(b) may, in particular, include provision for—

(a) renewables obligation certificates, issued in respect of a period before the imposition of the certificate purchase obligation, to be treated as if they were GB certificates issued in respect of a subsequent period for which the order is in force;

(b) Northern Ireland RO certificates, issued in respect of a period before the imposition of the certificate purchase obligation, to be treated as if they were NI certificates issued in respect of a subsequent period for which the order is in force.

(3) Provision made by virtue of subsection (1)(d) may, in particular, make—

(a) different provision in relation to different suppliers;

(b) different provision in relation to generating stations of different descriptions;

(c) different provision in relation to different localities or different parts of the United Kingdom.

(4) In subsection (3) "supplier" means an electricity supplier or a Northern Ireland supplier.

(5) The Authority and the Northern Ireland authority may enter into arrangements for the Authority to act on behalf of the Northern Ireland authority for, or in connection with, the carrying out of any functions conferred on the Northern Ireland authority under, or for the purposes of, a certificate purchase order.

(6) The duties imposed on the Secretary of State by section 3A (principal objective and general duties in carrying out functions under this Part) do not apply in relation to the exercise of a power under section 32N to make a certificate purchase order so far as it is made for or in connection with imposing the certificate purchase obligation on the purchasing body of NI certificates.

32Z Certificate purchase orders: procedure

(1) Before making a certificate purchase order, the Secretary of State must consult—

(a) the Authority,

(b) the Northern Ireland authority,

(c) the Council,

(d) the General Consumer Council for Northern Ireland,

(e) such electricity suppliers and Northern Ireland suppliers that may be required to pay the certificate purchase levy as the Secretary of State considers appropriate,

(f) such generators of electricity from renewable sources as the Secretary of State considers appropriate, and

(g) such other persons, if any, as the Secretary of State considers appropriate.

(2) A certificate purchase order is not to be made unless a draft of the instrument containing it has been laid before and approved by a resolution of each House of Parliament.

(3) The Secretary of State must, subject to subsection (5), consult the Scottish Ministers before making a certificate purchase order that extends to Scotland.

(4) The Secretary of State must, subject to subsection (5), obtain the consent of the Northern Ireland department before making a certificate purchase order that extends to Northern Ireland.

(5) Except as provided by subsection (6), the Secretary of State is not required to—

(a) consult the Scottish Ministers under subsection (3), or

(b) obtain the consent of the Northern Ireland department under subsection (4),

in respect of any provision of a certificate purchase order that is made by virtue of section 32O(2)(m), 32P or 32Q (which together confer power to make provision about the certificate purchase levy).

(6) Designation of the Northern Ireland department as the administrator of the certificate purchase levy by virtue of section 32P(8)(b) requires the consent of that department.

32Z1 Interpretation of sections 32N to 32Z1

(1) In this section and sections 32N to 32Z ("the relevant sections"), the following terms have the meanings given in section 32M(1)—

"fossil fuel" (but see subsection (4));

"generated";

"Northern Ireland authority";

"Northern Ireland supplier";

"renewables obligation certificate";

"renewables obligation order".

(2) In the relevant sections—

"administrator", in relation to the certificate purchase levy, is to be construed in accordance with section 32P(7) to (10);

"banding provision" is to be construed in accordance with section 32V(3)

"CFD counterparty" has the same meaning as in Chapter 2 of Part 1 of the Energy Act 2013 (see section 3 of that Act);

"certificate purchase levy" is to be construed in accordance with section 32P;

"certificate purchase order" is to be construed in accordance with section 32N;

"the certificate purchase obligation" is to be construed in accordance with section 32N(3);

"distribution system" includes a distribution system within the meaning of Part 2 of the Electricity (Northern Ireland) Order 1992, and "distributing" is to be construed accordingly;

"GB certificate" is to be construed in accordance with section 32S;

"NI certificate" is to be construed in accordance with section 32T;

"the Northern Ireland department" means the Department of Enterprise, Trade and Investment;

"Northern Ireland RO certificate" means a certificate issued by the Northern Ireland authority in accordance with provision included in an order under Article 52 of the Energy (Northern Ireland) Order 2003;

"the purchasing body of GB certificates" is to be construed in accordance with section 32N(4);

"the purchasing body of NI certificates" is to be construed in accordance with section 32N(5);

"relevant authority" means—

(a) in relation to GB certificates, the Authority;

(b) in relation to NI certificates, the Northern Ireland authority;

"relevant purchasing body" means—

(a) in relation to GB certificates, the purchasing body of GB certificates;

(b) in relation to NI certificates, the purchasing body of NI certificates;

"renewable sources" means sources of energy other than fossil fuel or nuclear fuel, but includes waste of which not more than a specified proportion is waste which is, or is derived from, fossil fuel;

"specified", in relation to a certificate purchase order, means specified in the order;

"transmission system" includes a transmission system within the meaning of Part 2 of the Electricity (Northern Ireland) Order 1992, and "transmitting" is to be construed accordingly.

(3) For the purposes of the definition of "renewable sources", a certificate purchase order may make provision—

(a) about what constitutes "waste";

(b) about how the proportion of waste which is, or is derived from, fossil fuel is to be determined;

(c) about what, subject to such exceptions as may be specified, constitutes sufficient evidence of that proportion in any particular case;

(d) authorising the relevant authority, in specified circumstances, to require an operator of a generating station to arrange—

(i) for samples of any fuel used (or to be used) in the generating station, or of any gas or other substance produced as a result of the use of such fuel, to be taken by a person, and analysed in a manner, approved by the relevant authority;

(ii) for the results of that analysis to be made available to the relevant authority.

(4) In the application of the relevant sections to Northern Ireland, "fossil fuel" includes peat.

(5) In the relevant sections "Northern Ireland" does not include any part of the territorial sea of the United Kingdom, but this is subject to subsection (6).

(6) A certificate purchase order may provide that "Northern Ireland" includes the territorial sea adjacent to Northern Ireland.

(7) An Order in council under section 98(8) of the Northern Ireland Act 1998 (apportionment of sea areas) has effect for the purposes of this section if, or to the extent that, the Order is expressed to apply—

(a) by virtue of this subsection, for those purposes, or

(b) if no provision has been made by virtue of paragraph (a), for the general or residual purposes of that Act.

(8) References in the relevant sections to the supply of electricity to customers in Northern Ireland are to be construed in accordance with the definition of "supply" in Article 3 of the Electricity (Northern Ireland) Order 1992.

(9) A certificate purchase order may make provision, for the purposes of the relevant sections, about the circumstances in which electricity is to be regarded as having been supplied—

(a) to customers in Great Britain;

(b) to customers in Northern Ireland."

(3) In section 106 (regulations and orders), in subsection (2)(b) after "32," insert "32N, 32R(4),".

(4) In section 113 (extent etc), in subsection (3), at the beginning of the list (before the entry for sections 65 to 70) insert "Sections 32N to 32Z1;".

CHAPTER 8

EMISSIONS PERFORMANCE STANDARD

38 Duty not to exceed annual carbon dioxide emissions limit

(1) The operator of any fossil fuel plant must secure that the emissions of carbon dioxide from it that are attributable to the use of fossil fuel do not exceed EL tonnes of carbon dioxide ("the emissions limit") in any year, where—

$$EL = RxCx7.446$$

and—

R is the statutory rate of emissions, in g/kWh;

C is the installed generating capacity, in MW, of the electricity generating station comprised in the fossil fuel plant.

(2) Until (and including) 2044, the statutory rate of emissions is 450 g/kWh.

(3) In this Chapter, "fossil fuel plant" means an electricity generating station which satisfies the conditions in subsection (4), together with any associated gasification plant and any associated CCS plant.

(4) Those conditions are that the generating station—

(a) is constructed pursuant to a relevant consent given or made on or after the date on which subsection (1) comes into force, and

(b) uses—

(i) fossil fuel, or

(ii) fuel produced by gasification plant.

(5) Subsection (1) is subject to any provision made by or under regulations made under subsection (6).

(6) The Secretary of State may by regulations—

(a) make provision about the interpretation of the duty imposed by subsection (1) ("the emissions limit duty");

(b) make any provision mentioned in Schedule 4 (application of emissions limit duty to additional cases or subject to modifications).

(7) Regulations under subsection (6)(a) may, in particular, make provision—

(a) for determining whether gasification plant or CCS plant (including any CCS plant associated with gasification plant) is associated with a generating station;

(b) for determining the emissions from fossil fuel plant;

(c) for the use of fossil fuel—

(i) for operating plant that is ancillary to a generating station for safety purposes, or in an emergency, or

(ii) by a network generating station at a time when it is not exporting to a network,

to be disregarded for any of the purposes of this Chapter;

(d) for determining (whether by apportionment or otherwise) which emissions from fossil fuel plant are attributable to the use of fossil fuel;

(e) for determining when plant ceases to be, or to be part of, fossil fuel plant;

(f) specifying the meaning of any of the following expressions—

(i) "operator", in relation to fossil fuel plant;

(ii) "installed generating capacity";

(iii) "constructed pursuant to a relevant consent", in relation to an electricity generating station;

(g) specifying any category of emissions by reference to provision made, or that may from time to time be made, by or under regulations implementing the ETS Directive.

(8) Provision that may be made by virtue of subsection (7)(d) includes provision for treating emissions attributable to the supply of heat to customers from combined heat and power plant as not being attributable to the use of fossil fuel.

39 Suspension etc of emissions limit in exceptional circumstances

(1) This section applies where an appropriate authority considers that there is an electricity shortfall, or a significant risk of an electricity shortfall.

(2) Where this section applies, the appropriate authority may direct that, in relation to relevant plant, the emissions duty is to be treated as—

(a) suspended for a period specified in the direction, or

(b) modified for a period specified in the direction.

(3) For the purposes of this section, there is an electricity shortfall when—

(a) the electricity available in Great Britain is insufficient to meet demands in Great Britain, or

(b) the electricity available in Northern Ireland is insufficient to meet demands in Northern Ireland.

(4) For this purpose—

(a) electricity available in Great Britain or Northern Ireland includes electricity that is available there by virtue of an electricity interconnector (within the meaning of Part 1 of EA 1989), and

(b) subject to that, it is for the appropriate authority to determine what is to be regarded as available electricity.

(5) Before giving a direction under this section, the Secretary of State must consult—

(a) the Scottish Ministers,

(b) the Welsh Ministers, and

(c) such other persons as the Secretary of State considers it appropriate to consult.

(6) As soon as practicable after giving a direction under this section, the Secretary of State must lay before Parliament a document containing—

(a) a copy of the direction, and

(b) a statement of the Secretary of State's reasons for making the direction.

(7) Before giving a direction under this section, the Department of Enterprise, Trade and Investment must consult such persons as it considers it appropriate to consult.

(8) As soon as practicable after giving a direction under this section, the Department of Enterprise, Trade and Investment must lay before the Northern Ireland Assembly a document containing—

(a) a copy of the direction, and

(b) a statement of the Department's reasons for making the direction.

(9) A direction under this section—

(a) is to be made in writing;

(b) may include incidental, supplementary and transitional provision;

(c) may be varied or revoked by a further direction under this section.

(10) Provision that may be made by virtue of subsection (9)(b) includes, in particular, provision imposing requirements on enforcing authorities (within the meaning of Schedule 5) for Great Britain or Northern Ireland, as the case may be.

(11) Each appropriate authority—

(a) must issue (and may from time to time revise) a statement of the Secretary of State's or, as the case may be, that Department's policy in relation to making directions under this section,

(b) must publish the up-to-date text of the statement whenever it is issued or revised, and

(c) must have regard to the statement in making any direction under this section.

(12) For the purposes of this section—

"appropriate authority" means—

(a) the Secretary of State, or

(b) the Department of Enterprise, Trade and Investment;

"relevant generating station" means a generating station which satisfies paragraphs (a) and (b) of section 38(4);

"relevant plant" means—

(a) in relation to a direction by the Secretary of State, fossil fuel plant which consists of or includes a relevant generating station in Great Britain;

(b) in relation to a direction by the Department of Enterprise, Trade and Investment, fossil fuel plant which consists of or includes a relevant generating station in Northern Ireland.

40 Monitoring and enforcement

(1) It is the duty of the appropriate national authority to make arrangements for monitoring compliance with, and enforcement of, the emissions limit duty.

(2) The appropriate national authority may by regulations make any provision mentioned in Schedule 5 (monitoring compliance with, and enforcement of, the emissions limit duty).

(3) The arrangements under subsection (1) must include arrangements for giving effect to directions under section 39 (and, in particular, for compliance by enforcing authorities with any requirements imposed on them under subsection (10) of that section).

(4) In this section (and Schedule 5), the "appropriate national authority" means—

(a) in relation to England, the Secretary of State;

(b) in relation to Scotland, the Scottish Ministers;

(c) in relation to Wales, the Welsh Ministers;

(d) in relation to Northern Ireland, the Department of Environment.

(5) Subsection (4) is subject to paragraph 5 of Schedule 5 (which provides for the Secretary of State to make certain provision for Scotland, Wales and Northern Ireland).

41 Interpretation of Chapter 8

(1) In this Chapter—

"carbon capture and storage technology" means technology for doing, or contributing to the doing of, any of the following things—

(a) capturing carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by, or in connection with, generation of electricity on a commercial scale;

(b) transporting such carbon dioxide (or substance) that has been captured;

(c) disposing of such carbon dioxide (or substance) that has been captured, by way of permanent storage;

"CCS plant" means plant that uses, or is capable of using, carbon capture and storage technology;

"distribution system" has the meaning given by section 4(4) of EA 1989 (and "distributed" is to be read accordingly);

"emissions limit duty" means the duty imposed by section 38(1);

"ETS Directive" means Directive 2003/87/EC of the European Parliament and of the Council (as amended from time to time);

"fossil fuel" means—

(a) coal;

(b) lignite;

(c) peat;

(d) natural gas (within the meaning of the Energy Act 1976);

(e) crude liquid petroleum;

(f) bitumen;

(g) any substance which—

(i) is produced directly or indirectly from a substance mentioned in paragraphs (a) to (f) for use as a fuel, and

(ii) when burned, produces a greenhouse gas (within the meaning given in section 92 of the Climate Change Act 2008);

"fossil fuel plant" has the meaning given by section 38(3);

"gasification plant" means plant which—

(a) uses fossil fuel, and

(b) produces fuel for use in an electricity generating station;

"network generating station" means a station that exports to a network;

"relevant consent" means—

(a) consent granted under section 36 of EA 1989 or Article 39 of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I. 1)), or

(b) an order granting development consent under the Planning Act 2008;

"transmission system" has the meaning given by section 4(4) of EA 1989;

"year" means any calendar year for which the emissions limit is defined by section 38.

(2) For the purposes of this Chapter, a generating station exports to a network when it is generating any electricity that is conveyed from it by means of a transmission system or is distributed by means of a distribution system.

42 Regulations under Chapter 8

(1) Any regulations made by the Secretary of State or the Welsh Ministers under this Chapter must be made by statutory instrument.

(2) Any power to make regulations under this Chapter that is exercisable by the Department of Environment is to be exercisable by statutory rule for the purposes of the Statutory Rules (Northern Ireland) Order 1979 (S.I. 1979/1573 (N.I. 12)).

(3) An instrument containing—

(a) regulations under section 38 (whether or not also containing regulations by the Secretary of State under section 40), or

(b) regulations by the Secretary of State under section 40 which amend or repeal any provision of primary legislation,

may not be made unless a draft has been laid before and approved by a resolution of each House of Parliament.

(4) Any other instrument containing regulations made by the Secretary of State under section 40 is subject to annulment in pursuance of a resolution of either House of Parliament.

(5) If, but for this subsection, an instrument containing regulations by the Secretary of State under this Chapter would be treated for the purposes of the standing orders of either House of Parliament as a hybrid instrument, it is to proceed in that House as if it were not a hybrid instrument.

(6) Regulations by the Scottish Ministers under section 40 are—

(a) if they amend or repeal any provision of primary legislation, subject to the affirmative procedure;

(b) otherwise, subject to the negative procedure.

(7) An instrument containing regulations by the Welsh Ministers under section 40—

(a) may not be made if the regulations amend or repeal any provision of primary legislation unless a draft has been laid before, and approved by a resolution of, the National Assembly for Wales;

(b) otherwise, is subject to annulment in pursuance of a resolution of the National Assembly for Wales.

(8) Statutory rules containing regulations by the Department of Environment under section 40 are—

(a) if the regulations amend or repeal any provision of primary legislation, subject to affirmative resolution (within the meaning of section 41(6) of the Interpretation Act (Northern Ireland) 1954), and

(b) otherwise, subject to negative resolution (within the meaning of section 41(4) of that Act).

(9) Any regulations under this Chapter may—

(a) include incidental, supplementary and consequential provision;

(b) make transitory or transitional provision or savings;

(c) make different provision for different cases or circumstances or for different purposes;

(d) make provision subject to exceptions.

(10) Regulations under section 38 that apply in relation to Northern Ireland may be made only with the consent of the Department of Enterprise, Trade and Investment.

(11) Before making any regulations under section 38 or 40, the Secretary of State must consult—

(a) in the case of regulations under section 38 that will apply in relation to Scotland or Wales, the Scottish Ministers or the Welsh Ministers, respectively, and

(b) in any case, such persons (or such other persons) as the Secretary of State considers it appropriate to consult.

(12) Before making any regulations under section 40, the Scottish Ministers or the Welsh Ministers must consult such persons as they think appropriate.

(13) Subsections (11) and (12) may be satisfied by consultation before, as well as after, the passing of this Act.

CHAPTER 9

MISCELLANEOUS

43 Exemption from liability in damages

(1) The Secretary of State may include in regulations under section 2 or 17 provision that—

(a) the national system operator;

(b) any director of the national system operator;

(c) any employee, officer or agent of the national system operator,

is not liable in damages for anything done or omitted in the exercise or purported exercise of a relevant function specified in the regulations.

(2) A relevant function is a function conferred by or by virtue of Chapter 2 or 3.

(3) Provision made by virtue of subsection (1) may not exempt a person from liability for an act or omission which—

(a) is shown to be in bad faith;

(b) is unlawful by virtue of section 6(1) of the Human Rights Act 1998 (public authorities not to act incompatibly with convention rights);

(c) is a breach of a duty owed by virtue of section 27(4) of EA 1989 (compliance with final or provisional order under that Act).

(4) Whenever—

(a) the Secretary of State makes or revokes regulations under section 2 or 17, or exercises a modification power under section 16 or 25, and

(b) provision is not in force under subsection (1) in respect of a relevant function,

the Secretary of State must publish a statement of the reasons why no such provision is in force.

(5) In this section "national system operator" means the person operating the national transmission system for Great Britain (and for this purpose "transmission system" has the same meaning as in EA 1989 - see section 4(4) of that Act).

44 Licence modifications: general

(1) This section applies in relation to a power to make modifications conferred by—

(a) section 16, 25, 29, 34 or 35, or

(b) paragraph 19 of Schedule 3.

(2) Before making modifications under a power to which this section applies ("a relevant power") the Secretary of State must lay a draft of the modifications before Parliament.

(3) If, within the 40-day period, either House of Parliament resolves not to approve the draft, the Secretary of State may not take any further steps in relation to the proposed modifications.

(4) If no such resolution is made within that period, the Secretary of State may make the modifications in the form of the draft.

(5) Subsection (3) does not prevent a new draft of proposed modifications being laid before Parliament.

(6) In this section "40-day period", in relation to a draft of proposed modifications, means the period of 40 days beginning with the day on which the draft is laid before Parliament (or, if it is not laid before each House of Parliament on the same day, the later of the 2 days on which it is laid).

(7) For the purposes of calculating the 40-day period, no account is to be taken of any period during which Parliament is dissolved or prorogued or during which both Houses are adjourned for more than 4 days.

(8) A relevant power—

(a) may be exercised generally, only in relation to specified cases or subject to exceptions (including provision for a case to be excepted only so long as specified conditions are satisfied);

(b) may be exercised differently in different cases or circumstances;

(c) includes a power to make incidental, supplementary, consequential or transitional modifications.

(9) Provision included in a licence, or in a document or agreement relating to licences, by virtue of a relevant power—

(a) may make different provision for different cases;

(b) need not relate to the activities authorised by the licence;

(c) may do any of the things authorised for licences of that type by section 7(2A), (3) or (4) of EA 1989.

(10) The Secretary of State must publish details of any modifications made under a relevant power as soon as reasonably practicable after they are made.

(11) If under a relevant power the Secretary of State makes modifications of the standard conditions of a licence, the Authority must—

(a) make the same modification of those standard conditions for the purposes of their incorporation in licences of that type granted after that time, and

(b) publish the modification.

(12) A modification made under a relevant power of part of a standard condition of a licence does not prevent any other part of the condition from continuing to be regarded as a standard condition for the purposes of Part 1 of EA 1989.

(13) The power conferred by a relevant power to "modify" (in relation to licence conditions or a document) includes a power to amend, add to or remove, and references to modifications are to be construed accordingly.

45 Consequential amendments

(1) In section 3A of EA 1989 (principal objective and general duties), in subsection (2)(b) for "or sections 26 to 29 of the Energy Act 2010" substitute ", sections 26 to 29 of the Energy Act 2010 or Part 1 of the Energy Act 2013".

(2) In section 33(1) of the Utilities Act 2000 (standard conditions of electricity licences)—

(a) after paragraph (e) omit "or";

(b) after paragraph (f) insert "or

(g) under the Energy Act 2013.".

(3) In section 137(3) of the Energy Act 2004 (standard conditions of transmission licences)—

(a) after paragraph (d) omit "or";

(b) after paragraph (e) insert ", or

(f) under the Energy Act 2013,".

(4) In section 146(5) of the Energy Act 2004 (standard conditions for electricity interconnectors), for "or under section 98 of the Energy Act 2011" substitute ", under section 98 of the Energy Act 2011 or section 25 or 29 of the Energy Act 2013.".

46 Review of Part 1

(1) As soon as reasonably practicable after the end of the period of 5 years beginning with the day on which this Act is passed, the Secretary of State must carry out a review of the provisions of the following Chapters of this Part—

(a) Chapter 2 (contracts for difference);

(b) Chapter 3 (capacity market);

(c) Chapter 4 (conflicts of interest and contingency arrangements);

(d) Chapter 6 (access to markets);

(e) Chapter 7 (the renewables obligation: transitional arrangements).

(2) The Secretary of State must set out the conclusions of the review in a report.

(3) The report must, in particular—

(a) set out the objectives of the provisions of each Chapter subject to review,

(b) assess the extent to which those objectives have been achieved, and

(c) assess whether those objectives remain appropriate and, if so, the extent to which those objectives could be achieved in a way that imposes less regulation.

(4) The Secretary of State must lay the report before Parliament.

PART 2

NUCLEAR REGULATION

CHAPTER 1

THE ONR'S PURPOSES

47 The ONR's purposes

In this Part, "the ONR's purposes" means—

(a) the nuclear safety purposes (see section 48),

(b) the nuclear site health and safety purposes (see section 49),

(c) the nuclear security purposes (see section 50),

(d) the nuclear safeguards purposes (see section 52), and

(e) the transport purposes (see section 53).

48 Nuclear safety purposes

(1) In this Part, the "nuclear safety purposes" means the purposes of protecting persons against risks of harm from ionising radiations from GB nuclear sites, including through—

(a) the design and construction of relevant nuclear installations and associated sites,

(b) arrangements for the operation and decommissioning of, and other processes connected with, relevant nuclear installations,

(c) arrangements for the storage and use of nuclear matter on GB nuclear sites, and

(d) arrangements to minimise those risks in the event of an escape or release of such ionising radiations.

(2) For this purpose, ionising radiations from GB nuclear sites are ionising radiations from—

(a) relevant nuclear installations, or

(b) nuclear matter stored or used on a GB nuclear site;

and an escape or release of ionising radiations from a GB nuclear site includes ionising radiations from nuclear matter that has escaped or been released on or from a GB nuclear site.

(3) In this section—

"GB nuclear site" means a nuclear site in England, Wales or Scotland;

"nuclear installation" has the same meaning as in the Nuclear Installations Act 1965 (see section 26 of that Act);

"nuclear matter" has the same meaning as in that Act (see section 26 of that Act);

"relevant nuclear installation" means a nuclear installation on a site in England, Wales or Scotland for which a nuclear site licence is required by virtue of the installation (and includes a proposed or former nuclear installation in respect of which such a licence would be or has ever been so required).

49 Nuclear site health and safety purposes

(1) In this Part, the "nuclear site health and safety purposes" means so much of the general purposes of Part 1 of the 1974 Act as consists of the following purposes—

(a) securing the health, safety and welfare of persons at work on GB nuclear sites;

(b) protecting persons, other than persons at work on GB nuclear sites, against risks to health or safety arising out of or in connection with the activities of persons at work on GB nuclear sites;

(c) controlling the storage and use on GB nuclear sites of dangerous substances and generally preventing the unlawful acquisition, possession and use of such substances on or from such sites.

(2) In this section—

(a) "dangerous substances" means radioactive, explosive, highly flammable or otherwise dangerous substances, other than nuclear matter;

(b) "GB nuclear site" and "nuclear matter" have the same meanings as in section 48.

(3) Section 1(3) of the 1974 Act (interpretation of references to risks relating to persons at work) applies for the purposes of this section as it applies for the purposes of Part 1 of the 1974 Act.

50 Nuclear security purposes

(1) In this Part, the "nuclear security purposes" means the purposes of ensuring the security of—

(a) civil nuclear premises;

(b) nuclear material used or stored on civil nuclear premises and equipment or software used or stored on such premises in connection with activities involving nuclear material;

(c) other radioactive material used or stored on civil nuclear sites and equipment or software used or stored on civil nuclear sites in connection with activities involving such other radioactive material;

(d) civil nuclear construction sites and equipment used or stored on civil nuclear construction sites;

(e) equipment or software in the United Kingdom which—

(i) is capable of being used in, or in connection with, the enrichment of uranium, and

(ii) is in the possession or control of a person involved in uranium enrichment activities;

(f) sensitive nuclear information which is in the United Kingdom in the possession or control of—

(i) a person who is involved in activities on or in relation to civil nuclear premises or who is proposing or likely to become so involved;

(ii) a person involved in uranium enrichment activities; or

(iii) a person who is storing, transporting or transmitting the information for or on behalf of a person falling within sub-paragraph (i) or (ii);

(g) nuclear material which is being (or is expected to be)—

(i) transported within the United Kingdom or its territorial sea,

(ii) transported (outside the United Kingdom and its territorial sea) to or from any civil nuclear premises in the United Kingdom, or

(iii) carried on board a United Kingdom ship,

other than material being (or expected to be) so transported or carried for defence purposes;

(h) information relating to the security of anything mentioned in paragraphs (a) to (g).

(2) For the purposes of subsection (1), ensuring the security of any site or premises includes doing so by means of the design of, or of anything on, the site or premises.

(3) In this section—

"civil nuclear construction site" means a site—

(a) on which works are being carried out with a view to its becoming a civil nuclear site, and

(b) which is situated within 5 kilometres of an existing nuclear site;

"civil nuclear premises" means—

(a) a civil nuclear site, or

(b) other premises on which nuclear material is used or stored which are not controlled or operated wholly or mainly for defence purposes;

"civil nuclear site" means a nuclear site other than one controlled or operated wholly or mainly for defence purposes;

"defence purposes" means the purposes of the department of the Secretary of State with responsibility for defence;

"enrichment of uranium" means a treatment of uranium that increases the proportion of isotope 235 contained in the uranium;

"equipment" includes equipment that has not been assembled and its components;

"nuclear material" means any fissile material in the form of—

(a) uranium metal, alloy or compound, or

(b) plutonium metal, alloy or compound,

or any other fissile material prescribed by regulations made by the Secretary of State;

"sensitive nuclear information" means—

(a) information relating to, or capable of use in connection with, the enrichment of uranium, or

(b) information of a description for the time being specified in a notice under section 51;

"United Kingdom ship" means a ship registered in the United Kingdom under Part 2 of the Merchant Shipping Act 1995.

51 Notice by Secretary of State to ONR specifying sensitive nuclear information

(1) This section applies where the Secretary of State considers that information of any description relating to activities carried out on or in relation to civil nuclear premises is information which needs to be protected in the interests of national security.

(2) The Secretary of State may give a notice to the ONR under this section specifying that description of information.

(3) The Secretary of State may vary or revoke any notice given under this section by giving a further notice to the ONR.

(4) Before giving a notice under this section, the Secretary of State must consult the ONR.

(5) In this section "civil nuclear premises" has the same meaning as in section 50.

52 Nuclear safeguards purposes

(1) In this Part, the "nuclear safeguards purposes" means the purposes of—

(a) ensuring compliance by the United Kingdom or, as the case may be, enabling or facilitating compliance by a Minister of the Crown, with the safeguards obligations, and

(b) the development of any future safeguards obligations.

(2) In subsection (1)(a) "the safeguards obligations" has the meaning given by section 72.

53 Transport purposes

(1) In this Part, the "transport purposes" means the purposes of—

(a) protecting against risks relating to the civil transport of radioactive material in Great Britain by road, rail or inland waterway which arise out of, or in connection with, the radioactive nature of the material, and

(b) ensuring the security of radioactive material during civil transport in Great Britain by road, rail or inland waterway.

(2) For this purpose—

(a) "civil transport" means transport otherwise than for the purposes of the department of the Secretary of State with responsibility for defence;

(b) "radioactive material"—

(i) in relation to transport by road, has the same meaning as in ADR,

(ii) in relation to transport by rail, has the same meaning as in RID, and

(iii) in relation to transport by inland waterway, has the same meaning as in ADN;

(c) the transport of material begins with any preparatory process (such as packaging) and continues until the material has been unloaded at its destination.

(3) In subsection (2)(b)—

"ADN" means the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway (signed at Geneva on 26 May 2000);

"ADR" means Annexes A and B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (signed at Geneva on 30 September 1957);

"RID" means the Annex to Appendix C to the Convention concerning International Carriage by Rail (signed at Berne on 9 May 1980) (the Regulation concerning the International Carriage of Dangerous Goods by Rail);

and any reference to, or to an appendix to, an Agreement, a Convention or a Treaty, or to an annex to any of them, is to it as it has effect for the time being.

(4) The Secretary of State may by regulations modify the definition of "radioactive material".

CHAPTER 2

NUCLEAR REGULATIONS

54 Nuclear regulations

(1) The Secretary of State may make regulations (to be known as "nuclear regulations") for any of the following purposes—

(a) the nuclear safety purposes;

(b) the nuclear security purposes;

(c) the nuclear safeguards purposes;

(d) the transport purposes.

(2) Schedule 6 (which gives examples of particular kinds of provision that may be made by nuclear regulations) has effect.

(3) Nuclear regulations may—

(a) confer functions on the ONR;

(b) create powers which inspectors may be authorised to exercise by their instruments of appointment under paragraph 2 of Schedule 8;

(c) create offences (as to which see section 55);

(d) modify—

(i) any of the provisions of the Nuclear Installations Act 1965 that are relevant statutory provisions;

(ii) any provision of the Nuclear Safeguards Act 2000;

(e) provide for exemptions (including conditional exemptions) from any prohibition or requirement imposed by or under any of the relevant statutory provisions;

(f) provide for defences in relation to offences under any of the relevant statutory provisions;

(g) provide for references in the regulations to any specified document to operate as references to that document as revised or re-issued from time to time.

(4) Provision that may be included by virtue of subsection (3)(a) includes, in particular,—

(a) provision requiring compliance with directions by the ONR;

(b) provision conferring power for the ONR to authorise other persons to exercise functions relating to the grant of exemptions of a kind mentioned in subsection (3)(e).

(5) Nuclear regulations may make provision—

(a) applying to acts done outside the United Kingdom by United Kingdom persons;

(b) for enabling offences under any of the relevant statutory provisions to be treated as having been committed at any specified place for the purpose of conferring jurisdiction on any court in relation to any such offence.

(6) In subsection (5) "United Kingdom person" means—

(a) an individual who is—

(i) a British citizen, a British overseas territories citizen, a British National (Overseas) or a British Overseas citizen,

(ii) a person who under the British Nationality Act 1981 is a British subject, or

(iii) a British protected person within the meaning of that Act,

(b) a Scottish partnership, or

(c) a body incorporated under the law of any part of the United Kingdom.

(7) Before making nuclear regulations, the Secretary of State must consult—

(a) the ONR,

(b) if the regulations would modify any provision of health and safety regulations (within the meaning of Part 1 of the 1974 Act), the Health and Safety Executive, and

(c) such other persons (if any) as the Secretary of State considers it appropriate to consult.

(8) Subsection (7)(a) does not apply if the regulations give effect, without modification, to proposals submitted by the ONR under section 60(1)(a)(i).

(9) Nuclear regulations which include any provisions to which any paragraph of subsection (10) applies must identify those provisions as such.

(10) This subsection applies to any provisions of nuclear regulations which are made for—

(a) the nuclear security purposes,

(b) the nuclear safeguards purposes, or

(c) both of those purposes,

and for no other purpose.

(11) In this section (and Schedule 6) "specified" means specified in nuclear regulations.

55 Nuclear regulations: offences

(1) Nuclear regulations may provide for an offence under the regulations to be triable—

(a) only summarily, or

(b) either summarily or on indictment.

(2) Nuclear regulations may provide for an offence under the regulations that is triable either way to be punishable—

(a) on conviction on indictment—

(i) with imprisonment for a term not exceeding the period specified, which may not exceed 2 years,

(ii) with a fine, or

(iii) with both,

(b) on summary conviction—

(i) with imprisonment for a term not exceeding the period specified,

(ii) with a fine not exceeding the amount specified (which must not exceed £20,000), or

(iii) with both.

(3) A period specified under subsection (2)(b)(i) may not exceed—

(a) in relation to England and Wales—

(i) 6 months, in relation to offences committed before the date on which section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison) comes into force,

(ii) 12 months, in relation to offences committed after that date,

(b) in relation to Scotland, 12 months,

(c) in relation to Northern Ireland, 6 months.

(4) Nuclear regulations may provide for a summary offence under the regulations to be punishable—

(a) with imprisonment for a term not exceeding the period specified,

(b) with a fine not exceeding the amount specified, which must not exceed level 5 on the standard scale, or

(c) with both.

(5) A period specified under subsection (4)(a) may not exceed—
  (a) in relation to England and Wales—
    (i) 6 months, in relation to offences committed before the date on which section 281(5) of the Criminal Justice Act 2003 (alteration of penalties for summary offences) comes into force, or
    (ii) 51 weeks, in relation to offences committed after that date,
  (b) in relation to Scotland, 12 months,
  (c) in relation to Northern Ireland, 6 months.

(6) In this section "specified" means specified in nuclear regulations.

56 Civil liability for breach of nuclear regulations

(1) Breach of a duty imposed by nuclear regulations is actionable to the extent that it causes damage (and whether or not the breach constitutes an offence).

(2) Any term of an agreement is void to the extent that it purports to exclude or restrict—
  (a) the operation of subsection (1), or
  (b) any liability arising by virtue of that subsection.

(3) Nuclear regulations may provide—
  (a) for subsection (1) or (2) not to apply in specified circumstances;
  (b) for any specified defence to be available in any action under subsection (1).

(4) Nothing in subsection (1) or (3)(b) affects any right of action or defence which otherwise exists or may be available.

(5) In this section—
  "damage" includes the death of any person or any personal injury;
  "specified" means specified in nuclear regulations.

CHAPTER 3

OFFICE FOR NUCLEAR REGULATION

57 The Office for Nuclear Regulation

(1) There is to be a body corporate known as the Office for Nuclear Regulation.

(2) In this Part that body is referred to as "the ONR".

(3) Schedule 7 makes further provision about the ONR.

CHAPTER 4

FUNCTIONS OF THE ONR

Functions of ONR: general

58 Principal function

(1) The ONR must do whatever it considers appropriate for the ONR's purposes.

(2) That includes, so far as it considers appropriate, assisting and encouraging others to further those purposes.

59 Codes of practice

(1) The ONR may, with the consent of the Secretary of State, issue codes of practice giving practical guidance as to the requirements of any provision of the relevant statutory provisions.

(2) The ONR may, with the consent of the Secretary of State, revise or withdraw a code of practice issued under this section.

(3) Before seeking the consent of the Secretary of State under subsection (1) or (2), the ONR must consult—

(a) any government department or other person that the Secretary of State has directed the ONR to consult, and

(b) any other government department or other person that the ONR considers it appropriate to consult.

(4) A direction under subsection (3)(a) may be general or may relate to a particular code, or codes of a particular kind.

(5) The ONR must—

(a) publish any code of practice issued under this section;

(b) when it revises such a code, publish a copy of the revised code;

(c) when it withdraws such a code, publish a notice to that effect.

(6) A code of practice (including a revised code) must specify the relevant statutory provisions to which it relates.

(7) References in this Part to an approved code of practice are references to a code issued under this section as it has effect for the time being.

(8) A person's failure to observe any provision of an approved code of practice does not of itself make the person liable to any civil or criminal proceedings.

(9) But subsections (10) to (12) apply to any proceedings for an offence where—

(a) the offence consists of failing to comply with any requirement or prohibition imposed by or under any of the relevant statutory provisions, and

(b) at the time of the alleged failure, there was an approved code of practice relating to the provision.

(10) Any provision of the code of practice which appears to the court to be relevant to the alleged offence is admissible in evidence in the proceedings.

(11) Where—

(a) in order to establish that the defendant failed to comply with the requirement or prohibition, the prosecution must prove any matter,

(b) the court is satisfied that a provision of the code of practice is relevant to that matter, and

(c) the prosecution prove that, at a material time, the defendant failed to observe that provision of the code of practice,

that matter is to be taken as proved unless the defendant proves that the requirement or prohibition was complied with in some other way.

(12) A document purporting to be an approved code of practice is to be taken to be such an approved code unless the contrary is proved.

60 Proposals about orders and regulations

(1) The ONR may from time to time—

(a) submit proposals to the Secretary of State for—

(i) nuclear regulations,

(ii) regulations under section 64,

(iii) regulations under section 80,

(iv) health and safety fees regulations, or

(v) orders or regulations under a relevant enactment;

(b) submit proposals to the Health and Safety Executive for relevant health and safety regulations.

(2) In this section—

"health and safety fees regulations" means regulations under section 43(2) of the 1974 Act in relation to fees payable for or in connection with the performance of a function by or on behalf of—

(a) the ONR, or

(b) a health and safety inspector;

"relevant enactment" means—

(a) section 3 of the Nuclear Safeguards and Electricity (Finance) Act 1978 (regulations for giving effect to certain provisions of Safeguards Agreement);

(b) section 3 of the Nuclear Safeguards Act 2000 (identifying persons who have information);

(c) section 5(3) of that Act (rights of access for Agency inspectors);

(d) section 80 of the Anti-terrorism, Crime and Security Act 2001 (prohibition of disclosures of uranium enrichment technology);

"relevant health and safety regulations" means regulations under section 15 of the 1974 Act so far as they can be made for the nuclear site health and safety purposes.

(3) Before submitting any such proposal, the ONR must consult—

(a) any government department or other person that the Secretary of State has directed the ONR to consult, and

(b) any other government department or other person that the ONR considers it appropriate to consult.

(4) A direction under subsection (3)(a) may be general or may relate to a particular proposal, or to proposals of a particular kind.

61 Enforcement of relevant statutory provisions

(1) The ONR must make adequate arrangements for the enforcement of the relevant statutory provisions.

(2) In this Part, "relevant statutory provisions" means—

(a) the provisions of—

this Part, and

nuclear regulations;

(b) the provisions made by or under the following sections of the Nuclear Installations Act 1965, so far as they have effect in England and Wales or Scotland—

section 1;
sections 3 to 6;
section 22;
section 24A; and

(c) the provisions of the Nuclear Safeguards Act 2000.

62 Inspectors

Schedule 8 (appointment and powers of inspectors) has effect.

63 Investigations

(1) The ONR may—
(a) investigate and make a report ("a special report") on any relevant matter, or
(b) authorise another person to do so.

(2) The ONR may publish or arrange for the publication of—
(a) a special report, or
(b) so much of a special report as the ONR considers appropriate.

(3) In this section "relevant matter" means any accident, occurrence, situation or other matter which the ONR considers it necessary or desirable to investigate—
(a) for any of the ONR's purposes, or
(b) with a view to the making of—
(i) nuclear regulations, or
(ii) regulations under section 15 of the 1974 Act (health and safety regulations) so far as they can be made for the nuclear site health and safety purposes.

(4) The ONR may pay such remuneration, expenses and allowances as it may determine to a person who—
(a) is not a member or member of staff of the ONR, and
(b) investigates a relevant matter or makes a special report under subsection (1), or assists in doing so.

(5) The ONR may make such payments as it may determine to meet the other costs (if any) of an investigation or special report under subsection (1).

(6) The ONR must consult the Office of Rail Regulation before taking any step under subsection (1) in relation to a matter which appears to the ONR to be, or likely to be, relevant to the railway safety purposes (within the meaning given in paragraph 1 of Schedule 3 to the Railways Act 2005).

(7) Subsection (2) is subject to section 73.

64 Inquiries

(1) The ONR may, with the consent of the Secretary of State, direct an inquiry to be held into any matter if it considers the inquiry necessary or desirable for any of the ONR's purposes.

(2) In this Part "ONR inquiry" means an inquiry under this section.

(3) An ONR inquiry must be held in accordance with regulations made by the Secretary of State.

(4) Except as provided by the regulations—
- (a) an ONR inquiry is to be held in public; and
- (b) any report made by the person holding an ONR inquiry is to be published.

(5) The regulations may in particular make provision—
- (a) conferring on the person holding an ONR inquiry and any person assisting that person—
  - (i) powers of entry and inspection;
  - (ii) powers of summoning witnesses to give evidence or produce documents;
  - (iii) power to take evidence on oath and to administer oaths;
  - (iv) power to require the making of declarations;
- (b) as to circumstances in which—
  - (i) an ONR inquiry or any part of it is to be held in private;
  - (ii) any report, or part of a report, made by the person holding an ONR inquiry is not to be published;
- (c) conferring functions on the ONR or the Secretary of State;
- (d) creating summary offences.

(6) An offence under the regulations may be made punishable with a fine not exceeding level 5 on the standard scale.

(7) Subsection (8) applies where—
- (a) the ONR directs an ONR inquiry to be held into a matter arising in Scotland, and
- (b) the matter in question causes the death of a person.

(8) Unless the Lord Advocate otherwise directs, no inquiry is to be held with regard to the death of that person under the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976.

65 Inquiries: payments and charges

(1) The ONR may pay such remuneration, expenses and allowances as it may determine to—
- (a) a person holding an ONR inquiry;
- (b) any assessor appointed to assist a person holding an ONR inquiry.

(2) The ONR may pay to persons attending an ONR inquiry as witnesses such expenses as it may determine.

(3) The ONR may make such payments as it may determine to meet the other costs (if any) of an ONR inquiry.

(4) The ONR may require such person or persons to make such payments to it as it considers appropriate in connection with an ONR inquiry.

(5) The aggregate of the payments required under subsection (4) must not exceed the ONR's costs that are attributable to the ONR inquiry.

(6) No payment may be required under subsection (4) except with the consent of the Secretary of State.

Other functions

66 Provision of information

(1) The ONR must make such arrangements as it considers appropriate for providing information that it holds that is relevant to the ONR's purposes.

(2) Arrangements that may be made under subsection (1) are arrangements of any description, including arrangements—

(a) for providing information to any person or category of persons (whether or not concerned with matters relevant to the ONR's purposes);

(b) for providing information on request or on the ONR's initiative;

(c) for providing only such information as the ONR considers appropriate.

(3) This section is subject to section 73.

67 Research, training etc

(1) The ONR—

(a) may carry out research in connection with the ONR's purposes, or arrange for such research to be carried out on its behalf, and

(b) must, if it considers it appropriate to do so, publish the results of any such research or arrange for them to be published.

(2) The ONR may make payments for research to be carried out in connection with the ONR's purposes and for the dissemination of information derived from such research.

(3) The ONR may provide, or make arrangements for the provision of, training to any person in connection with the ONR's purposes.

(4) Arrangements under subsection (3) may include provision for payments to be made to the ONR by or on behalf of—

(a) other parties to the arrangements,

(b) persons to whom the training is provided.

68 Provision of information or advice to relevant authorities

(1) The ONR must, on request, provide a relevant authority with relevant information or relevant advice.

(2) Relevant information is information about the ONR's activities which is requested—

(a) in the case of information requested by a Minister of the Crown—

(i) for the purpose of monitoring the ONR's performance of its functions, or

(ii) for the purpose of any proceedings in Parliament,

(b) in any case, in connection with any matter with which the relevant authority requesting it is concerned.

(3) The reference in subsection (2) to the ONR's activities includes a reference to—

(a) the activities of inspectors appointed by the ONR under—

(i) Schedule 8,

(ii) section 19 of the 1974 Act, or

(iii) Article 26 of the Regulatory Reform (Fire Safety) Order 2005 (S.I. 2005/2541),

in their capacity as such inspectors, and

(b) the activities of enforcing officers appointed by the ONR under section 61(3) of the Fire (Scotland) Act 2005 (asp. 5) in their capacity as such enforcing officers.

(4) Relevant advice is advice on a matter with which the relevant authority requesting it is concerned where the matter—

(a) is relevant to the ONR's purposes, or

(b) is one on which expert advice is obtainable from any member or member of staff of the ONR.

(5) The ONR may require a relevant authority to whom information or advice is provided under subsection (1) to pay a fee in respect of the ONR's costs reasonably incurred in providing the authority with—

(a) relevant information requested under subsection (2)(b), or

(b) relevant advice.

(6) The Secretary of State may by regulations provide that subsection (5) is not to apply in particular cases or classes of case or in particular circumstances.

(7) The duty under subsection (1) is in addition to any other duty or power of the ONR to provide information or advice.

(8) In this section "relevant authority" means any of the following—

(a) a Minister of the Crown;

(b) the Scottish Ministers;

(c) the Welsh Ministers;

(d) a Northern Ireland Department;

(e) the Health and Safety Executive;

(f) the Health and Safety Executive for Northern Ireland;

(g) the Civil Aviation Authority;

(h) the Office of Rail Regulation.

69 Arrangements with government departments etc

(1) If the condition in subsection (2) is met, the ONR may enter into an agreement with a Minister of the Crown, a government department or a public authority for the ONR to perform any function exercisable by the Minister, department or authority.

(2) The condition is that—

(a) the function is—

(i) a function of the Health and Safety Executive of investigating or making a special report under section 14 of the 1974 Act, or

(ii) a function of the Office of Rail Regulation of investigating or making a special report under paragraph 4 of Schedule 3 to the Railways Act 2005, or

(b) the Secretary of State considers that the function in question can appropriately be performed by the ONR.

(3) The functions to which an agreement under subsection (1) may relate—

(a) in the case of an agreement with a Minister of the Crown, include a function not conferred by an enactment;

(b) do not include any power to make regulations or other instruments of a legislative character.

(4) An agreement under subsection (1) may provide for functions to be performed with or without payment.

(5) The ONR may provide services or facilities, with or without payment, otherwise than for the ONR's purposes, to a government department or public authority in connection with the exercise of that department's or authority's functions.

70 Provision of services or facilities

(1) The ONR may provide services and facilities for the ONR's purposes to any person.

(2) The ONR may, with the consent of the Secretary of State, provide any relevant services to any person, whether or not in the United Kingdom.

(3) In subsection (2), "relevant services" means services which—

(a) are not relevant to the ONR's purposes, but

(b) are in a field in which any member or member of staff of the ONR has particular expertise.

(4) The Secretary of State may give consent for the purposes of subsection (2)—

(a) in relation to particular arrangements for the provision of services, or

(b) generally in relation to such arrangements of a particular description.

(5) Arrangements for the provision of services to a person under subsection (2) are to be on such terms as to payment as that person and the ONR may agree.

Exercise of functions: general

71 Directions from Secretary of State

(1) The Secretary of State may give the ONR a direction as to the exercise by it of—

(a) its functions generally, or

(b) any of its functions specifically.

(2) A direction given by the Secretary of State under subsection (1)—

(a) may modify a function of the ONR, but

(b) must not confer functions on the ONR (other than a function of which it was deprived by a previous direction given under this section).

(3) The Secretary of State may give the ONR such directions as appear to the Secretary of State to be necessary or desirable in the interests of national security.

(4) A direction given by the Secretary of State under subsection (3) may—

(a) modify a function of the ONR,

(b) confer a function on the ONR.

(5) A direction under subsection (1) or (3) must not be given in relation to the exercise of a regulatory function in a particular case.

(6) If the Secretary of State is satisfied that there are exceptional circumstances relating to national security which justify giving a direction under this subsection, the Secretary of State may give the ONR a direction as to the exercise by the ONR of a regulatory function in a particular case.

(7) A direction given under subsection (6) must be for the nuclear security purposes.

(8) The Secretary of State must lay before Parliament a copy of any direction given under this section.

(9) Subsection (8) does not apply to a direction under subsection (6) if the Secretary of State considers that publishing the direction would be contrary to the interests of national security; but, in that event, the Secretary of State must lay before Parliament a memorandum stating that such a direction has been given and the date on which it was given.

72 Compliance with nuclear safeguards obligations

(1) The ONR must do such things as it considers best calculated to secure compliance by the United Kingdom or, as the case may be, to enable or facilitate compliance by a Minister of the Crown, with the safeguards obligations.

(2) For the purposes of this Part "the safeguards obligations" are—

(a) Articles 77 to 85 of the Treaty establishing the European Atomic Energy Community, signed at Rome on 25 March 1957,

(b) the agreement made on 6 September 1976 between the United Kingdom, the European Atomic Energy Community and the International Atomic Energy Agency for the application of safeguards in the United Kingdom in connection with the Treaty on the Non-Proliferation of Nuclear Weapons,

(c) the protocol signed at Vienna on 22 September 1998 additional to the agreement mentioned in paragraph (b), and

(d) such other obligations, agreements or arrangements relating to nuclear safeguards as may be specified in a notice given to the ONR by the Secretary of State;

and any reference in paragraphs (a) to (c) to a treaty, agreement or protocol is to it as it has effect for the time being.

(3) The Secretary of State may vary or revoke a notice given under subsection (2)(d) by giving a further notice to the ONR.

(4) Before giving a notice under this section, the Secretary of State must consult the ONR.

(5) The ONR must publish any notice given under this section.

(6) Subsection (1) is not to be taken to affect the generality of section 58.

73 Consent of Secretary of State for certain communications

(1) The ONR must not issue any communication to which this section applies except with the consent of the Secretary of State.

(2) This section applies to—

(a) any—

(i) security guidance, or

(ii) statement of the ONR's nuclear security policy,

that the ONR considers concerns any matter to which any government policy on national security relates;

(b) any other communication of a description that the Secretary of State has directed should be submitted to the Secretary of State before being issued.

This is subject to subsection (3).

(3) This section does not apply to—

(a) a code of practice issued under section 59;

(b) the ONR's strategy or annual plan or a report under paragraph 24 of Schedule 7.

(4) In this section—

"government policy on national security" means any current policy which relates to national security and—

(a) has been published by or on behalf of Her Majesty's Government, or

(b) has been notified to the ONR by the Secretary of State;

"security guidance" means any guidance to which the ONR's nuclear security policy is relevant;

"the ONR's nuclear security policy" means the ONR's policy with respect to the exercise of its functions, or the functions of inspectors, so far as relevant to the nuclear security purposes.

(5) The Secretary of State may give a direction under subsection (2)(b) in relation to a description of communication only if it appears to the Secretary of State—

(a) that—

(i) a communication of that description might contain security guidance or information about the ONR's nuclear security policy, or

(ii) the ONR's nuclear security policy might otherwise be relevant to such a communication, and

(b) that such a communication might concern any matter to which any government policy on national security relates.

(6) The Secretary of State may give the ONR a general consent in relation to the issue of a particular description of communication which would otherwise fall within subsection (2)(a).

(7) If the Secretary of State has given such a general consent, the ONR need not seek the Secretary of State's particular consent in relation to the issue of a

communication of that description unless directed by the Secretary of State to do so.

74 Power to arrange for exercise of functions by others

(1) If the condition in subsection (2) is satisfied, the ONR may make arrangements with a government department or other person for that department or person to perform any of the ONR's functions, with or without payment.

(2) That condition is that the Secretary of State considers that the function or functions in question can appropriately be performed by the government department or other person.

75 Co-operation between ONR and Health and Safety Executive

(1) The Health and Safety Executive and the ONR must enter into and maintain arrangements with each other for securing co-operation and the exchange of information in connection with the carrying out of any of their functions.

(2) The Health and Safety Executive and the ONR must—
  (a) review the arrangements from time to time, and
  (b) revise them when they consider it appropriate to do so.

Information etc

76 Power to obtain information

(1) The ONR may by notice require a person to provide information which the ONR needs for carrying out its functions.
This is subject to subsection (4).

(2) A notice may require information to be provided—
  (a) in a specified form or manner;
  (b) at a specified time;
  (c) in respect of a specified period.

(3) In particular, a notice may require the person to whom it is given to make returns to the ONR containing information about matters specified in the notice at times or intervals so specified.

(4) No notice may be given under this section which imposes a requirement which could be imposed by a notice served by the ONR under section 2 of the Nuclear Safeguards Act 2000 (information and records for purposes of the Additional Protocol).

(5) It is an offence to refuse or fail to comply with a notice under this section.

(6) A person who commits an offence under this section is liable—
  (a) on summary conviction, to a fine not exceeding the statutory maximum, or
  (b) on conviction on indictment, to a fine.

77 Powers of HMRC in relation to information

(1) The Commissioners for Her Majesty's Revenue and Customs may disclose information about imports to—

(a) the ONR,

(b) an inspector, or

(c) a health and safety inspector,

for the purpose of facilitating the ONR, inspector or health and safety inspector to carry out any function.

(2) For this purpose, "information about imports" means information obtained or held by the Commissioners for the purposes of the exercise of their functions in relation to imports.

(3) Information may be disclosed to the ONR, an inspector or a health and safety inspector under subsection (1) whether or not the disclosure of the information has been requested by or on behalf of the ONR, inspector or health and safety inspector.

78 HMRC power to seize articles etc to facilitate ONR and inspectors

(1) An officer of Revenue and Customs may seize any imported article or substance and detain it for the purpose of facilitating the ONR or an inspector to carry out any function under the relevant statutory provisions.

(2) It is an offence for a person intentionally to obstruct an officer of Revenue and Customs in the exercise of powers under subsection (1).

(3) A person who commits an offence under subsection (2) is liable on summary conviction—

(a) to imprisonment for a term not exceeding 51 weeks (in England and Wales), 12 months (in Scotland) or 6 months (in Northern Ireland),

(b) to a fine not exceeding level 5 on the standard scale, or

(c) to both.

(4) In relation to an offence committed before the commencement of section 281(5) of the Criminal Justice Act 2003 (alteration of penalties for summary offences), the reference in subsection (3)(a), as it has effect in England and Wales, to 51 weeks is to be read as a reference to 6 months.

(5) Anything seized and detained under subsection (1)—

(a) must not be detained for more than 2 working days, and

(b) must be dealt with during the period of detention in such manner as the Commissioners for Her Majesty's Revenue and Customs may direct.

(6) In subsection (5), the reference to 2 working days is a reference to the period of 48 hours beginning when the article or substance in question is seized but disregarding any time falling on a Saturday or Sunday, or on Good Friday or Christmas Day or on a day which is a bank holiday in the part of the United Kingdom where it is seized.

79 Disclosure of information

Schedule 9 (disclosure of information) has effect.

Fees

80 Fees

(1) *The Secretary of State may by regulations provide for fees to be payable for, or in connection with, the performance of any of the following functions (whenever conferred)—*

(a) any function of the ONR or an inspector under any of the relevant statutory provisions;

(b) *any function of the ONR under regulations under section 80 of the Anti-terrorism, Crime and Security Act 2001 (prohibition of disclosures of uranium enrichment technology);*

(c) any function of any other person under any of the relevant statutory provisions.

(2) The amount of any fee under regulations under this section must be—

(a) specified in the regulations, or

(b) determined by or in accordance with the regulations.

(3) Regulations under this section may provide for the amounts of fees to be different in different cases and, in particular, for fees in respect of the same function to be of different amounts in different circumstances.

(4) Regulations under this section may not provide for a fee to be payable by anyone in the capacity of—

an employee,

a person seeking employment,

a person training for employment, or

a person seeking training for employment.

(5) For the purposes of subsection (4)—

(a) "employee" and "employment" have the same meanings as in Part 1 of the 1974 Act, and

(b) an industrial rehabilitation course provided by virtue of the Employment and Training Act 1973 is to be treated as training for employment.

(6) Before making regulations under subsection (1), the Secretary of State must consult—

(a) the ONR, and

(b) such other persons (if any) as the Secretary of State considers it appropriate to consult.

(7) Subsection (6)(a) does not apply if the regulations give effect, without modification, to any proposals submitted by the ONR under section 60(1)(a)(iii).

CHAPTER 5

SUPPLEMENTARY

General duties of employers, employees and others

81 General duty of employees at work in relation to requirements imposed on others

(1) Every employee, while at work, must co-operate with any person (whether or not the employer) on whom a requirement is imposed by or under any relevant provision so far as necessary to enable the requirement to be complied with.

(2) Failure to comply with the duty in subsection (1) is an offence.

(3) A person who commits an offence under subsection (2) is liable—

(a) on summary conviction—

(i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),

(ii) to a fine not exceeding the statutory maximum, or

(iii) to both;

(b) on conviction on indictment—

(i) to imprisonment for a term not exceeding 2 years,

(ii) to a fine, or

(iii) to both.

(4) In the application of subsection (3) to England and Wales in relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference in subsection (3)(a)(i) to 12 months is to be read as a reference to 6 months.

(5) In this section—

(a) "employee" and "employer" have the same meanings as in Part 1 of the 1974 Act (see sections 52 and 53(1) of that Act), and

(b) "relevant provision" means any of the relevant statutory provisions other than—

(i) any provision of the Nuclear Safeguards Act 2000,

(ii) any provision of nuclear regulations which is identified under section 54(9) as having been made solely for the nuclear safeguards purposes.

82 Duty not to interfere with or misuse certain things provided under statutory requirements

(1) It is an offence intentionally or recklessly to interfere with or misuse anything provided in the interests of health, safety or welfare in pursuance of any of the relevant statutory provisions.

(2) A person who commits an offence under this section is liable—

(a) on summary conviction—

(i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),

(ii) to a fine not exceeding £20,000, or

(iii) to both;

(b) on conviction on indictment—

(i) to imprisonment for a term not exceeding 2 years,

(ii) to a fine, or

(iii) to both.

(3) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's powers to imprison), the reference in subsection (2)(a)(i), as it has effect in England and Wales, to 12 months is to be read as a reference to 6 months.

83 Duty not to charge employees for certain things

(1) It is an offence for an employer to impose a charge, or allow a charge to be imposed, on an employee in respect of anything done or provided in pursuance of a specific requirement imposed by or under any relevant provision.

(2) A person who commits an offence under this section is liable—

(a) on summary conviction to a fine not exceeding £20,000;

(b) on conviction on indictment, to a fine.

(3) In this section—

(a) "employer" and "employee" have the same meanings as in Part 1 of the 1974 Act (see section 53(1) of that Act), and

(b) "relevant provision" has the same meaning as in section 81.

Offences

84 Offences relating to false information and deception

(1) It is an offence for a person—

(a) to make a statement which the person knows to be false, or

(b) recklessly to make a statement which is false,

in the circumstances mentioned in subsection (2).

(2) Those circumstances are where the statement is made—

(a) in purported compliance with any requirement to provide information imposed by or under any of the relevant statutory provisions, or

(b) for the purposes of obtaining the issue of a document under any of the relevant statutory provisions (whether for the person making the statement or anyone else).

(3) It is an offence for a person—

(a) intentionally to make a false entry in a relevant document, or

(b) with intent to deceive, to make use of any such entry which the person knows to be false.

(4) In subsection (3) "relevant document" means any register, record, notice or other document which is required to be kept or given by or under any of the relevant statutory provisions.

(5) It is an offence for a person, with intent to deceive—
  (a) to use a relevant document,
  (b) to make or have possession of a document so closely resembling a relevant document as to be calculated to deceive.

(6) In subsection (5) "relevant document" means a document—
  (a) issued or authorised to be issued under any of the relevant statutory provisions, or
  (b) required for the purpose of any of those provisions.

(7) A person who commits an offence under this section is liable—
  (a) on summary conviction—
    (i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),
    (ii) to a fine not exceeding £20,000, or
    (iii) to both;
  (b) on conviction on indictment—
    (i) to imprisonment for a term not exceeding 2 years,
    (ii) to a fine, or
    (iii) to both.

(8) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's powers to imprison), the reference in subsection (7)(a)(i), as it has effect in England and Wales, to 12 months is to be read as a reference to 6 months.

85 Provision relating to offences under certain relevant statutory provisions

(1) Schedule 10 (provision relating to offences under certain relevant statutory provisions) has effect.

(2) That Schedule contains provision about the following matters—
  (a) the place where an offence involving plant or a substance may be treated as having been committed;
  (b) the extension of time for bringing summary proceedings in certain cases;
  (c) the continuation of offences;
  (d) where an offence committed by one person is due to the act or default of another person, the liability of that other person;
  (e) offences by bodies corporate or partnerships;
  (f) restrictions on the persons who may institute proceedings in England and Wales;
  (g) powers of inspectors to prosecute offences;
  (h) the burden of proof in certain cases relating to what is practicable or what are the best means for doing something;
  (i) reliance on entries in a register or other document as evidence;
  (j) power of the court to order a defendant to take remedial action.

Supplementary

86 Reporting requirements of Secretary of State

(1) As soon as reasonably practicable after the end of the financial year, the Secretary of State must make a report to each House of Parliament on the use of the Secretary of State's powers under this Part during the year.

(2) The Secretary of State must lay a copy of any such report before Parliament.

87 Notices etc

(1) In this section references to a notice are to a notice or other document that is required or authorised to be given to any person under a relevant provision.

(2) A notice to the person must be in writing.

(3) A notice may be given by—
- (a) delivering it to the person,
- (b) leaving it at the person's proper address,
- (c) sending it by post to the person at that address, or
- (d) in the case of a notice to be given to the owner or occupier of any premises (whether or not a body corporate), in accordance with subsection (9), (10) or (11).

(4) A notice may—
- (a) in the case of a body corporate, be given in accordance with subsection (3) to a director, manager, secretary or other similar officer of the body corporate, and
- (b) in the case of a partnership, be given in accordance with subsection (3) to a partner or a person having the control or management of the partnership business or, in Scotland, the firm.

(5) For the purposes of this section and section 7 of the Interpretation Act 1978 (service of documents by post) in its application to this section, the "proper address" is—
- (a) in the case of a notice to be given to a body corporate or an officer of the body, the address of the registered or principal office of the body;
- (b) in the case of a notice to be given to a partnership, a partner or a person having the control or management of the partnership business, the address of the principal office of the partnership;
- (c) in any other case, the last known address of the person to whom the notice is to be given.

(6) For the purposes of subsection (5), the principal office of a company registered outside the United Kingdom or of a partnership carrying on business outside the United Kingdom is its principal office within the United Kingdom.

(7) Subsection (8) applies if—
- (a) a person has specified an address in the United Kingdom as one at which the person, or someone on the person's behalf, will accept documents of the same description as a notice, and
- (b) the address so specified is not the person's proper address (as determined under subsection (5)).

(8) The specified address is also to be treated as the person's proper address for the purposes of this section and section 7 of the Interpretation Act 1978 in its application to this section.

(9) A notice that is to be given to the owner or occupier of any premises may be given by—

(a) sending it by post to the person at those premises, or

(b) addressing it by name to the person and delivering it to some responsible person who is or appears to be resident or employed at the premises.

(10) If the name or address of an owner or occupier of premises cannot be ascertained after reasonable inquiry, a notice to the owner or occupier may be given by—

(a) addressing it by the description "owner" or "occupier" of the premises to which the notice relates (and describing the premises), and

(b) delivering it to some responsible person who is or appears to be resident or employed there.

(11) If there is no person as mentioned in subsection (10)(b), then the notice may be given by fixing it, or a copy of it, to some conspicuous part of the premises.

(12) This section is subject to provision made in regulations under this Part in respect of notices given under the regulations.

(13) In this section—

"director", in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate;

"employed" has the same meaning as in the 1974 Act;

"relevant provision" means any of the relevant statutory provisions other than a provision of the Nuclear Safeguards Act 2000;

and references to giving a notice include similar expressions (such as serving or sending).

88 Electronic delivery of notices etc

(1) This section applies where—

(a) section 87 authorises the giving of a notice or other document by its delivery to a particular person ("the recipient"), and

(b) the notice or other document is transmitted to the recipient—

(i) by means of an electronic communications network, or

(ii) by other means but in a form that requires the use of apparatus by the recipient to render it intelligible.

(2) The transmission has effect for the purposes of section 87 as a delivery of the notice or other document to the recipient, but only if the recipient has indicated to the person making the transmission ("the sender") a willingness to receive the notice or other document in the form and manner used.

(3) An indication to the sender for the purposes of subsection (2)—

(a) must be given to the sender in such manner as the sender may require,

(b) may be a general indication or an indication that is limited to notices or other documents of a particular description,

(c) must state the address to be used,

(d) must be accompanied by such other information as the sender requires for the making of the transmission, and

(e) may be modified or withdrawn at any time by a notice given to the sender in such manner as the sender may require.

(4) In this section "electronic communications network" has the same meaning as in the Communications Act 2003; and the reference to giving a notice is to be read in accordance with section 87.

89 Crown application: Part 2

(1) Subject as follows, this Part, and regulations made under it, bind the Crown.

(2) Part 2 of Schedule 8 (inspectors: improvement and prohibition notices) does not bind the Crown.

(3) Any other provision of, or of regulations under, this Part under which a person may be prosecuted for an offence—

(a) does not bind the Crown, but

(b) applies to persons in the public service of the Crown as it applies to other persons.

(4) So far as it applies to nuclear regulations, subsection (3) is subject to any provision made by those regulations.

(5) For the purposes of this Part and regulations made under this Part, persons in the service of the Crown are to be treated as employees of the Crown (whether or not they would be so treated apart from this subsection).

(6) The Secretary of State may, by order—

(a) amend this section so as to provide for any provision made by or under this Part to apply to the Crown, or not to apply to the Crown, to any extent;

(b) amend any provision of sections 48 to 53 so far as it affects the extent to which any of the ONR's purposes relates to the Crown or any of the purposes of the Crown.

(7) Provision that may be made under subsection (6) includes in particular provision altering whether, or the extent to which, any of the ONR's purposes relates to—

(a) sites or premises used or occupied by the Crown,

(b) sites controlled or occupied to any extent for defence purposes (within the meaning of section 50), or

(c) transport for those purposes.

(8) Nothing in this section authorises proceedings to be brought against Her Majesty in her private capacity (within the meaning of the Crown Proceedings Act 1947).

90 Interpretation of Part 2

(1) In this Part—

"the 1974 Act" means the Health and Safety at Work etc. Act 1974;

"approved code of practice" has the meaning given by section 59(7);

"financial year", in relation to the ONR, has the meaning given by paragraph 28 of Schedule 7;

"health and safety inspector" means a person appointed by the ONR under section 19 of the 1974 Act;

"improvement notice" has the meaning given by paragraph 3(2) of Schedule 8;

"inspector" means an inspector appointed under Part 1 of Schedule 8 (unless otherwise specified);

"member of staff", in relation to the ONR, is to be read in accordance with paragraph 2(2) of Schedule 7;

"modify" includes amend, repeal or revoke (and "modification" is to be read accordingly);

"nuclear regulations" has the meaning given by section 54(1);

"nuclear site" means—

(a) a site in respect of which a nuclear site licence is in force, or

(b) a site in respect of which a period of responsibility has not ended;

"nuclear site licence" has the same meaning as in the Nuclear Installations Act 1965 (see section 1 of that Act);

"ONR" means the Office for Nuclear Regulation;

"ONR inquiry" has the meaning given by section 64(2);

"period of responsibility", in relation to a site, means the period of responsibility (within the meaning given in section 5 of the Nuclear Installations Act 1965 (revocation and surrender of licences)) in respect of a nuclear site licence granted at any time in respect of the site;

"personal injury" includes—

(a) any disease, and

(b) any impairment of a person's physical or mental condition;

"prohibition notice" has the meaning given by paragraph 4(2) of Schedule 8;

"regulatory function", in relation to the ONR, means—

(a) a function of giving or revoking permission or approval in relation to any material, premises or activity;

(b) a function of imposing conditions or requirements in relation to any material, premises or activity;

(c) a function, other than a function under section 63 (investigations), which relates to securing, monitoring or investigating compliance with conditions or requirements (however imposed) in relation to any material, premises or activity;

(d) a function which relates to the enforcement of such requirements;

"relevant power" has the meaning given by paragraph 2 of Schedule 8;

"relevant statutory provisions" has the meaning given by section 61(2) (unless otherwise specified).

(2) The following apply for the purposes of this Part as they apply for the purposes of Part 1 of the 1974 Act—

(a) section 52(1) of that Act (meaning of "work" and "at work");

(b) the power conferred by section 52(2)(a) of that Act to extend the meaning of "work" and "at work".

91 Subordinate legislation under Part 2

(1) Any power to make subordinate legislation under this Part is exercisable by statutory instrument.

(2) An instrument containing—

(a) nuclear regulations which amend or repeal any provision of the Nuclear Safeguards Act 2000 (whether or not it includes other provision), or

(b) an order under section 89,

may not be made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.

(3) An instrument containing an order under paragraph 26 of Schedule 7 (payments and borrowing) may not be made unless a draft of the instrument has been laid before and approved by a resolution of the House of Commons.

(4) An instrument containing any other subordinate legislation under this Part is subject to annulment in pursuance of a resolution of either House of Parliament.

(5) Any power to make subordinate legislation under this Part includes power—

(a) to make different provision for different cases;

(b) to make provision for some cases only or subject to exceptions;

(c) to make provision generally or only in particular respects.

(6) Any subordinate legislation under this Part may include—

(a) consequential, incidental or supplementary provision;

(b) transitional, transitory or saving provision.

(7) In this section "subordinate legislation" means an Order in Council, an order or regulations.

92 Transitional provision etc

(1) The Secretary of State may by order make any transitional, transitory or saving provision which appears appropriate in consequence of, or otherwise in connection with, this Part.

(2) The provision which may be made by virtue of subsection (1) includes provision modifying any provision made by—

(a) primary legislation passed before the end of the session in which this Act was passed, or

(b) an instrument made before the end of that session.

(3) Provision made under this section is additional, and without prejudice, to that made by or under any other provision of this Act.

93 Transfer of staff etc

Schedule 11 (which makes provision about schemes to transfer staff etc to the ONR) has effect.

94 Minor and consequential amendments

(1) Schedule 12 (minor and consequential amendments related to Part 2) has effect.

(2) The Secretary of State may by order make such modifications of—

(a) primary legislation passed before the end of the session in which this Act is passed, or

(b) an instrument made before the end of that session,

as the Secretary of State considers appropriate in consequence of this Part.

95 Application of Part 2

(1) Her Majesty may by Order in Council provide that the provisions of this Part apply, so far as specified, in relation to persons, premises, activities, articles, substances or other matters, outside the United Kingdom as they apply within the United Kingdom or a specified part of the United Kingdom.

(2) Such an Order in Council may—

(a) provide for any provisions of this Part to apply subject to modifications;

(b) provide for any of those provisions, as applied by the Order, to apply—

(i) in relation to individuals, whether or not they are British citizens, and

(ii) in relation to bodies corporate, whether or not they are incorporated under the law of a part of the United Kingdom;

(c) make provision for conferring jurisdiction on a specified court or courts of a specified description in respect of—

(i) offences under this Part committed outside the United Kingdom, or

(ii) causes of action under section 56 in respect of acts or omissions that occur outside the United Kingdom;

(d) make provision for questions arising out of any acts or omissions mentioned in paragraph (c)(ii) to be determined in accordance with the law in force in any specified part of the United Kingdom;

(e) exclude from the operation of section 3 of the Territorial Waters Jurisdiction Act 1878 (consents required for prosecutions) proceedings for offences under any provision of this Part committed outside the United Kingdom.

(3) In this section "specified", in relation to an Order in Council, means specified in the Order.

(4) Nothing in this section affects the application outside the United Kingdom of any provision of, or made under, this Part which so applies otherwise than by virtue of an Order in Council under this section.

96 Review of Part 2

(1) As soon as reasonably practicable after the end of the period of 5 years beginning with the day on which section 57 comes into force, the Secretary of State must carry out a review of the provisions of this Part.

(2) The Secretary of State must set out the conclusions of the review in a report.

(3) The report must, in particular—

(a) set out the objectives of the provisions of this Part,
(b) assess the extent to which those objectives have been achieved, and
(c) assess whether those objectives remain appropriate and, if so, the extent to which those objectives could be achieved in a way that imposes less regulation.

(4) The Secretary of State must lay the report before Parliament.

PART 3

GOVERNMENT PIPE-LINE AND STORAGE SYSTEM

97 Meaning of "government pipe-line and storage system"

(1) In this Part "the government pipe-line and storage system" means any property to which subsection (2), (3), (4) or (5) applies and which is vested in the Secretary of State, including any land held by the Secretary of State for the purposes of such property.

(2) This subsection applies to any oil installations—
(a) which are government war works, within the meaning of the Requisitioned Land and War Works Act 1945, or
(b) to which section 28 of that Act applies by virtue of section 12(4) or (5) of the Requisitioned Land and War Works Act 1948.

(3) This subsection applies to any oil installations which have been, are being or are intended to be, laid, installed or constructed, in or on land acquired for the purpose by virtue of section 13(a) of the 1958 Act.

(4) This subsection applies to anything which has been, is being or is intended to be, laid, installed or constructed by virtue of a wayleave order under the 1958 Act.

(5) This subsection applies to any other oil installations or other property—
(a) relating to oil installations to which subsection (2) or (3) applies, or
(b) relating to anything to which subsection (4) applies.

(6) In this section—
"the 1958 Act" means the Land Powers (Defence) Act 1958;
"oil installations" has the meaning given by section 25(1) of that Act.

98 Rights in relation to the government pipe-line and storage system

(1) The Secretary of State may maintain and use the government pipe-line and storage system or any part of it for any purpose for which it is suitable.

(2) The Secretary of State may remove, replace or renew the system or any part of it.

(3) The Secretary of State may restore land if the system or any part of it has been removed or abandoned.

(4) The Secretary of State may inspect or survey the system, any part of it or any land on or under which the system or any part of it is situated.

(5) The rights conferred by this section include in particular the right—

(a) to place, continue or renew markers for indicating the position of the system or any part of it in so far as it is placed under land;
(b) to erect and maintain stiles, gates, bridges or culverts for the facilitation of access to the system or any part of it;
(c) to construct works for the facilitation of maintenance or inspection, or protection from damage, of the system or any part of it;
(d) temporarily to place on land on or under which the system or any part of it is situated materials, plant or apparatus required in connection with the system or any part of it.

99 Right of entry

(1) For the purpose of exercising a right conferred by section 98, the Secretary of State may enter—
(a) any land on or under which is situated any part of the government pipe-line and storage system, or
(b) any land which is held with that land.

(2) The right conferred by subsection (1) is a right to enter on foot or with vehicles and includes a right to transport materials, plant and apparatus.

(3) For the purpose of accessing any land mentioned in subsection (1) ("the system land"), the Secretary of State may pass over any other land ("the access land") so far as it is necessary to do so for that purpose.

(4) But the right conferred by subsection (3) may be exercised only if, and to the extent that, the occupier or owner of the system land is entitled to exercise a corresponding right of access (whether by virtue of an easement, under an agreement or otherwise) to pass over the access land.

(5) Except in an emergency the rights conferred by this section may be exercised only—
(a) at a reasonable time and with the consent of the occupier of the land, or
(b) under the authority of a warrant (see section 100).

(6) "An emergency" means that urgent action is required to prevent or limit serious damage to health or to the environment.

(7) The rights conferred by this section do not include a right to enter premises used wholly or mainly as a private dwelling house.

100 Warrants for the purposes of section 99

(1) A justice of the peace or, in Scotland, a sheriff, may issue a warrant to authorise entry on to land in the exercise of a right conferred by section 99 (including such a right exercisable by virtue of provision made by or under section 103).

(2) The justice of the peace or the sheriff must be satisfied, on information on oath—
(a) that—
(i) at least 7 days' notice of intention to apply for a warrant has been given to the occupier of the land,
(ii) the occupier cannot be found, or
(iii) urgent action is required to prevent or limit serious damage to health or to the environment,

(b) (except where the occupier cannot be found) that entry to the land has been or is likely to be refused, and

(c) that there are reasonable grounds for exercising the right.

(3) A warrant under this section may authorise the use of reasonable force.

(4) It is an offence for a person intentionally to obstruct the exercise of any right conferred by a warrant under this section; and a person guilty of such an offence is liable on summary conviction to a fine not exceeding level 3 on the standard scale.

(5) In the application of this section to Scotland the reference to information on oath is to be read as a reference to evidence on oath.

101 Registration of rights

(1) In this section a "GPSS right" is a right conferred by section 98, 99 or 103(1).

(2) A GPSS right in respect of any land—

(a) is not subject to any enactment requiring the registration or recording of interests in, charges over or other obligations affecting land;

(b) binds any person who is at any time the owner or occupier of the land.

(3) But a GPSS right in respect of any land in England or Wales is a local land charge and subsection (2)(a) does not apply to subsection (2) of section 5 of the Local Land Charges Act 1975 (duty to register local land charge).

(4) For the purposes of the operation in relation to a GPSS right of the duty under that subsection to register a local land charge, the Secretary of State is the originating authority.

(5) A GPSS right in respect of any land in Scotland may be registered in the Land Register of Scotland or recorded in the Register of Sasines.

102 Compensation

(1) The Secretary of State must pay compensation to a person who proves that the value of a relevant interest to which the person is entitled is depreciated by reason of the coming into force of section 98, 99 or 103.

(2) A "relevant interest" means an interest in land which—

(a) comprises, or is held with, land in respect of which a right conferred by section 98, 99 or 103 is exercisable, and

(b) subsisted at the time of the coming into force of the section.

(3) The amount of compensation payable under subsection (1) is the amount that is equal to the amount of the depreciation.

(4) If a person proves loss by reason of damage to, or disturbance in the enjoyment of, any land or chattels (or in Scotland corporeal moveables) as a result of the exercise of any right conferred by section 98 or 99, the person on whose behalf the right is exercised must pay compensation in respect of that loss.

(5) Any dispute about entitlement to, or amount of, compensation under this section is to be determined by—

(a) in the application of this Act to England and Wales, the Upper Tribunal;

(b) in the application of this Act to Scotland, the Lands Tribunal for Scotland.

(6) In relation to the assessment of compensation under subsection (1)—

(a) for the purposes of an interest in land in England and Wales and the application of section 5A of the Land Compensation Act 1961 (relevant valuation date) the "relevant valuation date" is the date on which the section concerned comes into force;

(b) for the purposes of an interest in land in Scotland and the operation of rule 2 in section 12 of the Land Compensation (Scotland) Act 1963 (value of land) the valuation must be made as at the date the section concerned comes into force.

103 Right to transfer the government pipe-line and storage system

(1) The Secretary of State may—

(a) sell or lease the government pipe-line and storage system or any part of it;

(b) transfer for valuable consideration or otherwise the ownership of the system or any part of it;

(c) transfer for valuable consideration or otherwise any right relating to the system or any part of it (whether a right conferred by this Part or otherwise);

(d) transfer any liability relating to the system or any part of it.

(2) Any sale, lease or transfer by virtue of subsection (1) may be subject to such conditions, if any, as the Secretary of State considers appropriate.

104 Application of the Pipe-lines Act 1962

(1) Subsection (3) applies in relation to any part of the government pipe-line and storage system which is for the time being owned otherwise than by the Secretary of State.

(2) In subsection (1) "owned" is to be construed in accordance with the definition of "owner" in section 66(1) of the Pipe-lines Act 1962.

(3) The following sections of that Act, namely—

(a) section 10 (provisions for securing that a pipe-line is so used as to reduce necessity for construction of others),

(b) section 36 (notification of abandonment, cesser of use and resumption of use of pipe-lines or lengths thereof),

apply in relation to any such part as if it were a pipe-line constructed pursuant to a pipe-line construction authorisation.

(4) Section 40(2) of that Act (application of the electronic communications code) applies—

(a) for the purposes of GPSS works as it applies for the purposes of works in pursuance of a compulsory rights order,

(b) to a person executing GPSS works as it applies to a person authorised to execute works in pursuance of such an order.

(5) In subsection (4) "GPSS works" means—

(a) works for inspecting, maintaining, adjusting, repairing, altering or renewing the government pipe-line and storage system or any part of it;
(b) works for changing the position of the system or any part of it;
(c) works for removing the system or any part of it;
(d) breaking up or opening land for the purpose of works falling within paragraph (a), (b) or (c), or tunnelling or boring for that purpose;
(e) other works incidental to anything falling within paragraph (a), (b), (c) or (d).

(6) To the extent that anything done under or by virtue of this Part constitutes the execution of pipe-line works for the purposes of section 45 of the Pipe-lines Act 1962 (obligation to restore agricultural land), subsection (3) of that section has effect as if after "this Act" there were inserted "or any provision of Part 3 of the Energy Act 2013".

105 Rights apart from Part 3

(1) Nothing in this Part affects any other rights of the Secretary of State in relation to the government pipe-line and storage system (whether conferred under another enactment, by agreement or otherwise, and whether or not existing upon the coming into force of this section).

(2) For the purposes of sections 98, 99 and 103, it is immaterial whether a right corresponding to a right conferred by the section was exercisable by the Secretary of State before the coming into force of the section.

106 Repeals

(1) The provisions mentioned in subsection (2) cease to have effect.

(2) The provisions are—
(a) section 12 of the Requisitioned Land and War Works Act 1948 (permanent power to maintain government oil pipe-lines);
(b) section 13 of that Act (compensation in respect of government oil pipe-lines);
(c) section 14 of that Act (registration of rights as to government oil pipe-lines);
(d) section 15 of that Act (supplementary provisions as to government oil pipe-lines);
(e) section 12 of the Land Powers (Defence) Act 1958 (extension of provisions of Requisitioned Land and War Works Acts).

107 Power to dissolve the Oil and Pipelines Agency by order

(1) The Secretary of State may provide by order for—
(a) the repeal of the Oil and Pipelines Act 1985;
(b) the dissolution of the Oil and Pipelines Agency.

(2) If the Oil and Pipelines Agency is dissolved under subsection (1), the Secretary of State may make one or more schemes for the transfer to the Secretary of State of property, rights and liabilities (a "transfer scheme").

(3) Schedule 13 makes further provision about any transfer scheme under subsection (2).

(4) An order under this section may—

(a) include incidental, supplementary and consequential provision;

(b) make transitory or transitional provision or savings;

(c) make different provision for different cases or circumstances or for different purposes;

(d) make provision subject to exceptions.

(5) An order under this section is to be made by statutory instrument which is subject to annulment in pursuance of a resolution of either House of Parliament.

108 Crown application: Part 3

(1) This Part binds the Crown.

(2) No contravention by the Crown of section 100(4) makes the Crown criminally liable; but the High Court or, in Scotland, the Court of Session may declare unlawful any act or omission of the Crown which constitutes such a contravention.

(3) But subsection (2) does not affect the criminal liability of persons in the service of the Crown.

PART 4

STRATEGY AND POLICY STATEMENT

109 Designation of statement

(1) The Secretary of State may designate a statement as the strategy and policy statement for the purposes of this Part if the requirements set out in section 113 are satisfied (consultation and Parliamentary procedural requirements).

(2) The strategy and policy statement is a statement prepared by the Secretary of State that sets out—

(a) the strategic priorities, and other main considerations, of Her Majesty's government in formulating its energy policy for Great Britain ("strategic priorities"),

(b) the particular outcomes to be achieved as a result of the implementation of that policy ("policy outcomes"), and

(c) the roles and responsibilities of persons (whether the Secretary of State, the Authority or other persons) who are involved in implementing that policy or who have other functions that are affected by it.

(3) The Secretary of State must publish the strategy and policy statement (including any amended statement following a review under section 112) in such manner as the Secretary of State considers appropriate.

(4) For the purposes of this section, energy policy "for Great Britain" includes such policy for—

(a) the territorial sea adjacent to Great Britain, and

(b) areas designated under section 1(7) of the Continental Shelf Act 1964.

(5) In this Part—

"the 1986 Act" means the Gas Act 1986;

"policy outcomes" has the meaning given in subsection (2)(b);

"strategic priorities" has the meaning given in subsection (2)(a);

"the strategy and policy statement" means the statement for the time being designated under subsection (1) as the strategy and policy statement for the purposes of this Part.

110 Duties in relation to statement

(1) The Authority must have regard to the strategic priorities set out in the strategy and policy statement when carrying out regulatory functions.

(2) The Secretary of State and the Authority must carry out their respective regulatory functions in the manner which the Secretary of State or the Authority (as the case may be) considers is best calculated to further the delivery of the policy outcomes.

(3) Subsection (2) is subject to the application of the principal objective duty in the carrying out of any such function.

(4) "Regulatory functions", in relation to the Secretary of State, means—

(a) functions of the Secretary of State under Part 1 of the 1986 Act or Part 1 of EA 1989;

(b) other functions of the Secretary of State to which the principal objective duty is applied by any enactment.

(5) "Regulatory functions", in relation to the Authority, means—

(a) functions of the Authority under Part 1 of the 1986 Act or Part 1 of EA 1989;

(b) other functions of the Authority to which the principal objective duty is applied by any enactment.

(6) The "principal objective duty" means the duty of the Secretary of State or the Authority (as the case may be) imposed by—

(a) section 4AA(1B) and (1C) of the 1986 Act;

(b) section 3A(1B) and (1C) of EA 1989.

(7) The Authority must give notice to the Secretary of State if at any time the Authority concludes that a policy outcome contained in the strategy and policy statement is not realistically achievable.

(8) A notice under subsection (7) must include—

(a) the grounds on which the conclusion was reached;

(b) what (if anything) the Authority is doing, or proposes to do, for the purpose of furthering the delivery of the outcome so far as reasonably practicable.

(9) In this section "enactment" includes—

(a) an enactment contained in this Act, and

(b) an enactment passed or made after the passing of this Act.

111 Exceptions from section 110 duties

(1) Section 110(1) and (2) do not apply in relation to functions of the Secretary of State under sections 36 to 37 of EA 1989.

(2) Section 110(1) and (2) do not apply in relation to anything done by the Authority—

(a) in the exercise of functions relating to the determination of disputes;

(b) in the exercise of functions under section 36A(3) of the 1986 Act or section 43(3) of EA 1989.

(3) The duties imposed by section 110(1) and (2) do not affect the obligation of the Authority or the Secretary of State to perform or comply with any other duty or requirement (whether arising under this Act or another enactment, by virtue of any EU obligation or otherwise).

112 Review

(1) The Secretary of State must review the strategy and policy statement if a period of 5 years has elapsed since the relevant time.

(2) The "relevant time", in relation to the strategy and policy statement, means—

(a) the time when the statement was first designated under this Part, or

(b) if later, the time when a review of the statement under this section last took place.

(3) A review under subsection (1) must take place as soon as reasonably practicable after the end of the 5 year period.

(4) The Secretary of State may review the strategy and policy statement at any other time if—

(a) a Parliamentary general election has taken place since the relevant time,

(b) the Authority has given notice to the Secretary of State under section 110(7) since the relevant time,

(c) a significant change in the energy policy of Her Majesty's government has occurred since the relevant time, or

(d) the Parliamentary approval requirement in relation to an amended statement was not met on the last review (see subsection (12)).

(5) The Secretary of State may determine that a significant change in the government's energy policy has occurred for the purposes of subsection (4)(c) only if—

(a) the change was not anticipated at the relevant time, and

(b) if the change had been so anticipated, it appears to the Secretary of State likely that the statement would have been different in a material way.

(6) On a review under this section the Secretary of State may—

(a) amend the statement (including by replacing the whole or part of the statement with new content),

(b) leave the statement as it is, or

(c) withdraw the statement's designation as the strategy and policy statement.

(7) The amendment of a statement under subsection (6)(a) has effect only if the Secretary of State designates under section 109 the amended statement as the

strategy and policy statement (and the procedural requirements under section 113 apply in relation to any such designation).

(8) For the purposes of this section, corrections of clerical or typographical errors are not to be treated as amendments made to the statement.

(9) The designation of a statement as the strategy and policy statement ceases to have effect upon a subsequent designation of an amended statement as the strategy and policy statement in accordance with subsection (7).

(10) The Secretary of State must consult the following persons before proceeding under subsection (6)(b) or (c)—

(a) the Authority,
(b) the Scottish Ministers,
(c) the Welsh Ministers, and
(d) such other persons as the Secretary of State considers appropriate.

(11) For the purposes of subsection (2)(b), a review of a statement takes place—

(a) in the case of a decision on the review to amend the statement under subsection (6)(a)—
  (i) at the time when the amended statement is designated as the strategy and policy statement under section 109, or
  (ii) if the amended statement is not so designated, at the time when the amended statement was laid before Parliament for approval under section 113(8);
(b) in the case of a decision on the review to leave the statement as it is under subsection (6)(b), at the time when that decision is taken.

(12) For the purposes of subsection (4)(d), the Parliamentary approval requirement in relation to an amended statement was not met on the last review if—

(a) on the last review of the strategy and policy statement to be held under this section, an amended statement was laid before Parliament for approval under section 113(8), but
(b) the amended statement was not designated because such approval was not given.

113 Procedural requirements

(1) This section sets out the requirements that must be satisfied in relation to a statement before the Secretary of State may designate it as the strategy and policy statement.

(2) In this section references to a statement include references to a statement as amended following a review under section 112(6)(a).

(3) The Secretary of State must first—

(a) prepare a draft of the statement, and
(b) issue the draft to the required consultees for the purpose of consulting them about it.

(4) The "required consultees" are—

(a) the Authority,
(b) the Scottish Ministers, and
(c) the Welsh Ministers.

(5) The Secretary of State must then—

(a) make such revisions to the draft as the Secretary of State considers appropriate as a result of responses to the consultation under subsection (3)(b), and

(b) issue the revised draft for the purposes of further consultation about it to the required consultees and to such other persons as the Secretary of State considers appropriate.

(6) The Secretary of State must then—

(a) make any further revisions to the draft that the Secretary of State considers appropriate as a result of responses to the consultation under subsection (5)(b), and

(b) prepare a report summarising those responses and the changes (if any) that the Secretary of State has made to the draft as a result.

(7) The Secretary of State must lay before Parliament—

(a) the statement as revised under subsection (6)(a), and

(b) the report prepared under subsection (6)(b).

(8) The statement as laid under subsection (7)(a) must have been approved by a resolution of each House of Parliament before the Secretary of State may designate it as the strategy and policy statement under section 109.

(9) The requirement under subsection (3)(a) to prepare a draft of a statement may be satisfied by preparation carried out before, as well as preparation carried out after, the passing of this Act.

114 Principal objective and general duties in preparation of statement

(1) Sections 4AA to 4B of the 1986 Act (principal objective and general duties) apply in relation to the relevant function of the Secretary of State under this Part as they apply in relation to functions of the Secretary of State under Part 1 of that Act.

(2) Sections 3A to 3D of EA 1989 (principal objective and general duties) apply in relation to the relevant function of the Secretary of State under this Part as they apply in relation to functions of the Secretary of State under Part 1 of that Act.

(3) The "relevant function" is the Secretary of State's function of determining the policy outcomes to be set out in the strategy and policy statement (whether when the statement is first prepared under this Part or when it is reviewed under section 112).

115 Reporting requirements

(1) The Utilities Act 2000 is amended as follows.

(2) After section 4 insert—

"4A Information in relation to strategy and policy statement

(1) As soon as reasonably practicable after the designation of a statement as the strategy and policy statement, the Authority must publish a document setting out the required information in relation to the statement.

(2) The Authority must include the required information in relation to a strategy and policy statement in the forward work programme for each financial year, subject to making such modifications to the information as the Authority considers appropriate from the version as last published under this subsection.

(3) The required information in relation to a strategy and policy statement to be set out in a document or forward work programme is—

(a) the strategy the Authority intends to adopt for the purpose of furthering the delivery of the policy outcomes contained in the statement (both in respect of the year in or for which the document or programme is issued and beyond);

(b) the things the Authority proposes to do in implementing that strategy (including when the Authority proposes to do them);

(c) the ways in which the Authority has had regard to the strategic priorities contained in the statement in setting out the information required under paragraphs (a) and (b).

(4) The duty under subsection (1) does not apply if—

(a) the Authority does not think it reasonably practicable to publish the document mentioned in that subsection before the time when the Authority is next required to publish a forward work programme, and

(b) the Authority includes the required information in that forward work programme.

(5) The duty under subsection (2) does not apply in relation to the first financial year beginning after the designation of the statement if—

(a) the Authority does not think it reasonably practicable to include the required information in the forward work programme for that year, and

(b) the Authority includes the required information in a document published under subsection (1).

(6) The duty under subsection (2) does not apply in relation to a financial year if the Secretary of State gives notice to the Authority under this subsection that the statement's designation—

(a) will be withdrawn before the beginning of the year, or

(b) is expected to have been withdrawn before the beginning of the year.

(7) Subsections (4) to (6) of section 4 (notice requirements) apply to a document published under subsection (1) as they apply to a forward work programme.

(8) In this section—

"designation", in relation to a strategy and policy statement, means designation of the statement by the Secretary of State under Part 4 of the Energy Act 2013;

"forward work programme" has the meaning given by section 4(1);

"policy outcomes", "strategic priorities" and "strategy and policy statement" have the same meaning as in Part 4 of the Energy Act 2013."

(3) In section 5 (annual and other reports of Authority), after subsection (2) insert—

"(2A) The annual report for each year shall also include a report on—

(a) the ways in which the Authority has carried out its duties under section 110(1) and (2) of the Energy Act 2013 in relation to the strategy and policy statement (so far as the statement's designation was in effect during the whole or any part of the year), and

(b) the extent to which the Authority has done the things set out under section 4A in a forward work programme or other document as the things the Authority proposed to do during that year in implementing its strategy for furthering the delivery of the policy outcomes contained in the statement (see subsection (3)(b) of that section).

(2B) The report mentioned in subsection (2A) must, in particular, include—

(a) the Authority's assessment of how the carrying out of its functions during the year has contributed to the delivery of the policy outcomes contained in the strategy and policy statement, and

(b) if the Authority has failed to do any of the things mentioned in subsection (2A)(b), an explanation for the failure and the actions the Authority proposes to take to remedy it.

(2C) In subsections (2A) and (2B)—

"forward work programme" has the meaning given by section 4(1);

"policy outcomes" and "strategy and policy statement" have the same meaning as in Part 4 of the Energy Act 2013."

116 Consequential provision

(1) The following provisions are repealed (guidance about the making by the Authority of a contribution towards the attainment of social or environmental policies)—

(a) sections 4AB and 4B(1) of the 1986 Act, and

(b) sections 3B and 3D(1) of EA 1989.

(2) In section 4AA(5) of the 1986 Act, after "(2)," insert "and to section 110(2) of the Energy Act 2013 (duty to carry out functions in manner best calculated to further delivery of policy outcomes)".

(3) In section 3A(5) of EA 1989, after "(2)," insert "and to section 110(2) of the Energy Act 2013 (duty to carry out functions in manner best calculated to further delivery of policy outcomes)".

PART 5

MISCELLANEOUS

Consumer redress orders

117 Consumer redress orders

Schedule 14 (which enables the Authority to impose requirements on a regulated person to take remedial action in respect of loss, damage or inconvenience caused to consumers of gas or electricity) has effect.

Offshore transmission

118 Offshore transmission systems

(1) EA 1989 is amended as follows.

(2) In section 4 (prohibition on unlicensed supply), after subsection (3A) insert—

"(3AA) Subsection (3A) is subject to section 6F (offshore transmission during commissioning period)."

(3) After section 6E insert—

"6F Offshore transmission during commissioning period

(1) For the purposes of this Part a person is not to be regarded as participating in the transmission of electricity if the following four conditions are met.

(2) The first condition is that the transmission takes place over an offshore transmission system ("the system") or anything forming part of it.

(3) The second condition is that the transmission takes place during a commissioning period (see section 6G).

(4) The third condition is that—

(a) a request has been made to the Authority in accordance with the tender regulations for a tender exercise to be held for the granting of an offshore transmission licence in respect of the system,

(b) the Authority has determined in accordance with those regulations that the request relates to a qualifying project, and

(c) the system, or anything forming part of it, has not been transferred as a result of the exercise to the successful bidder.

(5) The fourth condition is that—

(a) the person who is the developer in relation to the tender exercise is also the operator of a relevant generating station, and

(b) the construction or installation of the system is being or has been carried out by, or by a combination of, any of the following—

(i) the person mentioned in paragraph (a);

(ii) a body corporate associated with that person at any time during the period of construction or installation;

(iii) a previous developer;
(iv) a body corporate associated with a previous developer at any time during the period of construction or installation.

(6) For the purposes of subsection (1), it does not matter whether or not the person mentioned in that subsection is the developer in relation to the tender exercise.

(7) For the purposes of subsection (5)(b)(iii) and (iv), a person is a "previous developer" in relation to the system if—
(a) the person does not fall within subsection (5)(a), but
(b) at any time during the period of construction or installation, the person was the developer in relation to the tender exercise.

(8) In this section—
"associated", in relation to a body corporate, is to be construed in accordance with paragraph 37 of Schedule 2A;
"developer", in relation to a tender exercise, means any person within section 6D(2)(a) (person who makes the connection request, including any person who is to be so treated by virtue of section 6D(4));
"offshore transmission" has the meaning given by section 6C(6);
"offshore transmission licence" has the meaning given by section 6C(5);
"offshore transmission system" means a transmission system used for purposes connected with offshore transmission;
"operator", in relation to a generating station, means the person who is authorised to generate electricity from that station—
(a) by a generation licence granted under section 6(1)(a), or
(b) in accordance with an exemption granted under section 5(1);
"qualifying project" is to be construed in accordance with the tender regulations;
"successful bidder" and "tender exercise" have the same meanings as in section 6D;
"relevant generating station", in relation to an offshore transmission system, means a generating station that generates electricity transmitted over the system;
"the tender regulations" means regulations made under section 6C.

6G Section 6F: meaning of "commissioning period"

(1) For the purposes of section 6F(3), transmission over an offshore transmission system (or anything forming part of it) takes place during a "commissioning period" if it takes place at any time—
(a) before a completion notice is given in respect of the system, or
(b) during the period of 18 months beginning with the day on which such a notice is given.

(2) A "completion notice", in relation to a transmission system, is a notice which—

(a) is given to the Authority by the relevant co-ordination licence holder in accordance with the co-ordination licence, and

(b) states that it would be possible to carry on an activity to which section 4(1)(b) applies by making available for use that system.

(3) The Secretary of State may by order amend subsection (1) so as to specify a period of 12 months in place of the period of 18 months.

(4) An order under subsection (3) may be made only so as to come into force during the period—

(a) beginning 2 years after the day on which section 118 of the Energy Act 2013 comes into force, and

(b) ending 5 years after that day.

(5) An amendment made by an order under subsection (3) does not apply in relation to any transmission of electricity over a transmission system if—

(a) but for the making of the order, the person participating in the transmission would, by virtue of section 6F, have been regarded as not participating in the transmission, and

(b) the determination mentioned in subsection (4)(b) of that section in relation to the system was made on or before the day on which the order is made.

(6) In this section—

"co-ordination licence" has the same meaning as in Schedule 2A (see paragraph 38(1) of that Schedule);

"relevant co-ordination licence-holder" has the meaning given by paragraph 13(4) of Schedule 2A.

6H Sections 6F and 6G: modification of codes or agreements

(1) The Authority may—

(a) modify a code maintained in accordance with the conditions of a transmission licence or a distribution licence;

(b) modify an agreement that gives effect to a code so maintained.

(2) The Authority may make a modification under subsection (1) only if it considers it necessary or desirable for the purpose of implementing or facilitating the operation of section 6F or 6G.

(3) The power to make modifications under subsection (1) includes a power to make incidental, supplemental, consequential or transitional modifications.

(4) The Authority must consult such persons as the Authority considers appropriate before making a modification under subsection (1).

(5) Subsection (4) may be satisfied by consultation before, as well as consultation after, the passing of the Energy Act 2013.

(6) As soon as reasonably practicable after making a modification under subsection (1), the Authority must publish a notice stating its reasons for making it.

(7) A notice under subsection (6) is to be published in such manner as the Authority considers appropriate for the purpose of bringing the

matters to which the notice relates to the attention of persons likely to be affected by it.

(8) A modification under subsection (1) may not be made after the end of the period of 7 years beginning with the day on which section 118 of the Energy Act 2013 comes into force."

(4) In section 64 (interpretation of Part 1), in subsection (1B) at the end insert "and section 6F".

Nuclear decommissioning costs

119 Fees in respect of decommissioning and clean-up of nuclear sites

(1) Chapter 1 of Part 3 of the Energy Act 2008 (nuclear sites: decommissioning and clean-up) is amended as follows.

(2) After section 45 (duty to submit funded decommissioning programme) insert—

"45A Costs incurred in considering proposed programmes

(1) A person who informs the Secretary of State of a proposal to submit a funded decommissioning programme under section 45 must pay to the Secretary of State such fee as may be determined in accordance with regulations under section 54, in respect of the costs mentioned in subsection (2), at a time determined in accordance with such regulations.

(2) The costs are those incurred by the Secretary of State in relation to the consideration of the proposed programme (or any particular aspect of it), including, in particular, the costs of obtaining advice in relation to it."

(3) In section 46 (approval of programme), after subsection (3G) insert—

"(3H) Where the Secretary of State makes or amends an agreement under subsection (3A), or it is proposed that such an agreement be made or amended, the site operator must pay to the Secretary of State such fee as may be determined in accordance with regulations under section 54, in respect of the costs mentioned in subsection (3I), at a time determined in accordance with such regulations.

(3I) The costs are those incurred by the Secretary of State in relation to the consideration of the agreement or amendment, including, in particular, the costs of obtaining advice in relation to the agreement or amendment."

(4) In section 49 (procedure for modifying approved programme)—

(a) in subsection (3), after "made," insert "or advice is sought from the Secretary of State about the making of a proposal,", and

(b) in subsection (4), in the opening words after "proposal" insert "(or the making of a proposal)".

(5) In section 66 (disposal of hazardous material), after subsection (3) insert—

"(3A) The Secretary of State may make regulations providing for a person who makes a proposal to the Secretary of State to enter an agreement of

the kind mentioned in subsection (1), or proposes an amendment to such an agreement, to pay a fee to the Secretary of State in respect of the costs incurred in relation to the consideration of the proposal, including, in particular, the costs of obtaining advice in relation to it.

(3B) The regulations may, in particular, make provision about—

(a) when the fee is to be paid;

(b) how the amount of the fee is to be determined."

Review

120 Review of Part 5

(1) As soon as reasonably practicable after the end of the period of 5 years beginning with the relevant commencement date, the Secretary of State must carry out a review of—

(a) section 117 and Schedule 14 (consumer redress orders);

(b) section 119 (fees in respect of decommissioning etc).

(2) The relevant commencement date—

(a) in relation to section 117 and Schedule 14, is the date on which that section and Schedule come into force;

(b) in relation to section 119, is the date on which that section comes into force.

(3) The Secretary of State must set out the conclusions of the review in a report.

(4) The report must, in particular—

(a) set out the objectives of the provisions subject to review,

(b) assess the extent to which those objectives have been achieved, and

(c) assess whether those objectives remain appropriate and, if so, the extent to which those objectives could be achieved in a way that imposes less regulation.

(5) The Secretary of State must lay the report before Parliament.

PART 6

FINAL

121 Interpretation of Act

(1) In this Act—

"the Authority" means the Gas and Electricity Markets Authority;

"EA 1989" means the Electricity Act 1989;

"functions" includes powers and duties;

"primary legislation" means—

(a) an Act of Parliament,

(b) an Act of the Scottish Parliament,

(c) an Act or Measure of the National Assembly for Wales, or

(d) Northern Ireland legislation.

(2) A reference in this Act to—

(a) the Department of Enterprise, Trade and Investment, or
(b) the Department of Environment,

is to that Department in Northern Ireland.

122 Transfer schemes

(1) This section applies in relation to a scheme made by the Secretary of State under any of the following provisions (a "transfer scheme")—
(a) Schedule 1;
(b) Schedule 2;
(c) paragraph 16 of Schedule 3;
(d) Schedule 11;
(e) Schedule 13.

(2) Subject to subsection (3), the Secretary of State may modify a transfer scheme.

(3) If a transfer under the scheme has taken effect, any modification under subsection (2) that relates to the transfer may be made only with the agreement of the person (or persons) affected by the modification.

(4) A modification takes effect from such date as the Secretary of State may specify; and that date may be the date when the original scheme came into effect.

(5) A transfer scheme may—
(a) include incidental, supplementary and consequential provision;
(b) make transitory or transitional provision or savings;
(c) make different provision for different cases or circumstances or for different purposes;
(d) make provision subject to exceptions.

(6) In the provisions mentioned in subsection (1), "subordinate legislation" means—
(a) subordinate legislation within the meaning of the Interpretation Act 1978 (see section 21(1) of that Act), or
(b) an instrument made under—
(i) an Act of the Scottish Parliament,
(ii) an Act or Measure of the National Assembly for Wales, or
(iii) Northern Ireland legislation.

123 Financial provisions

(1) *The following are to be paid out of money provided by Parliament—*
(a) *any expenditure incurred by the Secretary of State by virtue of this Act;*
(b) *any expenditure incurred by the Authority by virtue of this Act;*
(c) *any increase attributable to this Act in the sums payable out of money so provided under any other enactment.*

(2) *The expenditure referred to in subsection (1)(a) includes expenditure incurred by the Secretary of State for the purposes of, or in connection with—*
(a) *the establishment of a CFD counterparty;*
(b) *making payments or providing financial assistance to a CFD counterparty;*

(c) *obtaining advice and assistance in relation to the exercise of functions conferred on the Secretary of State by or by virtue of Chapter 2 or 3;*

(d) *making payments or providing financial assistance to a person who is a settlement body in relation to capacity agreements (see section 18(4)(g));*

(e) *making payments or providing financial assistance to the national system operator or an alternative delivery body in connection with the exercise of EMR functions.*

(3) *Financial assistance or payments includes financial assistance or payments given subject to such conditions as may be determined by, or in accordance with arrangements made by, the Secretary of State; and such conditions may in particular in the case of a grant include conditions for repayment in specified circumstances.*

(4) *In this section—*

"alternative delivery body" and "EMR functions" have the same meaning as in section 30;

"CFD counterparty" and "national system operator" have the same meaning as in Chapter 2 of Part 1;

"financial assistance" means grants, loans, guarantees or indemnities, or any other kind of financial assistance.

124 Extent

(1) Subject to the rest of this section, this Act extends to England and Wales and Scotland.

(2) The following also extend to Northern Ireland—

(a) in Part 1—

(i) Chapter 1 (general considerations),

(ii) Chapter 2 (contracts for difference),

(iii) Chapter 5 (investment contracts),

(iv) Chapter 7 (the renewables obligation: transitional arrangements),

(v) Chapter 8 (emissions performance standard), and

(vi) section 43 (exemption from liability in damages);

(b) subject to subsections (4) and (5), Part 2 (nuclear regulation);

(c) this Part.

(3) Section 119 extends to England and Wales and Northern Ireland only.

(4) Part 2 of Schedule 8 extends to England and Wales and Scotland only.

(5) The amendments made by Schedule 12 have the same extent as the provisions they amend, except that—

(a) paragraphs 18(6), 19(6), 20(2)(b) and (3) and 21 (amendments of certain provisions of the Nuclear Installations Act 1965) extend to England and Wales and Scotland only;

(b) the other amendments in that Schedule of the Nuclear Installations Act 1965 extend to England and Wales, Scotland and Northern Ireland only;

(c) paragraphs 34 to 44 (amendments of the Nuclear Safeguards and Electricity (Finance) Act 1978 and Nuclear Safeguards Act 2000) extend to England and Wales, Scotland and Northern Ireland only;

(d) paragraphs 54 to 56 (amendments of the Radioactive Substances Act 1993) extend to Scotland only.

125 Commencement

(1) The provisions of this Act come into force on such day as the Secretary of State may by order made by statutory instrument appoint, subject to subsections (2) and (3).

(2) The following provisions come into force at the end of the period of 2 months beginning with the day on which this Act is passed—

(a) Chapter 4 of Part 1 (conflicts of interest and contingency arrangements);
(b) Chapter 6 of Part 1 (access to markets);
(c) Chapter 7 of Part 1 (renewables obligation: transitional arrangements);
(d) Chapter 8 of Part 1 (emissions performance standard);
(e) Part 4 (strategy and policy statement), other than section 116(1) (repeals);
(f) section 117 (consumer redress orders);
(g) section 118 (offshore transmission systems);
(h) section 119 (fees in respect of decommissioning and clean-up of nuclear sites).

(3) The following provisions come into force on the day on which this Act is passed—

(a) Chapter 1 of Part 1 (general considerations);
(b) Chapter 2 of Part 1 (contracts for difference);
(c) Chapter 3 of Part 1 (capacity market);
(d) Chapter 5 of Part 1 (investment contracts);
(e) Chapter 9 of Part 1 (miscellaneous);
(f) section 91 (subordinate legislation under Part 2);
(g) section 92(1) (power to make transitional provision in relation to Part 2);
(h) section 93 (transfer of staff etc for purposes of Part 2);
(i) section 94(2) (power to make consequential amendments in relation to Part 2);
(j) section 96 (review of Part 2);
(k) section 120 (review of Part 5);
(l) the provisions of this Part (including this section).

(4) An order under subsection (1) may—

(a) appoint different days for different purposes;
(b) make transitional provision and savings.

126 Short title

This Act may be cited as the Energy Act 2013.

SCHEDULES

SCHEDULE 1

Section 3

CFD COUNTERPARTIES: TRANSFER SCHEMES

Power to make transfer schemes

1 (1) The Secretary of State may make one or more schemes for the transfer of designated property, rights or liabilities of a person who has ceased to be a CFD counterparty ("the transferor") to a person who is a CFD counterparty ("the transferee").

(2) On the transfer date, the designated property, rights and liabilities are transferred and vest in accordance with the scheme.

(3) The rights and liabilities that may be transferred by a scheme include those arising under or in connection with a contract of employment.

(4) A certificate by the Secretary of State that anything specified in the certificate has vested in any person by virtue of a scheme is conclusive evidence for all purposes of that fact.

(5) In this Schedule—

"designated", in relation to a scheme, means specified in or determined in accordance with the scheme;

"property" includes interests of any description;

"the transfer date" means a date specified by a scheme as the date on which the scheme is to have effect.

Contents of a scheme

2 (1) A scheme may make provision—

(a) for anything done by or in relation to the transferor in connection with any property, rights or liabilities transferred by the scheme to be treated as done, or to be continued, by or in relation to the transferee;

(b) for references to the transferor in any agreement (whether written or not), instrument or other document relating to any property, rights or liabilities transferred by the scheme to be treated as references to the transferee;

(c) about the continuation of legal proceedings;

(d) for transferring property, rights or liabilities which could not otherwise be transferred or assigned;

(e) for transferring property, rights and liabilities irrespective of any requirement for consent which would otherwise apply;

(f) for preventing a right of pre-emption, right of reverter, right of forfeiture, right to compensation or other similar right from arising or becoming exercisable as a result of the transfer of property, rights or liabilities;

(g) for dispensing with any formality in relation to the transfer of property, rights or liabilities by the scheme;

(h) for transferring property acquired, or rights or liabilities arising, after the scheme is made but before it takes effect;

(i) for apportioning property, rights or liabilities;

(j) for creating rights, or imposing liabilities, in connection with property, rights or liabilities transferred by the scheme;

(k) for requiring the transferee to enter into any agreement of any kind, or for a purpose, specified in or determined in accordance with the scheme.

(2) Sub-paragraph (1)(b) does not apply to references in primary legislation or in subordinate legislation.

Compensation

3 A scheme may contain provision for the payment of compensation by the Secretary of State to any person whose interests are adversely affected by it.

SCHEDULE 2

Section 30

ORDERS UNDER SECTION 30: TRANSFER SCHEMES

Power to make transfer schemes

1 (1) The Secretary of State may exercise the power in sub-paragraph (2) in connection with the making of an order under section 30 providing for a person ("the transferee") to carry out EMR functions in place of another person ("the transferor").

(2) The Secretary of State may make one or more schemes for the transfer of designated property, rights or liabilities of the transferor to the transferee.

(3) On the transfer date, the designated property, rights and liabilities are transferred and vest in accordance with the scheme.

(4) The rights and liabilities that may be transferred by a scheme include those arising under or in connection with a contract of employment.

(5) A certificate by the Secretary of State that anything specified in the certificate has vested in any person by virtue of a scheme is conclusive evidence for all purposes of that fact.

(6) In this Schedule—

"designated", in relation to a scheme, means specified in or determined in accordance with the scheme;

"EMR functions" has the same meaning as in section 30;

"property" includes interests of any description;

"the transfer date" means a date specified by a scheme as the date on which the scheme is to have effect.

Contents of a scheme

2 (1) A scheme may make provision—

(a) for anything done by or in relation to the transferor in connection with any property, rights or liabilities transferred by the scheme to be treated as done, or to be continued, by or in relation to the transferee;

(b) for references to the transferor in any agreement (whether written or not), instrument or other document relating to any property, rights or liabilities transferred by the scheme to be treated as references to the transferee;

(c) about the continuation of legal proceedings;

(d) for transferring property, rights or liabilities which could not otherwise be transferred or assigned;

(e) for transferring property, rights and liabilities irrespective of any requirement for consent which would otherwise apply;

(f) for preventing a right of pre-emption, right of reverter, right of forfeiture, right to compensation or other similar right from arising or becoming exercisable as a result of the transfer of property, rights or liabilities;

(g) for dispensing with any formality in relation to the transfer of property, rights or liabilities by the scheme;

(h) for transferring property acquired, or rights or liabilities arising, after the scheme is made but before it takes effect;

(i) for apportioning property, rights or liabilities;

(j) for creating rights, or imposing liabilities, in connection with property, rights or liabilities transferred by the scheme;

(k) for requiring the transferee to enter into any agreement of any kind, or for a purpose, specified in or determined in accordance with the scheme.

(2) Sub-paragraph (1)(b) does not apply to references in primary legislation or in subordinate legislation.

Compensation

3 A scheme must contain provision for the payment by the Secretary of State of such amounts of compensation as the Secretary of State considers appropriate to any person whose interests are adversely affected by it.

SCHEDULE 3

Section 33

INVESTMENT CONTRACTS

PART 1

INTRODUCTORY

Meaning of "investment contract"

1 (1) In this Schedule an "investment contract" means a contract with an electricity generator which—

(a) is entered into by the Secretary of State, whether before or after this Schedule comes into force, on or before the earlier of 31st December 2015 and the date on which a definition of an "eligible generator" first comes into force by virtue of section 6(3),

(b) if it relates to an electricity generating station in Northern Ireland, is entered into with the consent of the Department of Enterprise, Trade and Investment,

(c) includes an obligation for the parties to make payments under the contract based on the difference between a strike price and a reference price in relation to electricity generated,

(d) is laid before Parliament in accordance with sub-paragraph (4).

(2) If the contract is entered into before the coming into force of this Schedule, the obligation referred to in sub-paragraph (1)(c) must be conditional on the being in force of this Schedule.

(3) In sub-paragraph (1)—

"electricity generator" means—

(a) a person who intends to establish an electricity generating station or alter an existing station;

(b) a person who intends to operate or participate in the operation of an electricity generating station that is to be established or altered;

(c) a person who has an interest in a company falling within paragraph (a) or (b).

"reference price" means the sum that is specified in, or determined under, the contract as the reference price in respect of electricity generated in the period specified in, or determined under, the contract;

"Northern Ireland" includes so much of the internal waters and territorial sea of the United Kingdom as are adjacent to Northern Ireland;

"strike price" means the sum that is specified in, or determined under, the contract as the strike price in respect of electricity generated in the period specified in, or determined under, the contract.

(4) A contract is laid before Parliament in accordance with this sub-paragraph if it is laid by the Secretary of State at any time after the introduction into Parliament of the Bill that becomes this Act—

(a) with a statement falling within sub-paragraph (5), and

(b) after the Secretary of State has excluded from the contract—

(i) any confidential information (see paragraph 3), or

(ii) if the investment contract does not contain any confidential information, any information to which paragraph 3(3) applies and which the Secretary of State considers it appropriate to exclude.

(5) A statement falls within this sub-paragraph if it is a statement—

(a) that the Secretary of State considers that payments falling within paragraph 1(1)(c) which would be made under the contract would encourage low carbon electricity generation,

(b) that the Secretary of State considers that without the contract there is a significant risk that the electricity generation to which the contract relates will not occur or will be significantly delayed, and

(c) summarising the regard that the Secretary of State has had, in deciding to enter the contract, to the matters set out in subsection (2) of section 1.

(6) In sub-paragraph (5) "low carbon electricity generation" means electricity generation which in the opinion of the Secretary of State will contribute to a reduction in emissions of greenhouse gases; and "greenhouse gas" has the meaning given by section 92(1) of the Climate Change Act 2008.

(7) The Secretary of State must publish an investment contract in the form in which it was laid before Parliament as soon as reasonably practicable after it is laid.

Varied investment contract

2 (1) An investment contract is a "varied investment contract" for the purposes of this paragraph if the variation—

(a) is agreed at any time before or after this Schedule comes into force, and

(b) will, in the opinion of the Secretary of State, materially increase the likely cost to consumers of electricity.

(2) A varied investment contract is an "investment contract" for the purposes of this Schedule only if it is laid before Parliament (at any time after the introduction into Parliament of the Bill that becomes this Act)—

(a) with a statement of why, having regard to the likely cost to consumers of electricity, the Secretary of State believes that the variation is appropriate, and

(b) after the Secretary of State has excluded from it—

(i) any confidential information (see paragraph 3), or

(ii) if the varied investment contract does not contain any confidential information, any information to which paragraph 3(3) applies and which the Secretary of State considers it appropriate to exclude.

(3) The Secretary of State must publish a varied investment contract in the form in which it was laid before Parliament as soon as reasonably practicable after it is laid.

(4) This paragraph does not apply in respect of a variation which is made in accordance with the terms of an investment contract.

Confidential information

3 (1) For the purposes of paragraphs 1 and 2, "confidential information" means specified information to which sub-paragraph (3) applies and in relation to which it is an initial term of the contract that it should not be disclosed.

(2) For the purposes of sub-paragraph (1)—

(a) a term is an initial term if it is agreed at the time the investment contract is entered into or, in relation to a varied investment contract, at the time the variation is agreed;

(b) "specified" means specified in the initial term.

(3) This sub-paragraph applies to information if it is—

(a) not the strike price or the reference price;

(b) information which, in the opinion of the Secretary of State at the time the initial term is agreed, constitutes a trade secret;

(c) information the disclosure of which, in the opinion of the Secretary of State at that time, would or would be likely to prejudice the commercial interests of any person;

(d) information the disclosure of which would, in the opinion of the Secretary of State at that time, constitute a breach of confidence actionable by any person.

Interpretation for the purposes of this Schedule

4 (1) In this Schedule—

"CFD" is to be construed in accordance with section 2(2);

"CFD counterparty" is to be construed in accordance with section 3(2);

"electricity supplier", subject to any provision made by regulations, means a person who is a holder of a licence to supply electricity under—

(a) section 6(1)(d) of EA 1989, or

(b) Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1));

"investment contract counterparty" is to be construed in accordance with paragraph 5;

"national system operator" means the person operating the national transmission system for Great Britain (and for this purpose "transmission system" has the same meaning as in EA 1989 - see section 4(4) of that Act);

"regulations" means regulations made under paragraph 6.

(2) References in this Schedule to a CFD counterparty (apart from the reference in paragraph 9(1)(c), 9(1)(d) and 16) are to a CFD counterparty acting as a counterparty in relation to an investment contract (where any property, rights or liabilities under the contract have been transferred to the CFD counterparty by a scheme under paragraph 16).

Investment contract counterparty

5 (1) The Secretary of State may by order made by statutory instrument designate an eligible person to be a counterparty for investment contracts.

(2) A person may be designated if the person is—

(a) a company formed and registered under the Companies Act 2006, or
(b) a public authority, including any person any of whose functions are of a public nature.

(3) A designation may be made only with the consent of the person designated.

(4) More than one designation may have effect under this paragraph.

(5) A designation ceases to have effect if—
(a) the Secretary of State by order made by statutory instrument revokes the designation, or
(b) the person withdraws consent to the designation by giving not less than 28 days' notice in writing to the Secretary of State.

(6) As soon as reasonably practicable after a designation ceases to have effect the Secretary of State must make a transfer scheme under paragraph 16 to ensure the transfer of all rights and obligations under any investment contract to which the person who has ceased to be an investment contract counterparty was a party.

(7) If necessary for the purposes of a transfer scheme required to be made by virtue of sub-paragraph (6), the Secretary of State must, so far as reasonably practicable, exercise the power to designate so as to ensure that at least one designation has effect under this paragraph.

(8) Regulations may include provision about the period of time for which, and the circumstances in which, a person who has ceased to be an investment contract counterparty is to continue to be treated as an investment contract counterparty for the purposes of the regulations.

PART 2

REGULATIONS: GENERAL

Regulations for the purposes of investment contracts

6 (1) The Secretary of State may by regulations make further provision about or in connection with investment contracts.

(2) The provision which may be made by regulations includes, but is not limited to, the provision described in this Schedule.

(3) Regulations may—
(a) include incidental, supplementary and consequential provision;
(b) make transitory or transitional provision or savings;
(c) make different provision for different cases or circumstances or for different purposes;
(d) make provision subject to exceptions.

(4) Regulations are to be made by statutory instrument.

(5) An instrument containing regulations which make provision falling within paragraph 7 or 8 (whether or not also making any other provision) may not be made unless a draft of the instrument has been laid before, and approved by a resolution of, each House of Parliament.

(6) Any other instrument containing regulations is subject to annulment in pursuance of a resolution of either House of Parliament.

Supplier obligation

7 (1) *Regulations may make provision for electricity suppliers to pay the Secretary of State, an investment contract counterparty or a CFD counterparty for the purpose of enabling payments to be made under investment contracts.*

(2) *Regulations may make provision for electricity suppliers to pay the Secretary of State, an investment contract counterparty or a CFD counterparty for the purpose of enabling the person to whom the payments are made—*

(a) *to meet such other descriptions of costs as the Secretary of State considers appropriate;*

(b) *to hold sums in reserve;*

(c) *to cover losses in the case of insolvency or default of an electricity supplier.*

(3) *Regulations may make provision to require electricity suppliers to provide financial collateral to the Secretary of State, an investment contract counterparty or a CFD counterparty (whether in cash, securities or any other form).*

(4) Provision made by virtue of this paragraph may include provision for—

(a) the Secretary of State, an investment contract counterparty or a CFD counterparty to determine the form and terms of any financial collateral;

(b) the Secretary of State, an investment contract counterparty or a CFD counterparty to calculate or determine, in accordance with such criteria as may be provided for by or under the regulations, amounts which are owed by an electricity supplier or are to be provided as financial collateral by an electricity supplier;

(c) the issuing of notices by the Secretary of State, an investment contract counterparty or a CFD counterparty to require the payment or provision of such amounts;

(d) the enforcement of obligations arising under such notices.

(5) Provision made by virtue of sub-paragraph (4)(b) may provide for anything which is to be calculated or determined under the regulations to be calculated or determined by such persons, in accordance with such procedure and by reference to such matters and to the opinion of such persons, as may be specified in the regulations.

(6) Provision made by virtue of sub-paragraph (4)(d) may include provision—

(a) about costs;

(b) about interest on late payments under notices;

(c) about references to arbitration;

(d) about appeals.

Payments to electricity suppliers

8 Regulations may make provision about the amounts which must be paid by the Secretary of State, an investment contract counterparty or a CFD counterparty to electricity suppliers.

Application of sums

9 (1) Regulations may make provision for apportioning sums—

(a) received by the Secretary of State, an investment contract counterparty or a CFD counterparty from electricity suppliers under provision made by virtue of paragraph 7;

(b) received by the Secretary of State, an investment contract counterparty or a CFD counterparty under an investment contract,

(c) received by a CFD counterparty from electricity suppliers under provision made by virtue of section 5;

(d) received by a CFD counterparty under a CFD,

in circumstances where the Secretary of State, an investment contract counterparty or a CFD counterparty is unable fully to meet obligations under an investment contract or a CFD.

(2) Provision made by virtue of sub-paragraph (1) may include provision about the meaning of "unable fully to meet obligations under an investment contract or a CFD".

(3) Regulations may make provision about the application of sums held by the Secretary of State, an investment contract counterparty or a CFD counterparty.

(4) Provision made by virtue of sub-paragraph (3) may include provision that sums are to be paid, or not to be paid, into the Consolidated Fund.

Information and advice

10 (1) Regulations may make provision about the provision and publication of information.

(2) Provision made by virtue of sub-paragraph (1) may include provision—

(a) for the Secretary of State to require the national system operator to provide advice to the Secretary of State;

(b) for the Secretary of State to require an investment contract counterparty, a CFD counterparty, the Authority, the Northern Ireland Authority for Utility Regulation or the Northern Ireland system operator to provide advice to the Secretary of State or any other person specified in the regulations;

(c) for the Secretary of State to require an investment contract counterparty, a CFD counterparty, the national system operator, electricity suppliers, the Authority, the Northern Ireland Authority for Utility Regulation, the Northern Ireland system operator or a generator who is party to an investment contract to provide information to the Secretary of State or any other person specified in the regulations;

(d) for the national system operator to require information to be provided to it by an investment contract counterparty, a CFD counterparty, a generator who is party to an investment contract or the Northern Ireland system operator;

(e) for an investment contract counterparty or a CFD counterparty to require information to be provided to it by electricity suppliers or the Northern Ireland system operator;

(f) for the classification and protection of confidential or sensitive information;

(g) for the enforcement of any requirement imposed by virtue of paragraphs (a) to (f).

(3) In sub-paragraph (2) "Northern Ireland system operator" means the holder of a licence under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

(4) The prohibition on disclosure of information by—

(a) section 105(1) of the Utilities Act 2000;

(b) Article 63(1) of the Energy (Northern Ireland) Order 2003 (S.I. 2003/419 (N.I.6));

does not apply to a disclosure required by virtue of this paragraph.

Investment contracts: functions of the Authority

11 Regulations may make provision conferring functions on the Authority for the purpose of offering advice to, or making determinations on behalf of, a party to an investment contract.

Enforcement

12 (1) Regulations may include provision for requirements under the regulations to be enforceable—

(a) by the Authority as if they were relevant requirements on a regulated person for the purposes of section 25 of EA 1989;

(b) by the Northern Ireland Authority for Utility Regulations as if they were relevant requirements on a regulated person for the purposes of Article 41A of the Energy (Northern Ireland) Order 2003 (S.I 2003/419 (N.I. 6)).

(2) Provision made by virtue of sub-paragraph (1)(b) may be made in relation only to the enforcement of requirements imposed on the holder of a licence under Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

Consultation

13 (1) Before making regulations the Secretary of State must consult—

(a) the Scottish Ministers,

(b) the Welsh Ministers,

(c) the Department of Enterprise, Trade and Investment, and

(d) such other persons as the Secretary of State considers it appropriate to consult.

(2) Before making regulations which contain provision falling within paragraph 7, 8 or 14(2), the Secretary of State must also consult electricity suppliers.

(3) Before making regulations which contain provision falling within paragraph 9, the Secretary of State must also consult electricity suppliers and any electricity generator who is party to an investment contract.

(4) Before making regulations which contain provision falling within paragraph 11 or 12(1)(a), the Secretary of State must also consult the Authority.

(5) Before making regulations which contain provision falling within paragraph 12(1)(a), the Secretary of State must also consult any person who is a holder of a licence under section 6(1)(d) of EA 1989.

(6) Before making regulations which contain provision falling within paragraph 12(1)(b), the Secretary of State must also consult the Northern Ireland Authority for Utility Regulation and any person who is a holder of a licence under Article 10(1)(c) of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I.1)).

(7) If regulations impose requirements by virtue of paragraph 10(2), the Secretary of State must before making the regulations also consult any person upon whom a requirement is imposed.

(8) The requirement to consult may be satisfied by consultation before, as well as consultation after, the passing of this Act.

PART 3

FURTHER PROVISION ABOUT AN INVESTMENT CONTRACT COUNTERPARTY AND A CFD COUNTERPARTY

Duties of an investment contract counterparty and a CFD counterparty

14 (1) An investment contract counterparty and a CFD counterparty must act in accordance with—

(a) any direction given by the Secretary of State by virtue of this Schedule;

(b) any provision included in regulations.

(2) Regulations may make provision—

(a) to require an investment contract counterparty or a CFD counterparty to enter into arrangements or to offer to contract for purposes connected to an investment contract;

(b) specifying things that an investment contract counterparty or a CFD counterparty may or must do, or things that an investment contract counterparty or CFD counterparty may not do;

(c) conferring on the Secretary of State further powers to direct an investment contract counterparty or CFD counterparty to do, or not to do, things specified in the regulations or the direction.

(3) Provision made by virtue of sub-paragraph (2)(b) or (c) includes provision requiring consultation with, or the consent of, the Secretary of State in relation to—

(a) the enforcement of obligations under an investment contract;

(b) a variation or termination of an investment contract;

(c) the settlement or compromise of a claim under an investment contract;

(d) the conduct of legal proceedings relating to an investment contract;

(e) the exercise of rights under an investment contract.

Shadow directors, etc.

15 The Secretary of State is not, by virtue of the exercise of a power conferred by or by virtue of this Schedule, to be regarded as—

(a) a person occupying in relation to an investment contract counterparty or a CFD counterparty the position of director;

(b) being a person in accordance with whose directions or instructions the directors of an investment contract counterparty or a CFD counterparty are accustomed to act;

(c) exercising any function of management in an investment contract counterparty or a CFD counterparty;

(d) a principal of an investment contract counterparty or a CFD counterparty.

PART 4

TRANSFERS

Transfers

16 (1) The Secretary of State may make one or more schemes for the transfer of designated property, rights or liabilities under an investment contract—

(a) from the Secretary of State ("the transferor") to a CFD counterparty ("the transferee");

(b) from the Secretary of State ("the transferor") to an investment contract counterparty ("the transferee");

(c) from an investment contract counterparty ("the transferor") to a CFD counterparty ("the transferee");

(d) from a person who has ceased to be an investment contract counterparty ("the transferor") to a person who is an investment contract counterparty ("the transferee").

(2) If a scheme transfers liabilities under an investment contract regulations must make provision under paragraph 7(1) or section 5(1) for the purpose of enabling payments to be made under the contract.

(3) If a scheme provides for a CFD counterparty to be the transferee, regulations may provide, to any extent considered appropriate by the Secretary of State, for the investment contract to be treated as a CFD for the purposes of provision made by or by virtue of Chapter 2 of this Act.

(4) On the transfer date, the designated property, rights and liabilities are transferred and vest in accordance with the scheme.

(5) The rights and liabilities that may be transferred by a scheme include those arising under or in connection with a contract of employment.

(6) A certificate by the Secretary of State that anything specified in the certificate has vested in any person by virtue of a scheme is conclusive evidence for all purposes of that fact.

(7) In this paragraph and paragraph 17—

"designated", in relation to a scheme, means specified in or determined in accordance with the scheme;

"property" includes interests of any description;

"the transfer date" means a date specified by a scheme as the date on which the scheme is to have effect.

17 (1) A scheme may make provision—

(a) for anything done by or in relation to the transferor in connection with any property, rights or liabilities transferred by the scheme to

be treated as done, or to be continued, by or in relation to the transferee;

(b) for references to the transferor in any agreement (whether written or not), instrument or other document relating to any property, rights or liabilities transferred by the scheme to be treated as references to the transferee;

(c) about the continuation of legal proceedings;

(d) for transferring property, rights or liabilities which could not otherwise be transferred or assigned;

(e) for transferring property, rights and liabilities irrespective of any requirement for consent which would otherwise apply;

(f) for preventing a right of pre-emption, right of reverter, right of forfeiture, right to compensation or other similar right from arising or becoming exercisable as a result of the transfer of property, rights or liabilities;

(g) for dispensing with any formality in relation to the transfer of property, rights or liabilities by the scheme;

(h) for transferring property acquired, or rights or liabilities arising, after the scheme is made but before it takes effect;

(i) for apportioning property, rights or liabilities;

(j) for creating rights, or imposing liabilities, in connection with property, rights or liabilities transferred by the scheme;

(k) for requiring the transferee to enter into any agreement of any kind, or for a purpose, specified in or determined in accordance with the scheme.

(2) Sub-paragraph (1)(b) does not apply to references in primary legislation or in subordinate legislation.

18 A scheme may contain provision for the payment of compensation by the Secretary of State to any person whose interests are adversely affected by it.

PART 5

SUPPLEMENTARY

Licence modifications

19 (1) The Secretary of State may modify—

(a) a condition of a particular licence under section 6(1)(a), (b) or (c) of EA 1989 (generation, transmission and distribution licences);

(b) the standard conditions incorporated in licences under that provision by virtue of section 8A(1A) of that Act;

(c) a document maintained in accordance with the conditions of licences under that provision, or an agreement that gives effect to a document so maintained.

(2) The Secretary of State may make a modification under sub-paragraph (1) only for the purpose of—

(a) allowing or requiring services to be provided to the Secretary of State, an investment contract counterparty or a CFD counterparty;

(b) enforcing obligations under an investment contract.

(3) Provision included in a licence, or in a document or agreement relating to licences, by virtue of the power under sub-paragraph (1) may in particular include provision of a kind that may be included in regulations.

(4) Before making a modification under this paragraph, the Secretary of State must consult—

(a) the Scottish Ministers,
(b) the Welsh Ministers,
(c) the holders of any licence being modified,
(d) electricity suppliers,
(e) the Department of Enterprise, Trade and Investment,
(f) the Authority, and
(g) such other persons as the Secretary of State considers it appropriate to consult.

(5) Sub-paragraph (4) may be satisfied by consultation before, as well as by consultation after, the passing of this Act.

Expenditure

20 (1) *There may be paid out of money provided by Parliament expenditure incurred by the Secretary of State for the purpose of making payments in respect of the Secretary of State's obligations under an investment contract, whether entered into before or after this Schedule comes into force.*

(2) *There may be paid out of money provided by Parliament expenditure incurred by the Secretary of State for the purpose of, or in connection with—*

(a) *obtaining advice and assistance in relation to investment contracts (including in relation to entering into an investment contract);*
(b) *the establishment of an investment contract counterparty;*
(c) *making payments or providing financial assistance to an investment contract counterparty.*

(3) *Financial assistance or payments includes financial assistance or payments given subject to such conditions as may be determined by, or in accordance with arrangements made by, the Secretary of State; and such conditions may in particular in the case of a grant include conditions for repayment in specified circumstances.*

(4) *In this paragraph, "financial assistance" means grants, loans, guarantees or indemnities, or any other kind of financial assistance.*

SCHEDULE 4

Section 38

APPLICATION AND MODIFICATION OF EMISSIONS LIMIT DUTY

Application of duty: changes to main boilers

1 (1) Regulations under section 38(6)(b) may provide for the emissions limit duty to apply (with or without modifications) in relation to fossil fuel plant in cases where—

(a) immediately before the day on which section 38(1) came into force, the electricity generating station in question was the subject of a relevant consent, and

(b) on or after that day—

(i) any main boiler of the generating station is replaced, or

(ii) an additional main boiler is installed for the generating station.

(2) Regulations made by virtue of this paragraph may, in particular, make different provision in relation to different parts of fossil fuel plant.

(3) For the purposes of sub-paragraph (1)(a), plant is to be treated as the subject of a relevant consent if, by virtue of a consent or approval granted before section 36 of EA 1989 or Article 39 of the Electricity (Northern Ireland) Order 1992 (S.I. 1992/231 (N.I. 1)) came into force, no relevant consent was required in respect of it.

Application of duty: generating stations not exporting to a network

2 Regulations under section 38(6)(b) may provide for the emissions limit duty to apply with modifications (or not to apply) in relation to fossil fuel plant which does not include a network generating station.

Modifications where gasification or CCS plant associated with two or more generating stations

3 (1) Regulations under section 38(6)(b) may provide for the emissions limit duty to apply with modifications in cases where—

(a) gasification plant or CCS plant is associated with two or more electricity generating stations, and

(b) each of those generating stations is the subject of a relevant consent.

(2) Regulations made by virtue this paragraph may, in particular, provide for—

(a) the installed generating capacity of any those generating stations (or any part of it) to be treated as installed generating capacity of another of those generating stations;

(b) any of the emissions from the gasification plant or CCS plant to be treated as emissions from any of the generating stations.

Modifications of emissions limit for changes of circumstance during a year

4 Regulations under section 38(6)(b) may modify the emissions limit duty in relation to fossil fuel plant in cases where the generating station—

(a) is used for the first time, or permanently ceases to be used, for the generation of electricity, or

(b) is altered.

SCHEDULE 5

Section 40

EMISSIONS LIMIT DUTY: MONITORING AND ENFORCEMENT

Matters that may be contained in enforcement regulations

1 (1) Provision that may be contained in enforcement regulations includes provision—

(a) conferring functions for or in connection with monitoring or enforcing the compliance of operators with the emissions limit duty;

(b) determining the authorities by whom such functions are to be exercisable ("enforcing authorities");

(c) requiring enforcing authorities to comply with directions given by the appropriate national authority in carrying out any of their functions under the regulations;

(d) requiring enforcing authorities to comply with requirements imposed on them under section 39(10);

(e) requiring or authorising enforcing authorities to carry out consultation in connection with the carrying out of any of their functions under the regulations;

(f) requiring enforcing authorities to publish guidance about the carrying out of any of their functions under the regulations;

(g) about the provision, use and publication of information in relation to the compliance of operators with the emissions limit duty;

(h) authorising the appropriate national authority to make schemes for the charging by enforcing authorities of fees or other charges in respect of or in connection with functions conferred on enforcing authorities under the regulations;

(i) about the enforcement of contraventions of the emissions limit duty through enforcement notices and financial penalties (see paragraphs 2 and 3);

(j) about the procedure to be followed in connection with the service of enforcement notices and imposition of financial penalties (including requirements for enforcement notices to be published in draft before being served for the purpose of enabling representations to be made about them);

(k) for the enforcement of—

(i) enforcement notices,

(ii) undertakings given in connection with such notices,

(iii) financial penalties, or

(iv) other obligations imposed on operators under the regulations,

by proceedings in the High Court or any court of competent jurisdiction in Scotland;

(l) conferring rights of appeal in respect of decisions made, notices served, financial penalties imposed or other things done (or omitted to be done) by enforcing authorities under the regulations (including provision in relation to the making, consideration and determination of such appeals);

(m) about the application of the regulations to the Crown.

(2) Provision under sub-paragraph (1)(a) may in particular include provision—

(a) conferring power on enforcing authorities to take samples or to make copies of information;

(b) conferring power on enforcing authorities to arrange for preventative or remedial action to be taken at the expense of operators;

(c) authorising enforcing authorities to appoint suitable persons to exercise the functions mentioned in paragraph (a) or (b);

(d) conferring powers on persons so appointed (which may include, so far as relevant, the powers mentioned in section 108(4) of the Environment Act 1995).

(3) Provision under sub-paragraph (1)(g) may in particular include provision—

(a) enabling enforcing authorities to use, for the purposes of their functions conferred under the regulations in respect of fossil fuel plant, information held for the purposes of their functions in relation to any such plant conferred under regulations implementing the ETS Directive;

(b) requiring operators, or other persons of a description specified in the regulations, to provide to an enforcing authority such information, and in such manner, as—

(i) the regulations may specify, or

(ii) the authority may reasonably require;

(c) requiring or authorising enforcing authorities to publish such information, and in such manner, as is specified in the regulations (whether such information is held as mentioned in paragraph (a) or is provided as mentioned in paragraph (b));

(d) requiring operators to publish such information, and in such manner, as—

(i) the regulations may specify, or

(ii) an enforcing authority may reasonably require.

(4) Provision under sub-paragraph (1)(h) in relation to a scheme may—

(a) require the scheme to be so framed that the fees and charges payable under the scheme are sufficient, taking one year with another, to cover such expenditure (whether or not incurred by the enforcing authority or other person to whom they are so payable) as is specified;

(b) authorise any such scheme to make different provision for different cases (and specify particular kinds of such cases).

Enforcement notices

2 (1) Enforcement regulations may authorise an enforcing authority to serve an enforcement notice on an operator who has breached the emissions limit duty in respect of any fossil fuel plant—

(a) in relation to the year in which the notice is served, or

(b) in relation to the preceding year.

(2) The regulations may specify the requirements that may be imposed on an operator under an enforcement notice.

(3) Those requirements may in particular include requirements—

(a) to take such remedial action in respect of the breach as is specified in the notice,

(b) to provide such undertakings in respect of the breach as may be agreed between the operator and the enforcing authority (whether for the taking of remedial action or otherwise), or

(c) to comply with a modified emissions limit duty in relation to the fossil fuel plant for any year to take account of excess emissions in earlier years.

Financial penalties

3 (1) Enforcement regulations may authorise an enforcing authority to serve a notice on an operator who has breached the emissions limit duty requiring

the operator to pay such a financial penalty in respect of the breach as is specified in, or calculated in accordance with, the notice or the regulations.

(2) Enforcement regulations which provide for the imposition of financial penalties—

(a) may not permit an enforcing authority to impose a financial penalty in respect of a breach of the emissions limit duty in any year which began more than 5 years before the year in which the notice imposing the penalty is served;

(b) may require enforcing authorities, in imposing such penalties, to have regard to any guidance issued by the appropriate national authority;

(c) may provide for such penalties to be instead of, or in addition to, requirements imposed under enforcement notices.

General

4 (1) Enforcement regulations may—

(a) make provision which corresponds or is similar to any provision made, or capable of being made, under section 2(2) of the European Communities Act 1972 in connection with the ETS Directive (subject to any modifications that the appropriate national authority considers appropriate);

(b) apply or incorporate (with or without modifications) other enactments relating to the prevention or control of environmental pollution (including, in particular, regulations implementing the ETS Directive and directly applicable EU legislation).

5 (1) Provision included in enforcement regulations by virtue of section 42(9)(a) may affect legislation.

This is subject to sub-paragraph (3).

(2) For this purpose, provision affects legislation if it amends, repeals or revokes any provision made by or under primary legislation.

(3) Enforcement regulations made by the Scottish Ministers, the Welsh Ministers or the Department of Environment may not include any provision affecting legislation unless it is within legislative competence.

(4) Enforcement regulations made by the Secretary of State—

(a) may include provision affecting legislation that is made in consequence of any enforcement regulations made by the Scottish Ministers, the Welsh Ministers or the Department of Environment, but

(b) may not include any such provision that could be included in the regulations mentioned in paragraph (a) except with the consent of the authority making those regulations.

(5) For this purpose, a provision of enforcement regulations is within legislative competence if—

(a) in the case of regulations by the Scottish Ministers, it would be within the legislative competence of the Scottish Parliament if it were included in an Act of that Parliament;

(b) in the case of regulations by the Welsh Ministers, it would be within the legislative competence of the National Assembly for Wales if it were included in an Act of that Assembly;

(c) in the case of regulations by the Department of Environment, it would be within the legislative competence of the Northern Ireland Assembly if it were included in an Act of that Assembly.

(6) Provision included in enforcement regulations by virtue of section 42(9)(b) may include provision modifying provision made by virtue of paragraph 2(3)(c) in cases where there is no applicable emissions limit in respect of any year.

Interpretation

6 In this Schedule "enforcement regulations" means regulations under section 40.

SCHEDULE 6

Section 54

NUCLEAR REGULATIONS

PART 1

INTRODUCTORY

Provision that may be made by nuclear regulations

1 Nuclear regulations may, in particular, make provision of any of the kinds mentioned in Part 2 of this Schedule for any of the purposes mentioned in section 54(1).

2 No provision in Part 2 of this Schedule is to be regarded as limiting the generality of—

(a) section 54(1), or

(b) any other provision in that Part of this Schedule.

Interpretation

3 In Part 2 of this Schedule, "activity" includes process, operation or act.

PART 2

EXAMPLES OF PROVISION THAT MAY BE MADE BY NUCLEAR REGULATIONS

Nuclear installations etc.

4 Imposing requirements with respect to the following, in relation to any nuclear installation or its site—

(a) design and construction;

(b) siting, installation and commissioning;

(c) operation;

(d) testing, maintenance and repair;

(e) inspection;
(f) alteration or adjustment;
(g) dismantling and decommissioning.

Research

5 Requiring research to be carried out in connection with any activity mentioned in paragraph 4.

Import etc

6 (1) Regulating or prohibiting the import of things of specified descriptions into the United Kingdom.

(2) For this purpose "import" includes landing and unloading.

(3) Where an act or omission could constitute an offence—
(a) under a provision of nuclear regulations made by virtue of sub-paragraph (1), and
(b) under a provision of the Customs and Excise Acts 1979,
specifying the provision under which the offence is to be punished.

Transport

7 Imposing requirements about how any radioactive material may be transported, including requirements about construction, testing and marking of packages or containers.

Licences and approvals

8 (1) Prohibiting any specified activity except—
(a) as permitted by virtue of a licence, or
(b) with the consent or approval of a specified authority.

(2) Providing for the grant, renewal, variation, transfer and revocation of licences (including the variation and revocation of conditions attached to licences).

Appointment of persons to carry out specified functions

9 (1) Requiring, in specified circumstances, the appointment (whether in a specified capacity or not) of persons to perform specified functions.

(2) Imposing duties or conferring powers on persons appointed (whether in pursuance of the regulations or not) to perform specified functions.

(3) Imposing requirements with respect to the qualifications or experience, or both, of persons—
(a) appointed pursuant to a requirement imposed by virtue of sub-paragraph (1), or
(b) performing specified functions.

Restrictions on employment

10 Regulating or prohibiting the employment in specified circumstances of—

(a) all persons, or
(b) persons of a specified description.

Instruction, training and supervision etc.

11 Imposing requirements with respect to the instruction, training and supervision of persons at work.

Registration, notification and records

12 Requiring any person, premises or thing to be registered—
(a) in any specified circumstances, or
(b) as a condition of doing any specified activity.

13 (1) Requiring, in specified circumstances, specified matters to be notified in a specified manner to specified persons.

(2) Specifying any power, to be exercisable by any inspector who may be authorised to exercise it by the instrument of appointment, in specified circumstances to require persons to provide information about measures they propose to take in order to comply with any of the relevant statutory provisions.

14 Imposing requirements with respect to making and keeping of records and other documents, including plans and maps.

Accidents and other occurrences

15 Securing that persons in premises of any specified description where persons work leave the premises in specified circumstances.

16 Restricting, prohibiting or requiring any specified activity where any accident or other occurrence of a specified kind has occurred.

SCHEDULE 7

Section 57

THE OFFICE FOR NUCLEAR REGULATION

Status

1 (1) The ONR is not to be regarded as a servant or agent of the Crown or as enjoying any status, immunity or privilege of the Crown.

(2) The ONR's property is not to be regarded as the property of, or property held on behalf of, the Crown.

Membership

2 (1) The ONR is to consist of—
(a) not more than 4 executive members, who are employees of the ONR, and
(b) not more than 7 non-executive members, who are not members of the ONR's staff.

(2) References in this Part of this Act to members of the ONR's staff are to persons who—

(a) are employees of the ONR, or

(b) have been seconded to it.

3 The executive members consist of—

(a) the Chief Nuclear Inspector,

(b) the Chief Executive Officer, and

(c) not more than 2 other members (or not more than 3 other members, if the Chief Nuclear Inspector and the Chief Executive Officer are the same person) appointed by the ONR.

4 (1) The non-executive members consist of—

(a) a chair appointed by the Secretary of State,

(b) the member (if any) appointed under sub-paragraph (4), and

(c) not more than 5 other members appointed by the Secretary of State.

(2) The Secretary of State must, so far as practicable, ensure that at any given time there are no fewer than 5 non-executive members of the ONR.

(3) One non-executive member must have experience of, or expertise in, matters relevant to the ONR's nuclear security purposes.

(4) The Health and Safety Executive may—

(a) appoint a non-executive member from among the members of the Health and Safety Executive (an "HSE member"), or

(b) authorise the Secretary of State to appoint a non-executive member.

(5) The Health and Safety Executive must notify the ONR and the Secretary of State whenever it appoints an HSE member.

5 Service as a member of the ONR is not service in the civil service of the State, but this is subject to paragraph 6.

6 Members of the ONR are to be regarded as Crown servants for the purposes of the Official Secrets Act 1989.

Terms of appointment

7 Subject to the following provisions of this Schedule, members of the ONR hold and vacate office in accordance with the terms of their respective appointments.

8 (1) The terms of a person's appointment as an executive member are to be determined by the ONR.

(2) The terms of a person's appointment as a non-executive member, other than an HSE member, are to be determined by the Secretary of State.

(3) The terms of a person's appointment as an HSE member are to be determined by the Health and Safety Executive.

9 (1) An executive member—

(a) ceases to be a member of the ONR upon ceasing to be an employee of the ONR, and

(b) may at any time resign from office by notice to the ONR.

(2) A person who is—
(a) the Chief Nuclear Inspector, or
(b) the Chief Executive Officer,
ceases to be a member of the ONR on ceasing to hold that appointment (unless the person was appointed as both Chief Nuclear Inspector and Chief Executive Officer and continues to hold one of those appointments).

(3) A non-executive member other than an HSE member—
(a) ceases to be a member of the ONR upon becoming a member of the ONR's staff, and
(b) may at any time resign from office by notice to the Secretary of State.

(4) An HSE member—
(a) ceases to be a member of the ONR upon ceasing to be a member of the Health and Safety Executive, and
(b) may at any time resign from office by notice to the Health and Safety Executive.

10 (1) The Secretary of State may by notice remove any non-executive member, other than an HSE member, from office.

(2) A notice may not be given under sub-paragraph (1) unless at least one of the conditions in sub-paragraph (3) or (4) is met.

(3) The conditions in this sub-paragraph are that the member—
(a) has been absent from meetings of the ONR for a period longer than 6 months without the permission of the ONR;
(b) is an undischarged bankrupt or has had his or her estate sequestrated without being discharged;
(c) is a person in relation to whom a moratorium period under a debt relief order applies;
(d) is subject to a bankruptcy restrictions order or an interim bankruptcy restrictions order;
(e) is subject to a debt relief restrictions order or an interim debt relief restrictions order;
(f) has made an arrangement with his or her creditors, or has entered into a trust deed for creditors, or has made a composition contract with his or her creditors;
(g) is subject to a disqualification order or a disqualification undertaking under the Company Directors Disqualification Act 1986 or equivalent legislation in Northern Ireland;
(h) has been convicted of a criminal offence (but this does not apply in relation to any conviction which is a spent conviction for the purposes of the Rehabilitation of Offenders Act 1974 or the Rehabilitation of Offenders (Northern Ireland) Order 1978 (S.I. 1978/1908 (N.I. 27))).

(4) The conditions in this sub-paragraph are that the Secretary of State is satisfied that the member—
(a) has a financial or other interest that is likely to affect prejudicially the carrying out of his or her functions as a member of the ONR;
(b) has been guilty of misbehaviour;
(c) is otherwise incapable of carrying out, or unfit to carry out, the functions of his or her office.

(5) The Health and Safety Executive may by notice remove an HSE member from office.

(6) The Health and Safety Executive must notify the ONR and the Secretary of State whenever an HSE member—

(a) ceases to be a member of the Health and Safety Executive,

(b) resigns from office, or

(c) is removed from office.

(7) In sub-paragraph (3) "debt relief order", "debt relief restrictions order" and "interim debt relief restrictions order" mean the orders of those names made under—

(a) Part 7A of the Insolvency Act 1986, or

(b) Part 7A of the Insolvency (Northern Ireland) Order 1989.

Remuneration, allowances and pensions etc of non-executive members

11 (1) The ONR may pay to non-executive members other than an HSE member such remuneration as the Secretary of State may determine.

(2) The ONR may pay to or in respect of the non-executive members such sums as the Secretary of State may determine by way of allowances and expenses.

(3) The ONR may pay, or make provision for paying, to or in respect of the non-executive members other than an HSE member, such sums as the Secretary of State may determine in respect of pensions or gratuities.

(4) Where—

(a) a person ceases, otherwise than on the expiry of his or her term of office, to be a non-executive member other than an HSE member, and

(b) it appears to the ONR that there are special circumstances that make it right for that person to receive compensation,

the ONR may pay the person such amount by way of compensation as the Secretary of State may determine.

(5) Where—

(a) a non-executive member appointed under paragraph 2(3A) of Schedule 2 to the 1974 Act to be a member of the Health and Safety Executive (the "ONR member of the HSE")—

(i) ceases to be the ONR member of the HSE otherwise than on the expiry of his or her term of office as ONR member of the HSE, but

(ii) does not cease to be a non-executive member of the ONR, and

(b) it appears to the ONR that there are special circumstances that make it right for that person to receive compensation,

the ONR may make pay the person such amount by way of compensation as the Secretary of State may determine.

Employees and other members of staff

12 (1) The ONR may appoint persons to serve as its employees.

(2) A person appointed to serve as an employee of the ONR is to be employed on such terms and conditions, including terms and conditions as to remuneration, as the ONR may determine.

(3) One employee of the ONR is to be appointed as the Chief Nuclear Inspector.

(4) One employee of the ONR is to be appointed as the Chief Executive Officer.

(5) The appointment of the Chief Nuclear Inspector or the Chief Executive Officer also requires the approval of the Secretary of State.

(6) A person may be both the Chief Nuclear Inspector and the Chief Executive Officer.

(7) The ONR may make arrangements for persons to be seconded to the ONR to serve as members of the ONR's staff.

(8) A period of secondment to the ONR does not affect the continuity of a person's employment with the employer from whose service he or she is seconded.

13 (1) The ONR may pay to or in respect of an employee sums by way of or in respect of allowances, expenses, pensions, gratuities or compensation for loss of employment.

(2) The ONR may pay to or in respect of a person seconded to it sums by way of or in respect of allowances, expenses, pensions or gratuities.

(3) An executive member may not take part in the determination of the amount of any remuneration, allowance, expense, pension, gratuity or compensation payable to or in respect of him or her.

14 (1) Service as an employee of the ONR is not service in the civil service of the State.

(2) A person employed in the civil service of the State continues to be employed in the civil service of the State during any period of secondment to the ONR.

(3) Members of the ONR's staff are to be regarded as Crown servants for the purposes of the Official Secrets Act 1989.

(4) Employment by the ONR is not Crown employment for the purposes of the Trade Union and Labour Relations (Consolidation) Act 1992 (see section 273 of that Act).

15 (1) The persons to whom section 1 of the Superannuation Act 1972 (persons to or in respect of whom benefits may be provided by schemes under that section) applies are to include the employees of the ONR.

(2) Accordingly, in Schedule 1 to that Act (employment to which superannuation schemes may extend), in the list of other bodies, at the appropriate place insert—

"Office for Nuclear Regulation."

(3) The ONR must pay to the Minister for the Civil Service, at such times as that Minister may direct, such sums as that Minister may determine in respect of the increase attributable to sub-paragraph (1) in the sums payable out of money provided by Parliament under that Act.

Committees

16 (1) The ONR may establish committees, and any committee may establish sub-committees.

(2) The members of a committee may include persons who are not members of the ONR or the ONR's staff (and the members of a sub-committee of a committee may include persons who are not members of the committee or members of the ONR or the ONR's staff).

(3) The ONR may make arrangements for the payment of such remuneration, allowances and expenses as it considers appropriate to any person who—

(a) is a member of a committee or sub-committee, but

(b) is not a member of the ONR or of the ONR's staff.

(4) Payments made by the ONR under sub-paragraph (3) are to be of such amounts as may be determined by the Secretary of State.

Procedure

17 (1) The ONR may make such provision as it considers appropriate to regulate—

(a) its own proceedings (including quorum), and

(b) the proceedings (including quorum) of its committees and sub-committees.

(2) The ONR may, to any extent, permit any of its committees and sub-committees to regulate their own proceedings (including quorum).

(3) The validity of any proceedings of the ONR is not affected by any vacancy among the members or by any defect in the appointment of a member.

(4) The ONR must from time to time publish a summary of its rules and procedures.

Performance of functions

18 (1) The ONR may authorise—

(a) a member of the ONR,

(b) a member of the ONR's staff,

(c) a health and safety inspector, or

(d) a committee of the ONR,

to do anything required or authorised to be done by the ONR (and such authorisation may include authorisation to exercise the power conferred on the ONR by this paragraph).

This sub-paragraph is subject to sub-paragraphs (2) and (3).

(2) The ONR must give an authorisation or authorisations under this paragraph in respect of all its functions which consist of the exercise of a regulatory function in a particular case.

(3) Only the following may be authorised under this paragraph to do anything in the exercise of a regulatory function in a particular case—

(a) a member of the ONR's staff;

(b) a health and safety inspector;

(c) a committee of the ONR of which every member is a member of the ONR's staff or a health and safety inspector.

(4) An authorisation under this paragraph—

(a) may be general or specific;

(b) does not affect the ability of the ONR to exercise the function in question.

(5) Any authorisations given by the ONR under this paragraph must be in writing.

(6) The ONR must publish any authorisations which it gives under this paragraph.

Payment of allowances and expenses

19 The ONR may pay allowances or expenses to any person in connection with the performance of any of its functions.

Indemnities

20 (1) The ONR may, in the circumstances specified in sub-paragraph (2), indemnify persons who are ONR officers against all or any part of any liability which they incur in the execution, or purported execution, of their functions as such ONR officers.

(2) Those circumstances are that the ONR is satisfied that the person in question honestly believed that the act giving rise to the liability—

(a) was within the person's relevant powers, and

(b) was one that the person was required or entitled to do by virtue of the person's position as an ONR officer.

(3) Sub-paragraph (1)—

(a) applies only so far as the ONR is not otherwise required to indemnify ONR officers, and

(b) is not to be taken to affect any other powers that the ONR has to indemnify its members or members of staff or persons appointed by it.

(4) In this paragraph—

"liability" includes damages, costs and expenses (and a reference to liability incurred by a person includes a reference to any such sums which the person is ordered to pay);

"ONR officer" means—

(a) an inspector appointed under Schedule 8;

(b) an enforcing officer appointed by the ONR under section 61(3) of the Fire (Scotland) Act 2005 (asp. 5) (enforcing authorities);

(c) an inspector appointed by the ONR under article 26(1) of the Regulatory Reform (Fire Safety) Order 2005 (S.I. 2005/1541) (enforcement of Order);

(d) a member of staff of the ONR who is authorised by the Secretary of State under section 4(2)(b) of the Employers' Liability (Compulsory Insurance) Act 1969 (certificates of insurance);

"relevant powers"—

(a) in relation to a person within paragraph (a), (b) or (c) of the definition of "ONR officer", means the powers which the person has in the capacity of an inspector or enforcing officer of the kind in question;

(b) in relation to a person within paragraph (d) of that definition means the person's powers under the Employers' Liability (Compulsory Insurance) Act 1969.

Accounts

21 (1) It is the duty of the ONR—

(a) to keep proper accounts and proper records in relation to the accounts;

(b) to prepare in respect of each financial year a statement of accounts in such form as the Secretary of State, with the approval of the Treasury, may direct;

(c) to send copies of the statement to the Secretary of State and the Comptroller and Auditor General before the end of November next following the financial year to which the statement relates.

(2) The Comptroller and the Auditor General must examine, certify and report on the statement and must lay copies of the statement and of the report on it before Parliament.

Strategy

22 (1) The ONR must prepare a strategy for carrying out its functions, including any general priorities it will apply, or principal objectives to which it will have regard, in carrying out its functions.

(2) The ONR must act in accordance with its strategy, or any revision of it, approved under sub-paragraph (7).

(3) Before preparing or revising its strategy the ONR must consult such persons as it considers it appropriate to consult.

(4) The first proposal for the ONR's strategy must be submitted to the Secretary of State within 8 months beginning with the day on which this paragraph comes into force.

(5) The ONR—

(a) may review its strategy at any time, and

(b) must do so—

(i) within 5 years beginning with the day on which its strategy is first published, and

(ii) within 5 years beginning with the most recent review of its strategy.

(6) The ONR—

(a) may revise its strategy following a review under sub-paragraph (5), and

(b) must submit any revision of its strategy to the Secretary of State.

(7) The Secretary of State may approve the ONR's strategy, or any revision of it, with or without modifications.

(8) The Secretary of State must consult the ONR before approving with modifications the ONR's strategy or any revision of it.

Annual plan

23 (1) The ONR—

(a) must prepare, for each financial year, a plan for the performance during that year of its functions ("the annual plan"), and

(b) may revise the annual plan.

(2) The ONR must take all reasonable steps to act in accordance with the annual plan, or any revision of it, approved under sub-paragraph (4).

(3) The ONR must submit the proposed annual plan and any revision of it to the Secretary of State.

(4) The Secretary of State may approve the annual plan and any revision of it with or without modifications.

(5) The Secretary of State must consult the ONR before approving with modifications the ONR's annual plan or any revision of it.

Reporting requirements of the ONR

24 (1) As soon as reasonably practicable after the end of each financial year, the ONR must make a report to the Secretary of State on the performance of the ONR's functions during the year.

(2) The report for a financial year must contain—

(a) a general description of what the ONR has done in the exercise of its functions during the year,

(b) a description of how, and the extent to which, what the ONR has done during the year has enabled it to—

(i) act in accordance with its strategy in force during the year, and

(ii) meet any objectives set out in its annual plan, and

(c) a description of any relevant services provided by the ONR during the year to any person, whether or not in the United Kingdom, under section 70(2) (provision of services or facilities).

Laying and publication

25 (1) This paragraph applies to—

(a) the ONR's strategy, and any revision of it, approved under paragraph 22(7),

(b) the ONR's annual plan, and any revision of it, approved under paragraph 23(4), and

(c) a report made to the Secretary of State under paragraph 24.

(2) The documents mentioned in sub-paragraph (1) are referred to in this paragraph as "relevant documents".

(3) The Secretary of State must lay a copy of each relevant document before Parliament, together with a statement as to whether any matter has been excluded from that copy in accordance with sub-paragraph (4).

(4) If it appears to the Secretary of State, after consultation with the ONR, that the publication of any matter in a relevant document would be contrary to

the interests of national security, the Secretary of State may exclude that matter from the copy of it as laid before Parliament.

(5) The ONR must arrange for a relevant document to be published in the form in which it was laid before Parliament under sub-paragraph (3).

Payments and borrowing

26 (1) *The Secretary of State must pay to the ONR such sums as are approved by the Treasury and as the Secretary of State considers appropriate for the purpose of enabling the ONR to perform its functions.*

(2) The ONR may, with the consent of the Secretary of State, borrow money.

(3) The ONR may not borrow money if the effect of the borrowing would be to cause the aggregate amount outstanding in respect of the principal of sums borrowed by the ONR to be, or to remain, in excess of the ONR's borrowing limit.

(4) The ONR's borrowing limit is £35 million.

(5) The Secretary of State may by order amend sub-paragraph (4) so as to substitute, for the sum for the time being specified in that sub-paragraph, the sum specified in the order, which must not be—

(a) less than £35 million, or

(b) greater than £80 million.

(6) Before making an order under this paragraph, the Secretary of State must consult the ONR.

Supplementary powers

27 (1) The ONR may do anything which is calculated to facilitate, or is conducive or incidental to, the performance of its functions.

(2) The power in sub-paragraph (1) is subject to any restrictions imposed by or under any provision of any enactment.

Financial year

28 (1) In this Part of this Act "financial year" means a period of 12 months ending with 31st March.

(2) But the first financial year of the ONR is—

(a) the period beginning with the date on which section 57 comes into force and ending with the following 31st March, or

(b) if the Secretary of State so directs, such other period not exceeding 2 years as may be specified in the direction.

SCHEDULE 8

Section 62

INSPECTORS

PART 1

APPOINTMENT AND POWERS OF INSPECTORS

Appointment of inspectors

1 (1) The ONR may appoint persons (referred to in this Part of this Act as "inspectors") to carry into effect the relevant statutory provisions.

(2) A person appointed as an inspector must be someone who appears to the ONR to be suitably qualified to carry out the functions that the ONR authorises the person to carry out.

(3) The appointment of an inspector under this paragraph is to be on such terms as the ONR may determine and may be ended by the ONR at any time.

(4) Any appointment of an inspector under this paragraph must be made by a written instrument.

(5) References in this Schedule to carrying into effect the relevant statutory provisions include in particular assisting the ONR to fulfil its functions under the relevant statutory provisions.

Powers of inspectors

2 (1) An inspector's instrument of appointment may authorise the inspector to exercise any relevant power.

(2) Authority to exercise a relevant power may be given—

(a) without restriction, or

(b) only to a limited extent or for limited purposes.

(3) The authority conferred by an inspector's instrument of appointment to exercise any relevant powers may be varied by the ONR by a further instrument in writing varying the instrument of appointment.

(4) For the purposes of this Schedule, an inspector is "authorised", in relation to a power, if and so far as the inspector is authorised by the instrument of appointment to exercise the power.

(5) In this Part, "relevant power" means a power conferred by any of the relevant statutory provisions on an inspector if and so far as so authorised.

(6) When exercising or seeking to exercise any relevant power, an inspector must, if asked, produce the instrument of appointment (including any instrument varying it) or a duly authenticated copy.

PART 2

POWERS EXERCISABLE BY INSPECTORS AUTHORISED BY INSTRUMENT OF APPOINTMENT: IMPROVEMENT NOTICES AND PROHIBITION NOTICES

Improvement notices

3 (1) This paragraph applies where an inspector is of the opinion that a person—
(a) is contravening one or more applicable provisions, or
(b) has contravened one or more of those provisions in circumstances that make it likely that the contravention will continue or be repeated.

(2) The inspector may, if authorised, give the person a notice (an "improvement notice") requiring the person to remedy—
(a) the contravention, or
(b) as the case may be, the matters giving rise to the notice,
within the period specified in the notice.

(3) The improvement notice must—
(a) specify the applicable provision or provisions in question, and
(b) state that the inspector is of the opinion mentioned in sub-paragraph (1), and why.

(4) The period specified under sub-paragraph (2) must end no earlier than the period within which an appeal against the notice may be brought under paragraph 6.

(5) In this paragraph "applicable provision" means—
(a) any of the relevant statutory provisions other than—
(i) a provision of the Nuclear Safeguards Act 2000, or
(ii) any provision of nuclear regulations identified in accordance with section 54(9) (requirement for provisions made for nuclear security purposes or nuclear safeguards purposes, or both, to be identified as such), or
(b) any condition attached to a nuclear site licence under section 4 of the Nuclear Installations Act 1965 relating to a site in England, Wales or Scotland.

Prohibition notices

4 (1) This paragraph applies where an inspector is of the opinion that—
(a) relevant activities, as they are being carried on by or under the control of a person, involve a risk of serious personal injury, or
(b) relevant activities which are likely to be carried on by or under the control of a person will, as so carried on, involve a risk of serious personal injury.

(2) The inspector may, if authorised, give the person a notice ("a prohibition notice") directing that the activities to which the notice relates must not be carried on by or under the control of the person unless the following have been remedied—
(a) the matters specified in the notice under sub-paragraph (3)(b), and

(b) any associated contraventions of provisions specified under sub-paragraph (3)(c).

(3) A prohibition notice must—

(a) state that the inspector is of the opinion mentioned in sub-paragraph (1);

(b) specify the matters which in the inspector's opinion give, or, as the case may be, will give rise to the risk mentioned in that sub-paragraph;

(c) where in the inspector's opinion any of those matters involves or, as the case may be, will involve a contravention of any applicable provision—

(i) specify the provision or provisions in question, and

(ii) state that the inspector is of that opinion, and why.

(4) A prohibition notice takes effect—

(a) at the end of the period specified in the notice, or

(b) if the notice so specifies, immediately.

(5) In this paragraph—

"applicable provision" has the same meaning as in paragraph 3;

"relevant activities" means any activities in relation to which any applicable provision applies (or would apply if they were being carried on).

Improvement and prohibition notices: supplementary

5 (1) In this paragraph "a notice" means an improvement notice or a prohibition notice.

(2) A notice may (but need not) include directions as to the measures to be taken to remedy any contravention or matter to which the notice relates.

(3) Any such directions—

(a) may be expressed by reference to any approved code of practice, and

(b) may afford the person to whom the notice is given a choice between different ways of remedying the contravention or matter.

(4) Sub-paragraph (5) applies where—

(a) any of the applicable provisions applies to a building or any matter connected with a building, and

(b) an inspector proposes to serve an improvement notice relating to a contravention of that provision in connection with the building or matter.

For this purpose "applicable provision" has the same meaning as in paragraph 3.

(5) The notice must not direct any measures to be taken to remedy the contravention that are more onerous than any measures that would be necessary to secure conformity with—

(a) current new-build requirements, or

(b) if the provision in question imposes specific requirements that are more onerous than the requirements of any current new-build requirements, those specific requirements.

(6) In sub-paragraph (5), "current new-build requirements", in relation to a building, or matter connected with a building, means the requirements of any building regulations for the time being in force to which the building or matter would be required to conform if the relevant building were being newly erected.

(7) In sub-paragraph (6), "building regulations", in relation to Scotland, has the meaning given by section 1 of the Building (Scotland) Act 2003 (asp 8).

(8) Where an improvement notice or a prohibition notice which is not to take immediate effect has been given—

(a) the notice may be withdrawn by an inspector at any time before the end of the period specified in it under paragraph 3(2) or 4(4)(a), and

(b) the period so specified may be extended or further extended by an inspector at any time when an appeal against the notice is not pending.

Appeal against improvement or prohibition notice

6 (1) In this paragraph, "a notice" means an improvement notice or a prohibition notice.

(2) A person to whom a notice is given may appeal within such period after the notice is given as may be prescribed by regulations made by the Secretary of State ("the prescribed period").

(3) An appeal under this paragraph lies to an employment tribunal.

(4) On an appeal, the tribunal may—

(a) cancel the notice, or

(b) confirm it—

(i) in its original form, or

(ii) with such modifications as, in the circumstances, the tribunal considers appropriate.

(5) Where an appeal under this paragraph is brought against an improvement notice within the prescribed period, the operation of the notice is suspended until the appeal is withdrawn or finally disposed of.

(6) Where—

(a) an appeal under this paragraph is brought against a prohibition notice within the prescribed period, and

(b) on the application of the appellant, the tribunal, so directs,

the operation of the notice is suspended from the time the direction is given until the appeal is withdrawn or finally disposed of.

(7) One or more assessors may be appointed for the purposes of any proceedings brought before an employment tribunal under this paragraph.

Improvement and prohibition notices: offences

7 (1) It is an offence to contravene any requirement or prohibition imposed by an improvement notice or a prohibition notice.

(2) A person who commits an offence under this paragraph is liable—

(a) on summary conviction—

(i) to imprisonment for a term not exceeding 12 months (in England and Wales and Scotland),
(ii) to a fine not exceeding £20,000, or
(iii) to both;

(b) on conviction on indictment—
(i) to imprisonment for a term not exceeding 2 years, or
(ii) to a fine, or
(iii) to both.

(3) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's powers to imprison), the reference in sub-paragraph (2)(a)(i), as it has effect in England and Wales, to 12 months is to be read as a reference to 6 months.

PART 3

OTHER POWERS EXERCISABLE BY INSPECTOR IF AUTHORISED BY INSTRUMENT OF APPOINTMENT

Power of entry

8 (1) An inspector may, if authorised, enter any premises which the inspector has reason to believe it is necessary for the inspector to enter for the relevant purpose—
(a) at any reasonable time, or
(b) at any time, in a situation—
(i) which in the inspector's opinion is or may be dangerous, or
(ii) in which, in the inspector's opinion, delay would or might be prejudicial to the nuclear security purposes.

(2) In relation to domestic premises, the power may be exercised only—
(a) in accordance with a warrant issued by a justice of the peace, or
(b) in a situation which in the inspector's opinion is or may be dangerous.

(3) A justice of the peace may issue a warrant under sub-paragraph (2)(a) only if satisfied, on the application of the inspector,—
(a) that—
(i) there are reasonable grounds to believe that a contravention of a relevant statutory provision is occurring on the premises, or
(ii) the inspector has been refused consent to enter the premises for the relevant purpose or there are reasonable grounds to believe that such consent will be refused, and
(b) that it is reasonable in the circumstances to issue a warrant to the inspector.

(4) The reference to premises in sub-paragraph (1) includes any ship outside the United Kingdom or its territorial sea.

(5) For the purposes of this paragraph, "domestic premises" means premises used wholly or mainly as a private dwelling.

Power to take persons and equipment etc onto premises

9 In exercising the power of entry mentioned in paragraph 8, an inspector may—

(a) be accompanied—

(i) by any person approved by the ONR for the purpose, and

(ii) if the inspector has reasonable cause to expect any serious obstruction in the exercise of any of the inspector's powers, by a constable, and

(b) take along any equipment and materials required for any purpose for which the inspector is exercising the power of entry.

Power to deal with cause of imminent danger

10 (1) Sub-paragraph (2) applies where an inspector finds any article or substance in relevant premises in circumstances in which the inspector has reasonable cause to believe it is a cause of imminent danger of serious personal injury.

(2) The inspector may, if authorised, do any of the following—

(a) seize the article or substance;

(b) cause it to be made harmless or the risk of harm from it to be reduced (in either case, by destruction or otherwise);

(c) for the purpose mentioned in paragraph (b), seize any other article or substance.

(3) Before any article that forms part of a batch of similar articles, or any substance, is dealt with under sub-paragraph (2)(b), the inspector must, if it is practicable,—

(a) take a sample, and

(b) give a portion of the sample, marked so as to be identifiable, to a responsible person.

(4) As soon as practicable after seizing or dealing with any article or substance under sub-paragraph (2), the inspector must make and sign a written report setting out the circumstances in which the article or substance was seized or so dealt with.

(5) The inspector must give a signed copy of the report to a responsible person.

(6) If that person is not the owner of the article or substance, the inspector must also—

(a) give a signed copy of the report to the owner, or

(b) if that is not possible because—

(i) the inspector cannot find out the owner's name or address after making reasonable enquiries, and

(ii) the owner has not indicated a willingness in accordance with section 88 to receive a signed copy of the report by any means mentioned in subsection (1)(b) of that section,

give a further signed copy of the report to that responsible person.

(7) For the purposes of this paragraph—

(a) "responsible person", in relation to any article or substance, means a responsible person at the premises in which the inspector finds the article or substance;

(b) in the case of a report in electronic form, any signature required on the report or a copy of it may be an electronic signature (within the meaning given in section 7(2) of the Electronic Communications Act 2000).

Powers exercisable in relation to particular articles or substances or in particular circumstances

11 (1) An authorised inspector may cause any article or substance in relevant premises—

(a) to be dismantled;

(b) to be tested;

(c) to have any other process applied to it.

(2) The inspector may exercise any of those powers only if it appears to the inspector—

(a) that the article or substance has caused, or is likely to cause, danger to health or safety, or

(b) that it is desirable to do so for the nuclear security purposes.

(3) Before exercising a power in this paragraph, the inspector must consult anyone whom the inspector considers it appropriate to consult about the dangers (if any) of what is proposed.

(4) Anything done to the article or substance under this paragraph must not damage or destroy it unless in the circumstances that is unavoidable for the relevant purpose.

(5) If requested by a person who has responsibilities in relation to the relevant premises, and is on the premises, the inspector must allow anything done to the article or substance under this paragraph to be done in that person's presence, unless the inspector considers that that would be prejudicial to national security.

12 (1) An authorised inspector may take possession of any article or substance found on relevant premises and retain it for as long as necessary—

(a) for it to be examined;

(b) for anything to be done to it which the inspector may cause to be done under paragraph 11;

(c) to ensure that it is not tampered with before any examination or other procedure mentioned in paragraph (a) or (b) is complete;

(d) to ensure that it is available for use in—

(i) any proceedings for an offence under any of the relevant statutory provisions, or

(ii) any proceedings relating to an improvement notice or a prohibition notice.

(2) The inspector may exercise that power only if it appears to the inspector—

(a) that it is desirable to do so for the nuclear security purposes, or

(b) that the article or substance has caused, or is likely to cause, danger to health or safety.

(3) Before taking possession of any substance under this paragraph, the inspector must, if it is practicable,—

(a) take a sample of it, and

(b) give a portion of the sample, marked so as to be identifiable, to a responsible person at the premises.

(4) An inspector who takes possession of any article or substance under this paragraph must—

(a) if it is practicable to do so, give a notice to that effect to a responsible person at the premises;

(b) otherwise, fix such a notice in a conspicuous position at the premises.

(5) The notice must include sufficient information about the article or substance to identify it.

Powers of inspection and examination and to take samples

13 (1) An authorised inspector may carry out any examination or investigation necessary for the relevant purpose and, in doing so, may—

(a) take measurements and photographs, and

(b) make recordings.

(2) An authorised inspector may take and deal with samples of—

(a) any article or substance found in relevant premises, or

(b) the atmosphere in or in the vicinity of relevant premises.

(3) The Secretary of State may by regulations make provision about—

(a) the procedure to be followed in taking any such samples, and

(b) the way in which any such samples are to be dealt with.

14 (1) An authorised inspector may direct that any relevant premises, or any article or substance in them, must be left undisturbed for as long as reasonably necessary for the purposes of any examination or investigation necessary for the purpose of any of the relevant statutory provisions.

(2) A direction under sub-paragraph (1)—

(a) may relate to part of any relevant premises;

(b) may relate to particular aspects of any premises or article or substance.

Powers to require information and documents

15 (1) An authorised inspector may require any person who the inspector has reasonable cause to believe is able to give any information relevant to any examination or investigation under paragraph 13—

(a) to answer any question the inspector thinks fit, and

(b) to sign a declaration of the truth of the person's answers.

(2) Where a person required to answer questions under this paragraph has nominated another person to be present, the person may not be required to answer questions except in the presence of the nominated person (if any).

(3) When exercising the power in this paragraph, an inspector may allow another person to be present (in addition to the nominated person (if any)).

(4) No answer given by a person by virtue of this paragraph is admissible in evidence against the person, or the person's spouse or civil partner, in any proceedings.

16 (1) An authorised inspector may—
(a) require any relevant documents to be produced, and
(b) inspect and take copies of (or of any information in) any relevant documents.

(2) For this purpose—
(a) "document" includes information recorded in any form;
(b) "relevant document" means a record or other document which—
(i) is required to be kept by virtue of any of the relevant statutory provisions, or
(ii) the inspector needs to see for the purposes of any examination or investigation under paragraph 13.

(3) In the case of a relevant document that consists of information held in electronic form, the inspector may—
(a) require it to be produced—
(i) in a legible form, or
(ii) in a form from which it can readily be produced in a legible form, and
(b) require access to, and inspect and check the operation of, any computer and any associated apparatus or material which is or has been used in connection with the relevant document.

Offences

17 (1) It is an offence for a person to contravene any requirement imposed by an inspector under this Part of this Schedule.

(2) It is an offence for a person to prevent or attempt to prevent any other person from—
(a) appearing before an inspector, or
(b) answering any question to which an inspector may require an answer by virtue of paragraph 15.

(3) A person who commits an offence under this paragraph is liable—
(a) on summary conviction—
(i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),
(ii) to a fine not exceeding £20,000, or
(iii) to both;
(b) on conviction on indictment—
(i) to imprisonment for a term not exceeding 2 years,
(ii) to a fine, or
(iii) to both.

(4) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's powers to imprison), the reference in sub-paragraph (3)(a)(i), as it has effect in England and Wales, to 12 months is to be read as a reference to 6 months.

18 (1) It is an offence for a person intentionally to obstruct an inspector in the exercise or performance of the inspector's functions.

(2) A person who commits an offence under this paragraph is liable on summary conviction—

(a) to imprisonment for a term not exceeding 51 weeks (in England and Wales), 12 months (in Scotland) or 6 months (in Northern Ireland),

(b) to a fine not exceeding level 5 on the standard scale, or

(c) to both.

(3) In relation to an offence committed before the commencement of section 281(5) of the Criminal Justice Act 2003 (alteration of penalties for summary offences), the reference in sub-paragraph (2)(a), as it has effect in England and Wales, to 51 weeks is to be read as a reference to 6 months.

19 (1) It is an offence for a person falsely to pretend to be an inspector.

(2) A person who commits an offence under this paragraph is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Supplementary powers

20 A power conferred by this Schedule includes power to require any person to provide any facilities or assistance relating to matters or things—

(a) within the person's control, or

(b) in relation to which the person has responsibilities,

which are needed in order to enable an authorised inspector to exercise the power.

21 A power conferred by this Schedule includes power to do anything incidental that is necessary for the relevant purpose.

Protection for documents subject to legal professional privilege etc

22 Nothing in this Part of this Schedule is to be taken to confer power to compel the production by any person of a document or information in respect of which—

(a) in England and Wales or Northern Ireland, a claim to legal professional privilege, or

(b) in Scotland, a claim to confidentiality of communications,

could be maintained in legal proceedings.

PART 4

SUPPLEMENTARY

Duty to provide information to employees or their representatives

23 (1) An inspector must provide to people employed at any premises (or their representatives) any relevant information that needs to be provided in order for them (or their representatives) to be kept adequately informed about matters affecting their health, safety or welfare.

(2) Where information is provided to employees (or their representatives) under sub-paragraph (1), the inspector must provide the same information to their employer.

(3) For this purpose—

(a) "relevant information", in relation to any premises, means—

(i) factual information which is protected information within the meaning of Schedule 9 and is relevant to the premises, and

(ii) information about action which the inspector has taken or proposes to take in relation to the premises, and

(b) "employee", "employer" and "employed" have the same meanings as in Part 1 of the 1974 Act.

Interpretation

24 (1) In this Schedule—

"authorised" is to be read in accordance with paragraph 2(4);

"offshore installation" means any installation which is intended for underwater exploitation of mineral resources or exploration with a view to such exploitation;

"premises" includes any place and, in particular, includes—

(a) any vehicle, ship or aircraft,

(b) any installation on land (including the foreshore and other land intermittently covered by water), any offshore installation, and any other installation (whether floating, or resting on the seabed or its subsoil, or resting on other land covered with water or its subsoil), and

(c) any tent or movable structure;

"relevant premises", in relation to an inspector, means premises which the inspector has entered—

(a) with the consent of a person who reasonably appeared to the inspector to be an appropriate person to give consent, or

(b) in exercise of the power in paragraph 8;

"the relevant purpose", in relation to a power, means—

(a) if an instrument of appointment authorises the inspector to exercise the power only for limited purposes, that purpose;

(b) in any other case, the purpose of carrying into effect the relevant statutory provisions;

"ship" includes every description of vessel used in navigation;

"substance" means any natural or artificial substance, whether solid or liquid or in the form of a gas or vapour.

(2) In this Schedule, references to an inspector, in relation to any power, are to the inspector exercising or proposing to exercise the power.

SCHEDULE 9

Section 79

DISCLOSURE OF INFORMATION

PART 1

PROHIBITION ON DISCLOSURE OF PROTECTED INFORMATION

Meaning of "protected information" and related terms

1 (1) In this Schedule "protected information" means information which has been—

(a) obtained by the ONR under section 76,

(b) provided to the ONR or an inspector under section 77,

(c) obtained by an inspector as a result of the exercise of any relevant power,

(d) obtained by a health and safety inspector in the exercise of any power under section 20 of the 1974 Act (powers of persons appointed under section 19 of that Act),

(e) obtained by an ONR inquiry official as a result of the exercise of an ONR inquiry power,

(f) provided to a person pursuant to a requirement imposed by any of the relevant statutory provisions, or

(g) provided to the ONR or a health and safety inspector pursuant to a requirement imposed by any provision which is one of the relevant statutory provisions for the purposes of Part 1 of the 1974 Act.

(2) Information is not protected information for the purposes of this Schedule if it has been—

(a) disclosed as mentioned in paragraph 16, or

(b) otherwise made available to the public—

(i) by virtue of a disclosure in accordance with Part 3 of this Schedule, or

(ii) lawfully from other sources.

(3) Information received by virtue of a disclosure under paragraph 20 (anonymised information) is not protected information.

(4) Protected information includes, in particular, information with respect to a trade secret which an inspector, a health and safety inspector or an ONR inquiry official has obtained as a result of entering premises in exercise of a relevant power, a power conferred under section 20 of the 1974 Act or an ONR inquiry power.

(5) In this Schedule—

"ONR inquiry official" means a person on whom functions are conferred under section 64(5)(a);

"ONR inquiry power" means a power conferred by regulations under under section 64(5)(a);

"the original holder" of protected information means the person who obtained the information, or to whom it was provided, as mentioned in sub-paragraph (1).

PART 2

OFFENCES RELATING TO DISCLOSURE AND USE OF PROTECTED INFORMATION

Prohibition on disclosing protected information

2 Protected information must not be disclosed—

(a) by the original holder of the information, or

(b) by any other person holding it who has received it directly or indirectly from the original holder by virtue of a disclosure, or disclosures, in accordance with this Schedule,

except in accordance with Part 3 of this Schedule.

Offence of disclosing protected information in contravention of paragraph 2

3 It is an offence for a person to disclose information in contravention of paragraph 2.

Offence of using protected information in contravention of a restriction in Part 3

4 It is an offence for a person to use protected information in contravention of a restriction under paragraph 10(3), 11(2), 12(2), 13(2), 14(2) or 15(2).

Defence to offences under paragraph 3 and 4

5 It is a defence for a person charged with an offence under paragraph 3 or 4 to prove—

(a) that the person did not know and had no reason to suspect that the information was protected information, or

(b) that the person took all reasonable precautions and exercised all due diligence to avoid committing the offence.

Penalty for offences under paragraph 3 and 4

6 (1) A person who commits an offence under paragraph 3 or 4 is liable—

(a) on summary conviction—

(i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),

(ii) to a fine not exceeding the statutory maximum, or

(iii) to both;

(b) on conviction on indictment—

(i) to imprisonment for a term not exceeding 2 years,

(ii) to a fine, or

(iii) to both.

(2) In the application of sub-paragraph (1) to England and Wales in relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference in sub-paragraph (1)(a)(i) to 12 months is to be read as a reference to 6 months.

PART 3

PROTECTED INFORMATION: PERMITTED DISCLOSURES AND RESTRICTIONS ON USE

Disclosure with appropriate consent

7 (1) Paragraph 2 does not prohibit a disclosure of protected information if it is made with the appropriate consent.

(2) For this purpose "the appropriate consent" means—

(a) if the information was obtained as mentioned in paragraph 1(1) as a result of any premises being entered—

(i) by an inspector in exercise of a relevant power,

(ii) by a health and safety inspector in exercise of a power under section 20 of the 1974 Act, or

(iii) by an ONR inquiry official in exercise of an ONR inquiry power,

the consent of a person having responsibilities in relation to the premises;

(b) in any other case, the consent of the person from whom the information was obtained, or who provided it, as mentioned in paragraph 1(1).

Disclosure by ONR, inspectors etc

8 Paragraph 2 does not prohibit a disclosure of protected information by—

(a) the ONR,

(b) an inspector,

(c) a health and safety inspector, or

(d) an ONR inquiry official,

for the purposes of any of that person's functions.

Disclosure to the ONR, inspectors etc.

9 Paragraph 2 does not prohibit a disclosure of protected information to—

(a) the ONR,

(b) an officer of the ONR,

(c) a person or body performing any functions of the ONR on its behalf by virtue of section 74,

(d) an officer of such a body,

(e) a person providing advice to the ONR,

(f) an inspector, or

(g) a health and safety inspector.

Ministers, government departments and certain authorities

10 (1) Paragraph 2 does not prohibit the following disclosures of protected information—

(a) a disclosure to—

(i) a relevant authority, or

(ii) an officer of a relevant authority, or

(b) a disclosure by a person within paragraph (a) which is necessary for any of the purposes of the relevant authority in question.

(2) For this purpose, "relevant authority" means—
(a) a Minister of the Crown,
(b) the Scottish Ministers,
(c) the Welsh Ministers,
(d) a Northern Ireland Department,
(e) the Environment Agency,
(f) the Scottish Environment Protection Agency,
(g) the Office of Rail Regulation,
(h) the Civil Aviation Authority, or
(i) any other government department.

(3) A person within sub-paragraph (1)(a) to whom protected information is disclosed by virtue of any provision of this Schedule may not use the information for a purpose other than any of the purposes of the relevant authority in question.

Health and safety etc

11 (1) Paragraph 2 does not prohibit the following disclosures of protected information—
(a) a disclosure to a health and safety authority, or
(b) a disclosure by a health and safety authority which is—
(i) made by or with the consent of the Health and Safety Executive, and
(ii) necessary for any of the purposes of the Health and Safety Executive.

(2) A health and safety authority to whom protected information is disclosed by virtue of any provision of this Schedule may not use the information for any purpose other than any of the purposes of the Health and Safety Executive.

(3) For this purpose, "health and safety authority" means—
(a) the Health and Safety Executive,
(b) an officer of the Health and Safety Executive,
(c) a person or body performing any functions of the Health and Safety Executive on its behalf by virtue of section 13(3) of the 1974 Act,
(d) an officer of such a body,
(e) an adviser appointed by that Executive under section 13(7) of that Act, and
(f) a person appointed by that Executive under section 19 of that Act as an inspector within the meaning given in that section.

12 (1) Paragraph 2 does not prohibit the following disclosures of protected information—
(a) a disclosure to a person with enforcement responsibilities;
(b) a disclosure by such a person which is—
(i) made by or with the consent of the enforcing authority in question, and

(ii) is necessary for the purposes of any function which the enforcing authority in question has in its capacity as an enforcing authority.

(2) A person with enforcement responsibilities to whom protected information is disclosed by virtue of any provision of this Schedule may not use the information otherwise than for the purposes of any function which the enforcing authority in question has in its capacity as such.

(3) For this purpose, "person with enforcement responsibilities" means—

(a) an enforcing authority within the meaning of the 1974 Act, other than the ONR or the Health and Safety Executive;

(b) an officer of an authority within paragraph (a);

(c) a person appointed by such an authority under section 19 of that Act as an inspector within the meaning given in that section.

13 (1) Paragraph 2 does not prohibit the following disclosures of protected information—

(a) a disclosure to a Northern Ireland health and safety authority;

(b) a disclosure by a Northern Ireland health and safety authority which is—

(i) made by or with the consent of the Health and Safety Executive for Northern Ireland, and

(ii) necessary for any of the purposes of the Health and Safety Executive for Northern Ireland.

(2) A Northern Ireland health and safety authority to whom protected information is disclosed by virtue of any provision of this Schedule may not use the information for any purpose other than any of the purposes of the Health and Safety Executive for Northern Ireland.

(3) For this purpose, Northern Ireland health and safety authority means—

(a) the Health and Safety Executive for Northern Ireland,

(b) an officer of the Health and Safety Executive for Northern Ireland,

(c) a person or body performing any functions of the Health and Safety Executive for Northern Ireland on its behalf by virtue of Article 15(1)(a) of the Health and Safety at Work (Northern Ireland) Order 1978 (S.I. 1978/1039 (N.I. 9)),

(d) an officer of such a body,

(e) an adviser appointed by that Executive under Article 15(1)(c) of that Order, and

(f) a person appointed by that Executive under Article 21 of that Order as an inspector within the meaning of that Article.

Local authorities and water authorities etc

14 (1) Paragraph 2 does not prohibit the following disclosures of protected information—

(a) a disclosure by the original holder to an officer of a local authority or relevant water authority who is authorised by the authority to receive the information;

(b) a disclosure by an officer of a local authority or relevant water authority to whom the information is disclosed by virtue of paragraph (a) which is necessary for a relevant purpose.

(2) A person to whom information is disclosed by virtue of sub-paragraph (1)(a) must not use the information for a purpose other than a relevant purpose.

(3) For the purposes of this paragraph—

"local authority" includes the following—

(a) a joint authority established by Part 4 of the Local Government Act 1985;

(b) an authority established for an area in England by an order under section 207 of the Local Government and Public Involvement in Health Act 2007 (joint waste authorities);

(c) an economic prosperity board established under section 88 of the Local Democracy, Economic Development and Construction Act 2009,

(d) a combined authority established under section 103 of that Act,

(e) the London Fire and Emergency Planning Authority;

(f) the Broads Authority;

(g) a National Park authority;

"relevant water authority" means—

(a) a water undertaker,

(b) a sewerage undertaker,

(c) a water authority,

(d) a water development board, or

(e) Scottish Water;

"relevant purpose" in relation to an officer of a local authority or relevant water authority, means any purpose of the authority in connection with—

(a) any of the relevant statutory provisions or any of the provisions which are relevant statutory provisions for the purposes of Part 1 of the 1974 Act, or

(b) any provision of, or made under, primary legislation which relates to public health, public safety or the protection of the environment.

Police

15 (1) Paragraph 2 does not prohibit the following disclosures of protected information—

(a) a disclosure by the original holder to a constable authorised by a chief officer of police to receive it;

(b) a disclosure by a constable to whom it is disclosed by virtue of paragraph (a) which is necessary for any of the purposes of the police in connection with—

(i) the relevant statutory provisions, or

(ii) any provision of, or made under, primary legislation which relates to public health, public safety or national security.

(2) A constable to whom information is disclosed by virtue of sub-paragraph (1) must not use the information for a purpose other than a purpose of the police in connection with—

(a) any of the relevant statutory provisions or any of the provisions which are relevant statutory provisions for the purposes of Part 1 of the 1974 Act, or

(b) any provision of, or made under, primary legislation which relates to public health, public safety or national security.

Disclosure required under legislation

16 Paragraph 2 does not prohibit a disclosure of protected information which is made in accordance with an obligation under—

(a) the Freedom of Information Act 2000,

(b) the Freedom of Information (Scotland) Act 2002, or

(c) environmental information regulations within the meaning given in section 39(1A) of the Freedom of Information Act 2000.

Legal proceedings, inquiries and investigations

17 Paragraph 2 does not prohibit a disclosure of protected information for the purposes of—

(a) any legal proceedings,

(b) an ONR inquiry,

(c) an inquiry under section 14(2A) of the 1974 Act which is relevant to the ONR's purposes,

(d) an investigation held by virtue of section 63,

(e) any report of such proceedings, ONR inquiry or inquiry under section 14(2A) of the 1974 Act or any special report under section 63.

18 Paragraph 2 does not prohibit a disclosure of protected information which is made—

(a) by an inspector, a health and safety inspector or an ONR inquiry official,

(b) to a person who appears to the person making the disclosure to be likely to be a party to any civil proceedings arising out of any accident, occurrence, situation or other matter, and

(c) in the form of a written statement of relevant facts observed by the person making the disclosure in the course of exercising a relevant power, a power under section 20 of the 1974 Act or an ONR inquiry power.

Disclosure for safeguards purposes

19 Paragraph 2 does not prohibit a disclosure of protected information which is made for the purposes of any of the safeguards obligations.

Anonymised information

20 Paragraph 2 does not prohibit a disclosure of protected information which is made in a form calculated to prevent the information from being identified as relating to a particular person or case.

PART 4

GENERAL

Interaction with other legislation

21 The prohibition in paragraph 2 is to be disregarded for the purposes of—

(a) section 44 of the Freedom of Information Act 2000, and

(b) section 26 of the Freedom of Information (Scotland) Act 2002,

(which provide for exemptions from disclosure requirements under those Acts for information subject to statutory prohibitions on disclosure).

22 Nothing in this Part of this Act is to be taken to permit or require a disclosure of information which is prohibited by or under any provision of primary legislation (including, in particular, section 79 or 80 of the Anti-terrorism, Crime and Security Act 2001 (prohibition on disclosure of information relating to nuclear security)).

SCHEDULE 10

Section 85

PROVISIONS RELATING TO OFFENCES

Interpretation

1 In this Schedule—

"offence" means an offence created by or under a relevant provision;

"relevant provision" means any of the relevant statutory provisions other than any provision made by or under the Nuclear Safeguards Act 2000.

Venue

2 (1) If an offence is committed in connection with any plant or substance, the offence may be treated as having been committed at the place where the plant or substance is for the time being.

(2) Sub-paragraph (1) applies only if it is necessary to treat the offence as having been committed there for the purpose of conferring jurisdiction on any court to entertain proceedings for the offence.

(3) In this paragraph—

"plant" includes any machinery, equipment or appliance;

"substance" means any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.

(4) This paragraph is subject to any provision made in nuclear regulations by virtue of section 54(5)(b) (treatment of offences as having been committed at a specified place).

Extension of time for bringing summary proceedings

3 (1) This paragraph applies where—

(a) a special report on a matter is made under section 63(1);

(b) a report is made by a person holding an ONR inquiry;
(c) a coroner's inquest is held into a relevant death; or
(d) a public inquiry under the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 is held into a relevant death.

(2) A "relevant death" is the death of any person which may have been caused—
(a) by an accident which happened while at work,
(b) by a disease which the person contracted (or probably contracted) while at work, or
(c) by an accident, act or omission which occurred in connection with the work of any person.

(3) Sub-paragraph (4) applies if it appears from—
(a) the report mentioned in sub-paragraph (1)(a) or (b),
(b) the inquest mentioned in sub-paragraph (1)(c), or
(c) the proceedings at the inquiry mentioned in sub-paragraph (1)(d),
that a relevant provision was contravened at a time which is material in relation to the subject-matter of the report, inquest or inquiry.

(4) Summary proceedings against any person liable to be proceeded against in respect of the contravention may be commenced at any time within 3 months of—
(a) the making of the report in question, or
(b) (as the case may be) the conclusion of the inquest or inquiry.

4 (1) This paragraph applies to any offence that a person commits as a result of a provision or requirement that the person is subject to as the designer, manufacturer, importer or supplier of any thing.

(2) Summary proceedings for the offence may be commenced at any time within 6 months from the date on which there comes to the knowledge of the ONR evidence that appears sufficient to the ONR—
(a) to justify a prosecution for the offence, or
(b) in relation to an offence in Scotland, to justify a report to the Lord Advocate with a view to consideration of the question for prosecution.

(3) For this purpose—
(a) a certificate of the ONR stating that such evidence came to its knowledge on a specified date is to be taken as conclusive evidence of that fact,
(b) a document purporting to be such a certificate, and to be signed on behalf of the ONR, is to be presumed to be such a certificate unless the contrary is proved, and
(c) in relation to an offence in Scotland, section 136(3) of the Criminal Procedure (Scotland) Act 1995 (date of commencement of proceedings) has effect as it has effect for the purposes of that section.

Continuation of offences

5 (1) This paragraph applies where an offence is committed as a result of a failure to do something at or within a time fixed by or under a relevant provision.

(2) The offence is to be deemed to continue until the thing is done.

Offences due to fault of other person

6 (1) A person ("A") is guilty of an offence if—
(a) another person ("B") commits the offence, and
(b) B's commission of the offence is due to the act or default of A,
and A is liable to be proceeded against and dealt with accordingly.

(2) For this purpose it does not matter whether or not proceedings are taken against B.

(3) A person ("A") is guilty of an offence if—
(a) A is a person other than the Crown,
(b) the offence would have been committed by the Crown but for the fact that the provision under which the offence is committed does not bind the Crown, and
(c) the Crown's commission of the offence would have been due to the act or default of A,
and A is liable to be proceeded against and dealt with accordingly.

(4) This paragraph is subject to any provision made in nuclear regulations.

Offences by bodies corporate

7 (1) Where an offence committed by a body corporate is proved—
(a) to have been committed with the consent or connivance of an officer of the body corporate, or
(b) to be attributable to neglect on the part of an officer of the body corporate,
that officer (as well as the body corporate) is guilty of the offence and is liable to be proceeded against and dealt with accordingly.

(2) In sub-paragraph (1) "officer", in relation to a body corporate, means—
(a) any director, manager, secretary or other similar officer of the body corporate, or
(b) any person purporting to act in any such capacity.

(3) In sub-paragraph (2) "director", in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate.

Offences by partnerships

8 (1) Proceedings for an offence alleged to have been committed by a partnership may be brought in the name of the partnership.

(2) Rules of court relating to the service of documents have effect in relation to proceedings for an offence as if the partnership were a body corporate.

(3) For the purposes of such proceedings the following provisions apply as they apply in relation to a body corporate—
(a) section 33 of the Criminal Justice Act 1925 and Schedule 3 to the Magistrates' Courts Act 1980, and
(b) section 18 of the Criminal Justice Act (Northern Ireland) 1945 and Schedule 4 to the Magistrates' Courts (Northern Ireland) Order 1981.

(4) A fine imposed on a partnership on its conviction for an offence is to be paid out of the partnership assets.

(5) Where an offence committed by a partnership is proved—

(a) to have been committed with the consent or connivance of a partner, or

(b) to be attributable to neglect on the part of a partner,

the partner (as well as the partnership) is guilty of the offence and is liable to be proceeded against and dealt with accordingly.

(6) In this paragraph "partner" includes a person purporting to act as a partner.

Restriction on institution of proceedings in England and Wales

9 Proceedings for an offence in England and Wales may only be instituted—

(a) by the ONR or an inspector, or

(b) by, or with the consent of, the Director of Public Prosecutions.

Prosecutions by inspectors in England and Wales

10 An inspector may prosecute proceedings for an offence before a magistrates' court in England and Wales if authorised to do so by the inspector's instrument of appointment (see paragraph 2 of Schedule 8).

Onus of proving limits of what is practicable etc

11 (1) This paragraph applies if regulations under this Part create an offence consisting of—

(a) a failure to comply with a duty or requirement to do something so far as practicable (or reasonably practicable), or

(b) a failure to use the best means do something.

(2) The regulations may provide that it is for the defendant to prove that—

(a) it was not practicable (or reasonably practicable) to do more than was in fact done to satisfy the duty or requirement, or

(b) there was no better practicable means than was in fact used to satisfy the duty or requirement.

Evidence

12 (1) This paragraph applies where a requirement is imposed by a relevant provision for an entry to be made in any register or other record.

(2) If the entry is made, it is—

(a) admissible in evidence, or

(b) in Scotland, sufficient evidence of the facts stated in the entry,

against the person by or on whose behalf the entry is made.

(3) If the entry is not made, and the requirement relates to making the entry in respect of observance with a relevant provision, the fact that the entry is not made—

(a) is admissible in evidence, or

(b) in Scotland, sufficient evidence that the provision has not been observed.

Power of court to order cause of offence to be remedied

13 (1) This paragraph applies where—
(a) a person ("P") is convicted of an offence, and
(b) it appears to the court that the matters in respect of which P is convicted are matters that are within P's power to remedy.

(2) The court may (in addition to, or instead of, imposing any punishment) order P to take such steps as the order may specify for the purpose of remedying those matters.

(3) The steps are to be taken within such time as may be fixed by the order ("the remedial period").

(4) The court may extend or further extend the remedial period on an application.

(5) An application under sub-paragraph (4) must be made—
(a) before the end of the remedial period, or
(b) before the end of that period as extended on a previous application.

(6) Where P is ordered to remedy any matters by an order under this paragraph—
(a) it is an offence for P to fail to comply with the order, but
(b) P is not liable under any relevant provision in respect of those matters to the extent that they continue during—
(i) the remedial period, or
(ii) any extension of that period granted under sub-paragraph (4).

(7) A person who commits an offence under this paragraph is liable—
(a) on summary conviction—
(i) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland),
(ii) to a fine not exceeding £20,000, or
(iii) to both;
(b) on conviction on indictment—
(i) to imprisonment for a term not exceeding 2 years,
(ii) to a fine, or
(iii) to both.

(8) In the application of sub-paragraph (7) to England and Wales in relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's powers to imprison), the reference in sub-paragraph (7)(a)(i) to 12 months is to be read as a reference to 6 months.

SCHEDULE 11

Section 93

TRANSFERS TO THE OFFICE FOR NUCLEAR REGULATION

PART 1

INTRODUCTORY

1 In this Schedule—

"the HSE" means the Health and Safety Executive;

"the interim ONR" means the agency of the HSE currently known as the Office for Nuclear Regulation;

"TUPE regulations" means the Transfer of Undertakings (Protection of Employment) Regulations 2006 (S.I. 2006/246).

PART 2

STAFF TRANSFER SCHEMES

Power to make staff transfer schemes

2 (1) The Secretary of State may make one or more schemes under which an employee to whom the scheme applies becomes an employee of the ONR (but this is subject to provision contained in the scheme by virtue of paragraph 6).

(2) A scheme under sub-paragraph (1) is referred to in this Schedule as a "staff transfer scheme".

Staff to whom a transfer may apply

3 (1) The employees to whom a transfer scheme may apply are those employees who fall within sub-paragraph (2).

(2) An employee falls within this sub-paragraph if, immediately before the staff transfer scheme takes effect, the employee—

(a) was employed by the HSE under a contract of employment, and

(b) was assigned to work in the interim ONR.

(3) Sub-paragraph (4) applies for the purposes of determining whether an employee was assigned as mentioned in sub-paragraph (2) where, immediately before the transfer scheme takes effect, the employee—

(a) is on secondment,

(b) is temporarily assigned to work in another part of the HSE, or

(c) is otherwise temporarily absent.

(4) That sub-paragraph is to be read as if it operated immediately before the date of the secondment or temporary assignment, or the date when the absence began, instead of immediately before the date on which the scheme takes effect.

Content of a staff transfer scheme

4 (1) A staff transfer scheme may make provision for giving full effect to an employee's transfer into the employment of the ONR as a result of the scheme.

(2) Provision made by virtue of sub-paragraph (1) may include provision—

(a) that has the same or similar effect as the TUPE regulations (so far as those regulations do not apply in relation to the transfer);

(b) modifying the law (including provision made by an Act or subordinate legislation) applicable to the employee's employment;

(c) about the pension entitlements of the employee enjoyed immediately before the transfer.

5 (1) A staff transfer scheme may apply to all, or to any specified class or description of, the employees falling within paragraph 4(2) or to specified employees so falling.

(2) "Specified" means specified in the scheme.

6 (1) A staff transfer scheme may make provision enabling an employee to object to the transfer which would otherwise be effected by the scheme including provision as to how such an objection is to be made and as to the consequences of it.

(2) A staff transfer scheme may make provision allowing an employee to be treated as being temporarily assigned to the ONR for a period limited by the scheme, whether at the employee's election or in the exercise of a discretion conferred on the Secretary of State by the scheme.

(3) Provision made by virtue of sub-paragraph (2) may include provision—

(a) allowing the employee to elect to end the period of temporary assignment by agreeing to become an employee of the ONR or by objecting to the transfer under sub-paragraph (1);

(b) as to the consequences of the expiry of the period of temporary assignment without such an election having been made;

(c) as to the employee's pay (and the liability to pay it) and the terms and conditions on which the employee is engaged.

PART 3

PROPERTY TRANSFER SCHEMES

Power to make property transfer schemes

7 (1) The Secretary of State may make one or more schemes transferring qualifying property, rights and liabilities of the HSE to the ONR.

(2) The Secretary of State may make one or more schemes transferring qualifying property, rights and liabilities of the Secretary of State to the ONR.

(3) A scheme under sub-paragraph (1) or (2) is referred to in this Schedule as a "property transfer scheme".

8 The HSE may submit to the Secretary of State proposals about the exercise of the power to make property transfer schemes.

Qualifying property

9 (1) References in this Part to "qualifying property, rights and liabilities" are to property held, and rights and liabilities arising, in connection with—

(a) functions under any enactment which were functions of the Secretary of State or the HSE and as a result of this Act have or are to become functions of the ONR;

(b) functions which were functions of the Secretary of State or the HSE which have been or are to be replaced by a function of the ONR under this Act;

(c) functions which were carried out by the HSE under an agreement under section 13 of the 1974 Act and which are to be carried out by ONR under an agreement under section 69.

(2) Rights and liabilities arising under or in connection with a contract of employment in effect when the scheme comes into force are excluded from the rights and liabilities which may be transferred under a property transfer scheme.

Content of a property transfer scheme

10 (1) A property transfer scheme may, in particular, make provision—

(a) for anything done by or in relation to the HSE or the Secretary of State in connection with any property, rights or liabilities transferred by the scheme to be treated as done, or to be continued, by or in relation to the ONR;

(b) for references to the HSE or the Secretary of State in any agreement (whether written or not), instrument or other document relating to any property, rights or liabilities transferred by the scheme to be treated as references to the ONR;

(c) about the continuation of legal proceedings;

(d) for transferring property, rights or liabilities which could not otherwise be transferred or assigned;

(e) for transferring property, rights and liabilities irrespective of any requirement for consent which would otherwise apply;

(f) for preventing a right of pre-emption, right of reverter, right of forfeiture, right to compensation or other similar right from arising or becoming exercisable as a result of the transfer of property, rights or liabilities;

(g) for dispensing with any formality in relation to the transfer of property, rights or liabilities by the scheme

(h) for transferring property acquired, or rights or liabilities arising, after the scheme is made but before it takes effect;

(i) for apportioning property, rights or liabilities;

(j) for creating rights, or imposing liabilities, in connection with property, rights or liabilities transferred by the scheme;

(k) for requiring the ONR to enter into any agreement of any kind, or for a purpose, specified in or determined in accordance with the scheme.

(2) Sub-paragraph (1)(b) does not apply to references in primary legislation or in subordinate legislation.

(3) In this Part "property" includes interests of any description.

Compensation

11 A scheme may contain provision for the payment of compensation by the Secretary of State to any person whose interests are adversely affected by it.

PART 4

PROCEDURE FOR MAKING OR MODIFYING SCHEMES UNDER THIS SCHEDULE

12 (1) Before making a staff transfer scheme or a property transfer scheme, the Secretary of State must be satisfied that—

(a) those persons that the Secretary of State considers likely to be affected by the making of the scheme, and

(b) such other persons as appear to the Secretary of State to represent the interests of such persons,

have been consulted (whether by the Secretary of State or another person) and must have regard to the results of the consultation in determining whether to make the scheme.

(2) Sub-paragraph (3) applies where—

(a) the Secretary of State is proposing to make a modification to a staff transfer scheme or a property transfer scheme under section 122,

(b) it appears to the Secretary of State that the modification is likely to have a material effect on any person, and

(c) the Secretary of State is not required under subsection (3) of that section to obtain the agreement of those persons before making the modification.

(3) Before making the modification, the Secretary of State must be satisfied that—

(a) any person or persons falling within sub-paragraph (2)(b), and

(b) such other persons as appear to the Secretary of State to represent the interests of such persons,

have been consulted (whether by the Secretary of State or another person) and must have regard to the results of the consultation in determining whether to make the modification.

(4) For the purposes of this paragraph it does not matter whether consultation takes place before or after the passing of this Act.

SCHEDULE 12

Section 12

MINOR AND CONSEQUENTIAL AMENDMENTS RELATING TO PART 2

PART 1

AMENDMENTS OF THE HEALTH AND SAFETY AT WORK ETC. ACT 1974

Health and Safety at Work etc. Act 1974 (c.37)

1 The Health and Safety at Work etc. Act 1974 is amended as follows.

2 (1) Section 11 (functions of the Health and Safety Executive) is amended as follows.

(2) In subsection (4)—

(a) in paragraph (a), for "the railway safety purposes" substitute "any of the transferred purposes", and

(b) in paragraph (b), for the words following "made" substitute "—

(i) for any of the transferred purposes, or

(ii) under section 43 and concern fees relating to nuclear site regulation."

(3) After that subsection insert—

"(4A) In subsection (4)—

(a) "the transferred purposes" means—

(i) the railway safety purposes;

(ii) the nuclear safety purposes;

(iii) the nuclear security purposes;

(iv) the nuclear safeguards purposes;

(v) the radioactive material transport purposes;

(b) "fees relating to nuclear site regulation" means fees payable for or in connection with the performance of a function by or on behalf of—

(i) the Office for Nuclear Regulation, or

(ii) any inspector appointed by the Office for Nuclear Regulation.

(4B) The Executive may submit to the Secretary of State any proposal submitted to it by the Office for Nuclear Regulation under section 60 of the Energy Act 2013 (proposals about orders and regulations)."

3 In section 13 (powers of the Executive), after subsection (6) insert—

"(6A) The reference in subsection (6) to the general purposes of this Part does not include a reference to any of the following—

(a) the nuclear safety purposes;

(b) the nuclear security purposes;

(c) the nuclear safeguards purposes;

(d) the radioactive material transport purposes."

4 (1) Section 14 (power of the Executive to direct investigations and inquiries) is amended as follows.

(2) In subsection (1)(a), after "railway safety purposes" insert "or the ONR's purposes".

(3) After subsection (4) insert—

"(4A) Provision that may be made by virtue of subsection (4)(a) includes in particular, provision conferring functions on the Office for Nuclear Regulation in relation to powers of entry and inspection in relation to any premises for which it is an enforcing authority."

5 (1) Section 15 (health and safety regulations) is amended as follows.

(2) After subsection (1) insert—

"(1A) In subsection (1), the reference to the general purposes of this Part does not include a reference to any of the following—

(a) the nuclear safety purposes;

(b) the nuclear security purposes;

(c) the nuclear safeguards purposes;

(d) the radioactive material transport purposes.

(1B) Subsection (1A) does not preclude health and safety regulations from including provision merely because the provision could be made for any of the purposes mentioned in paragraphs (a) to (d) of that subsection."

(3) In subsection (2), for "the preceding subsection" substitute "subsection (1)".

(4) In subsection (3)(c), after "may" insert ", subject to subsection (3A),".

(5) After subsection (3) insert—

"(3A) Nothing in this section is to be taken to permit health and safety regulations to make provision about responsibility for the enforcement of any of the relevant statutory provisions as they apply in relation to any GB nuclear site.

(3B) Subsection (3A) does not prevent health and safety regulations providing for the Office of Rail Regulation to be responsible for the enforcement, in relation to GB nuclear sites, of any of the relevant statutory provisions that are made for the railway safety purposes.

(3C) In subsections (3A) and (3B), "GB nuclear site" has the same meaning as in section 48 of the Energy Act 2013 (nuclear safety purposes)."

6 (1) Section 18 (authorities responsible for enforcement of the relevant statutory provisions) is amended as follows.

(2) After subsection (1) insert—

"(1A) The Office for Nuclear Regulation is responsible for the enforcement of the relevant statutory provisions as they apply in relation to GB nuclear sites (within the meaning given in section 48 of the Energy Act 2013 (nuclear safety purposes)).

(1B) Subsection (1A) is subject to any provision of health and safety regulations making the Office of Rail Regulation responsible for the enforcement of any of the relevant statutory provisions to any extent in relation to such sites."

(3) In subsection (2)—

(a) before paragraph (a) insert—

"(za) make the Office for Nuclear Regulation responsible for the enforcement of the relevant statutory provisions to such extent as may be prescribed (and may in particular provide for any site or matter in relation to which the Office for Nuclear Regulation is made so responsible to be determined by the Secretary of State or the Office for Nuclear Regulation under the regulations);";

(b) in paragraph (b), before sub-paragraph (i) insert—

"(zi) transferred from the Executive or local authorities to the Office for Nuclear Regulation, or from the Office for Nuclear Regulation to the Executive or local authorities;";

(c) in paragraph (b)(ii)—

(i) after "Executive" insert ", to the Office for Nuclear Regulation";

(ii) after "by virtue of" insert "subsection (1A) or".

(4) After subsection (3) insert—

"(3A) Regulations under subsection (2)(a) may not make local authorities enforcing authorities in relation to any site in relation to which the Office for Nuclear Regulation is an enforcing authority.

(3B) Where the Office for Nuclear Regulation is, by or under subsection (1A) or (2), made responsible for the enforcement of any of the relevant statutory provisions to any extent, it must make adequate arrangements for the enforcement of those provisions to that extent."

(5) In subsection (5) in the opening words, after "the Executive" insert ", the Office for Nuclear Regulation".

(6) In subsection (7), in the words following paragraph (b)—

(a) after "section 13" insert "of this Act or section 74 of the Energy Act 2013 (power for Office for Nuclear Regulation to arrange for exercise of functions by others)";

(b) after "the Executive" (in the first and third places) insert "or the Office for Nuclear Regulation";

(c) after "the Executive" (in the second place) insert "or the Office for Nuclear Regulation (as the case may be)";

(d) for "under that subsection" substitute "or arrangements under the provision in question".

7 In section 27 (obtaining of information by the Executive, enforcing authorities etc), in subsection (1)(b), after "an enforcing authority" insert "other than the Office for Nuclear Regulation".

8 In section 27A (information communicated by Commissioners for Revenue and Customs), in subsection (2), at the end insert ", other than the Office for Nuclear Regulation or an inspector appointed by the Office for Nuclear Regulation".

9 (1) Section 28 (restrictions on disclosure of information) is amended as follows.

(2) In subsection (1)(a), after "to any person" insert ", other than the Office for Nuclear Regulation (or an inspector appointed by it),".

(3) In subsection (3)(a), after "Executive" insert ", the Office for Nuclear Regulation,".

(4) In subsection (4)—

(a) in the opening words—

(i) after "Executive" (in the first place), insert ", the Office for Nuclear Regulation,";

(ii) after "Executive" (in the second place), insert "or the Office for Nuclear Regulation";

(b) in paragraph (a), after "Executive" insert "or Office for Nuclear Regulation" and after "section 13(3)" insert "of this Act or, as the case may be, section 74 of the Energy Act 2013";

(c) in paragraph (c), at the end insert "or, in the case of the Office for Nuclear Regulation, a person providing advice to that body.".

(5) In subsection (5)(a), after "Executive" insert ", of the Office for Nuclear Regulation".

(6) After subsection (9A) insert—

"(9B) Nothing in subsection (7) or (9) applies to a person appointed as an inspector by the Office for Nuclear Regulation in relation to functions which the person has by virtue of that appointment."

10 (1) Section 44 (appeals in connection with licensing provisions in the relevant statutory provisions) is amended as follows.

(2) In subsection (1), omit "(other than nuclear site licences").

(3) In subsection (7)—

(a) in paragraph (a) omit "other than a nuclear site licence";

(b) omit paragraph (b).

(4) Omit subsection (8).

11 (1) Section 50 (regulations under the relevant statutory provisions) is amended as follows.

(2) In subsection (1AA), for the words following "unless" substitute "the Secretary of State has consulted—

(a) the Executive,

(b) the Office for Nuclear Regulation, and

(c) such other bodies as appear to the Secretary of State to be appropriate."

(3) In subsection (2), for "the Executive" substitute "—

(a) the Executive, and

(b) the Office for Nuclear Regulation."

(4) In subsection (3), before paragraph (a) insert—

"(za) the Office for Nuclear Regulation;".

(5) After subsection (3) insert—

"(4) If the Executive has consulted the Office for Nuclear Regulation under subsection (3) in relation to a proposal under section 11(3) for regulations under any of the relevant statutory provisions, it must, when it submits the proposal (with or without modification) to the Secretary of State, also submit—

(a) any representations made by the Office for Nuclear Regulation in response to the consultation, and

(b) any response to those representations given by the Executive to the Office for Nuclear Regulation.

(5) The preceding provisions of this section do not apply to the exercise of the power in section 43 to make ONR fees regulations, but the Secretary of State must consult the Office for Nuclear Regulation before—

(a) making ONR fees regulations independently of any proposals submitted by the Office for Nuclear Regulation under section 60(1) of the Energy Act 2013, or

(b) making ONR fees regulations which give effect to such proposals but with modifications.

(6) In subsection (5) "ONR fees regulations" means regulations under section 43 so far as they make provision in relation to fees payable for or in connection with the performance of a function by or on behalf of—

(a) the Office for Nuclear Regulation, or

(b) any inspector appointed by the Office for Nuclear Regulation."

12 In section 53(1) (general interpretation of Part 1)—

(a) after the definition of "micro-organism" insert—

""nuclear safeguards purposes" has the same meaning as in Part 2 of the Energy Act 2013 (nuclear regulation etc.) (see section 52 of that Act);

"nuclear safety purposes" has the same meaning as in that Part of that Act (see section 48 of that Act);

"nuclear security purposes" has the same meaning as in that Part of that Act (see section 50 of that Act);";

(b) after the definition of "offshore installation" insert—

""the ONR's purposes" has the same meaning as in Part 2 of the Energy Act 2013 (see section 47 of that Act);";

(c) after the definition of "prohibition notice" insert—

""the radioactive material transport purposes" means the transport purposes within the meaning of Part 2 of the Energy Act 2013 (see section 53 of that Act);".

13 In Schedule 1 (existing enactments which are relevant statutory provisions), omit the entry relating to the Nuclear Installations Act 1965.

14 (1) Schedule 2 (constitution etc. of the Health and Safety Executive) is amended as follows.

(2) In paragraph 1(b) for "eleven" substitute "twelve".

(3) In paragraph 2(2), at the beginning insert "Subject to sub-paragraph (3A),".

(4) After paragraph 2(3) insert—

"(3A) The Office for Nuclear Regulation may appoint a member from among the non-executive members of the Office for Nuclear Regulation ("an ONR member").

(3B) The Office for Nuclear Regulation must notify the Executive and the Secretary of State whenever it appoints an ONR member.".

(5) In paragraph 3, after "4" insert ", 4A".

(6) In paragraph 4, after "Executive" insert ", other than an ONR member,".

(7) After paragraph 4 insert—

"4A (1) An ONR member may at any time resign from office by giving notice in writing to the Office for Nuclear Regulation.

(2) An ONR member ceases to be a member of the Executive upon ceasing to be a non-executive member of the Office for Nuclear Regulation.

(3) The Office for Nuclear Regulation may remove an ONR member from office by giving notice in writing.

(4) The Office for Nuclear Regulation must notify the Executive and the Secretary of State whenever an ONR member—

(a) resigns from office,

(b) ceases to be a non-executive member of the Office for Nuclear Regulation, or

(c) is removed from office.".

(8) In paragraph 5, after "member" insert ", other than an ONR member,".

(9) Paragraph 6 is amended as follows.

(10) In sub-paragraph (1), for the words following "pay" substitute "—

(a) to each member, other than an ONR member, such remuneration, and

(b) to each member such travelling and other allowances,

as may be determined by the Secretary of State."

(11) In sub-paragraph (2), after "member" insert "other than an ONR member".

(12) In sub-paragraph (3), after "member" insert "other than an ONR member".

(13) After that sub-paragraph insert—

"(4) Where—

(a) a member appointed under paragraph 4(4)(a) of Schedule 7 to the Energy Act 2013 to be a member of the Office for Nuclear Regulation (the "HSE member of the ONR")—

(i) ceases to be the HSE member of the ONR otherwise than on the expiry of his or her term of office as HSE member of the ONR, but

(ii) does not cease to be a member of the Executive, and

(b) it appears to the Executive that there are special circumstances that make it right for that person to receive compensation,

the Executive may pay the member such amount by way of compensation as the Secretary of State may determine."

PART 2

NUCLEAR SAFETY

Nuclear Installations Act 1965 (c. 57)

15 The Nuclear Installations Act 1965 is amended as follows.

16 (1) Section 1 (restriction of certain nuclear installations to licensed sites) is amended as follows.

(2) In subsection (1), for "Minister" substitute "appropriate national authority".

(3) In subsection (3), at the end insert "and liable—

(a) on conviction on indictment to imprisonment for a term not exceeding 2 years, or a fine, or both;

(b) on summary conviction to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland), or a fine not exceeding £20,000, or both.

(7A) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference to 12 months in subsection (3)(b), as it has effect in England and Wales, is to be read as a reference to 6 months."

17 (1) Section 3 (grant and variation of nuclear site licences) is amended as follows.

(2) For subsection (1A) substitute—

"(1A) The appropriate national authority must consult the appropriate environment authority before granting a nuclear site licence."

(3) In subsection (2), for "Minister" substitute "appropriate national authority".

(4) In subsection (3)—

(a) for "Minister", in each place where it appears, substitute "appropriate national authority";

(b) for "he", in each place where it appears, substitute "it".

(5) In subsection (6) for "Minister", in both places where it appears, substitute "appropriate national authority".

(6) For subsection (6A) substitute—

"(6A) The appropriate national authority must consult the appropriate environment authority before varying a nuclear site licence if the variation relates to or affects the creation, accumulation or disposal of radioactive waste.

(6B) In subsection (6A), "radioactive waste"—

(a) in relation to a site in England or Wales, has same meaning as in the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675);

(b) in relation to a site in Scotland or Northern Ireland, has the same meaning as in the Radioactive Substances Act 1993."

18 (1) Section 4 (attachment of conditions to licences) is amended as follows.

(2) In subsections (1) to (3) for "Minister", in each place where it appears, substitute "appropriate national authority".

(3) For subsection (3A) substitute—

"(3A) The appropriate national authority must consult the appropriate environment authority before—

(a) attaching any condition to a nuclear site licence, or
(b) varying or revoking any condition attached to a nuclear site licence,

if the condition relates to or affects the creation, accumulation or disposal of radioactive waste.

(3B) In subsection (3A), "radioactive waste"—
(a) in relation to a site in England or Wales, has same meaning as in the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675);
(b) in relation to a site in Scotland or Northern Ireland, has the same meaning as in the Radioactive Substances Act 1993."

(4) In subsection (4)—
(a) for "Minister" substitute "appropriate national authority";
(b) for "him", in both places where it appears, substitute "it";
(c) for "his" substitute "its".

(5) Omit subsection (5) (requirement to display licence conditions on site).

(6) For subsection (6) substitute—

"(6) Where a condition attached to a nuclear site licence by virtue of this section is contravened, each person within subsection (7) is guilty of an offence and liable—
(a) on conviction on indictment to imprisonment for a term not exceeding 2 years, or a fine, or both;
(b) on summary conviction to imprisonment for a term not exceeding 12 months, or a fine not exceeding £20,000, or both.

(7) Those persons are—
(a) the licensee, and
(b) any person having duties upon the site in question who committed the contravention.

(8) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference to 12 months in subsection (6)(b), as it has effect in England and Wales, is to be read as a reference to 6 months."

19 (1) Section 5 (revocation and surrender of licences) is amended as follows.

(2) In subsection (1) for "Minister" substitute "appropriate national authority".

(3) For subsection (1A) substitute—

"(1A) The appropriate national authority must consult the appropriate environment authority before revoking a nuclear site licence."

(4) In subsection (2) for "Minister", in each place where it appears, substitute "appropriate national authority".

(5) In subsection (3)—
(a) for "Minister", in each place where it appears, substitute "appropriate national authority";

(b) after paragraph (b) insert—

"(c) the date when the following conditions have both become satisfied—

(i) the site in question or, as the case may be, that part of it is used or occupied by or on behalf of the Crown, and

(ii) a nuclear site licence has ceased to be required in respect of that site or part,".

(6) In subsection (4)—

(a) the words following "offence" in the first place it appears become subsection (4B);

(b) at the end of subsection (4) (as so amended) insert "and liable—

(a) on conviction on indictment to imprisonment for a term not exceeding 2 years, or a fine, or both;

(b) on summary conviction to imprisonment for a term not exceeding 12 months, or a fine not exceeding £20,000, or both.";

(c) after that subsection (as so amended) insert—

"(4A) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference to 12 months in subsection (4)(b), as it has effect in England and Wales, is to be read as a reference to 6 months.";

(d) for "and any" at the beginning of subsection (4B) substitute "Any".

20 (1) Section 22 (reporting of and inquiries into dangerous occurrences) is amended as follows.

(2) In subsection (2)—

(a) for "Minister" substitute "appropriate national authority";

(b) at the end insert "and liable—

(a) on conviction on indictment to imprisonment for a term not exceeding 2 years, or a fine, or both;

(b) on summary conviction to imprisonment for a term not exceeding 12 months, or a fine not exceeding £20,000, or both."

(3) After that subsection insert—

"(2A) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference to 12 months in subsection (2)(b), as it has effect in England and Wales, is to be read as a reference to 6 months."

21 In section 24 (inspectors), for "provisions which are mentioned in Schedule 1 to the Health and Safety at Work etc. Act 1974" substitute "sections 1, 3 to 6, 22 and 24A of this Act".

22 (1) Section 24A (recovery of expenses by Health and Safety Executive) is amended as follows.

(2) In subsection (1)—

(a) for "Health and Safety Executive ("the Executive") which the Executive may" substitute "ONR which the ONR may";

(b) in paragraph (a) for "such of the provisions of this Act as are mentioned in Schedule 1 to the Health and Safety at Work etc Act 1974" substitute "sections 1, 3 to 6 and 22, and this section of this Act".

(3) In subsection (2)—

(a) for "Executive" substitute "ONR";

(b) for "the Health and Safety at Work etc. Act 1974" substitute "Schedule 8 to the Energy Act 2013".

(4) In subsections (3), (4) and (6) to (8) for "Executive", in each place where it appears, substitute "ONR".

(5) In the heading, for "Health and Safety Executive" substitute "ONR".

23 (1) Section 26 (interpretation) is amended as follows.

(2) For the definition of "the appropriate Agency" substitute—

"the appropriate environment authority" means—

(a) in the case of a site in England or Wales, the Environment Agency;

(b) in the case of a site in Scotland, the Scottish Environment Protection Agency;

(c) in the case of a site in Northern Ireland, the Department of Environment in Northern Ireland;

"the appropriate national authority" means—

(a) in relation to England and Wales and Scotland, the ONR;

(b) in relation to Northern Ireland, the Secretary of State;".

(3) For the definition of "inspector" substitute—

""inspector" in sections 4(5) and 5(2) of this Act means—

(a) in relation to England and Wales and Scotland, an inspector appointed by the ONR under Schedule 8 to the Energy Act 2013 (inspectors);

(b) in relation to Northern Ireland, an inspector appointed under section 24 of this Act;".

(4) After the definition of "occurrence" insert—

"ONR" means the Office for Nuclear Regulation;".

24 In section 27 (Northern Ireland) omit subsection (1)(b).

25 In Schedule 1 (security provisions applicable by order under section 2), in paragraph 3(2)(cc), for "section 19 of the Health and Safety at Work etc. Act 1974" substitute "Schedule 8 to the Energy Act 2013".

PART 3

NUCLEAR SECURITY

Anti-terrorism, Crime and Security Act 2001 (c. 24)

26 The Anti-terrorism, Crime and Security Act 2001 is amended as follows.

27 (1) Section 77 (regulation of security of civil nuclear industry) is amended as follows.

(2) In subsection (3)(a)(ii), for the words following "term" substitute "not exceeding 12 months (in England and Wales or Scotland) or 6 months (in Northern Ireland), or a fine not exceeding £20,000, or both".

(3) After that subsection insert—

"(3A) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' court's power to imprison), the reference to 12 months in subsection (3)(a)(ii), as it has effect in England and Wales, is to be read as a reference to 6 months."

(4) In subsection (5)(a), for "the Health and Safety Executive" substitute "the Office for Nuclear Regulation".

28 (1) Section 80 (prohibition of disclosures of uranium enrichment technology), is amended as follows.

(2) In subsection (4)(b), after "the Secretary of State" insert "or the Office for Nuclear Regulation".

(3) After subsection (7) insert—

"(7A) The Secretary of State must consult the Office for Nuclear Regulation before laying a draft of the regulations, unless they give effect, without modification, to any proposals for them submitted by the Office for Nuclear Regulation under section 60(1)(a)(v) of the Energy Act 2013."

PART 4

NUCLEAR SAFEGUARDS

Atomic Energy Act 1946 (c. 80)

29 The Atomic Energy Act 1946 is amended as follows.

30 (1) Section 4 (power to obtain information of materials, plants and processes) is amended as follows.

(2) In subsection (1), at the beginning insert "Subject to subsection (1A)".

(3) After subsection (1) insert—

"(1A) No notice may be served under subsection (1) which imposes a requirement which could be imposed—

(a) by a notice served by the Office for Nuclear Regulation under section 76 of the Energy Act 2013 (power of ONR to obtain information), or

(b) by an authorised inspector under paragraph 15 of Schedule 8 to that Act (power of inspectors to require information and documents).".

31 (1) Section 5 (power of entry and inspection) is amended as follows.

(2) In subsection (1), at the beginning insert "Subject to subsection (1A)".

(3) After subsection (1) insert—

"(1A) No authorisation to enter or inspect any premises may be given by the Minister to any person under subsection (1) if such authorisation could be given by the Office for Nuclear Regulation to an inspector under Part 1 of Schedule 8 to the Energy Act 2013 (appointment and powers of inspectors).".

32 In section 11 (restriction on disclosure of information relating to plant), after subsection (2) insert—

"(2A) The communication of information is not an offence under this section if it is—

(a) communication to the Office for Nuclear Regulation of information required under section 76 of the Energy Act 2013 (power of ONR to obtain information), or any subsequent communication of that information by the Office for Nuclear Regulation, or

(b) communication to an authorised inspector of information required by the inspector under paragraph 15 of Schedule 8 to that Act (power of inspectors to require information and documents), or any subsequent communication of that information by an inspector.".

33 In section 18 (definitions), in subsection (1), after the definition of "atomic energy" insert—

""inspector" means an inspector appointed under Schedule 8 to the Energy Act 2013; and "authorised", in relation to such an inspector, is to be construed in accordance with paragraph 2(4) of that Schedule;".

Nuclear Safeguards and Electricity (Finance) Act 1978 (c. 25)

34 The Nuclear Safeguards and Electricity (Finance) Act 1978 is amended as follows.

35 In section 2 (rights of International Atomic Energy Agency inspectors), in subsection (8) for "Secretary of State" substitute "Office for Nuclear Regulation".

36 In section 3 (regulations for giving effect to certain provisions of Safeguards Agreement) —

(a) after subsection (1) insert—

"(1A) Regulations under this section may in particular modify functions of, or confer functions on, the Office for Nuclear Regulation.";

(b) after subsection (2) insert—

"(2A) The Secretary of State must consult the Office for Nuclear Regulation before making regulations under this section unless the regulations give effect, without modification, to any proposals for them submitted by the Office for Nuclear Regulation under section 60(1)(a)(v) of the Energy Act 2013."

Nuclear Safeguards Act 2000 (c. 5)

37 The Nuclear Safeguards Act 2000 is amended as follows.

38 (1) Section 1(1) (interpretation) is amended as follows.

(2) In the definition of "Additional Protocol information" after "Secretary of State" insert "or the Office for Nuclear Regulation".

(3) In the definition of "authorised officer" for "Secretary of State" substitute "Office for Nuclear Regulation".

39 (1) Section 2 (information and records for purposes of the Additional Protocol) is amended as follows.

(2) In subsection (1), for "Secretary of State" substitute "Office for Nuclear Regulation".

(3) In subsection (2), for "Secretary of State", in both places where it appears, substitute "Office for Nuclear Regulation".

(4) In subsection (3)(a) for "Secretary of State" substitute "Office for Nuclear Regulation".

40 (1) Section 3 (identifying persons who have information) is amended as follows.

(2) In subsection (1), for "him" substitute "the Office for Nuclear Regulation".

(3) In subsection (2)(b), for "Secretary of State" substitute "Office for Nuclear Regulation".

(4) In subsection (3)(a), for "Secretary of State" substitute "Office for Nuclear Regulation".

(5) After subsection (3) insert—

"(3A) The Secretary of State must consult the Office for Nuclear Regulation before making regulations under this section unless the regulations give effect, without modification, to any proposals for them submitted by the Office for Nuclear Regulation under section 60(1)(a)(v) of the Energy Act 2013."

(6) In subsection (5), for "Secretary of State" substitute "Office for Nuclear Regulation".

41 (1) Section 4 (powers of entry in relation to Additional Protocol information) is repealed.

(2) Sub-paragraph (1) does not affect the power in section 12(4) of the Nuclear Safeguards Act 2000 to extend section 4 of that Act outside the United Kingdom.

42 (1) Section 5 (rights of access etc. for Agency inspectors) is amended as follows.

(2) After subsection (3) insert—

"(3A) The Secretary of State must consult the Office for Nuclear Regulation before making an order under subsection (3) unless the order gives effect, without modification, to any proposals for such an order submitted by the Office for Nuclear Regulation under section 60(1)(a)(v) of the Energy Act 2013."

(3) In subsection (6) for "Secretary of State" substitute "Office for Nuclear Regulation".

43 In section 6 (restriction on disclosure), after subsection (3) insert—

"(3A) It is not an offence under this section to disclose information held by the Office for Nuclear Regulation if the disclosure is not in contravention of Part 2 of the Energy Act 2013.".

44 In section 7 (giving false or misleading information), in paragraphs (a) and (b) for "Secretary of State" substitute "Office for Nuclear Regulation".

PART 5

OTHER ENACTMENTS

Parliamentary Commissioner Act 1967 (c. 13)

45 In Schedule 2 to the Parliamentary Commissioner Act 1967 (departments etc subject to investigation), at the appropriate place insert—

"Office for Nuclear Regulation."

House of Commons Disqualification Act 1975 (c. 24)

46 (1) Schedule 1 to the House of Commons Disqualification Act 1975 is amended as follows.

(2) In Part 2 (bodies of which all members are disqualified), at the appropriate place insert—

"The Office for Nuclear Regulation."

(3) In Part 3 (other disqualifying offices), at the appropriate place insert—

"Member of staff of the Office for Nuclear Regulation (within the meaning of Part 2 of the Energy Act 2013)."

Northern Ireland Assembly Disqualification Act 1975 (c. 25)

47 (1) Schedule 1 to the Northern Ireland Assembly Disqualification Act 1975 is amended as follows.

(2) In Part 2 (bodies of which all members are disqualified), at the appropriate place insert—

"The Office for Nuclear Regulation."

(3) In Part 3 (other disqualifying offices), at the appropriate place insert—

"Member of staff of the Office for Nuclear Regulation (within the meaning of Part 2 of the Energy Act 2013)."

Employment Protection Act 1975 (c.71)

48 In Schedule 15 to the Employment Protection Act 1975, omit paragraph 13 (amendments of section 44 of the Health and Safety at Work etc. Act 1974).

Civil Aviation Act 1982 (c. 16)

49 In section 23 of the Civil Aviation Act 1982 (disclosure of information), in subsection (4), after paragraph (b) insert—

"(ba) by the CAA or a member or employee of the CAA—

(i) to, or to a member of, the Office for Nuclear Regulation, or

(ii) to a member of staff of the Office for Nuclear Regulation (within the meaning of Part 2 of the Energy Act 2013);".

Water Act 1989 (c. 15)

50 In section 174 of the Water Act 1989 (general restrictions on disclosure of information), in subsection (2), after paragraph (g) insert—

"(ga) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Radioactive Material (Road Transport) Act 1991 (c. 27)

51 (1) The Radioactive Material (Road Transport) Act 1991, apart from section 1(1), is repealed.

(2) In section 1(1) of that Act, for "In this Act" substitute "In this subsection (which applies for the purposes of section E5 of Part 2 of Schedule 5 to the Scotland Act 1998)".

Water Industry Act 1991 (c. 56)

52 In section 206 of the Water Industry Act 1991 (restriction on disclosure of information), in subsection (3), after paragraph (g) insert—

"(ga) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Water Resources Act 1991 (c. 57)

53 In section 204 of the Water Resources Act 1991 (restriction on disclosure of information), in subsection (2), after paragraph (g) insert—

"(ga) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Radioactive Substances Act 1993 (c. 12)

54 The Radioactive Substances Act 1993 is amended as follows.

55 In section 16 (grant of authorisations), as it has effect in relation to Scotland, in subsection (4A)—

(a) in the opening words, omit "in any part of Great Britain";
(b) in paragraph (a) for "Health and Safety Executive" substitute "Office for Nuclear Regulation".

56 In section 17 (revocation and variation of authorisations), as it has effect in relation to Scotland, in subsection (2A)—
(a) in the opening words omit "in any part of Great Britain";
(b) in paragraph (a) for "Health and Safety Executive" substitute "Office for Nuclear Regulation".

Railways Act 1993 (c. 43)

57 In section 145 of the Railways Act 1993 (general restrictions on disclosure of information), in subsection (2), after paragraph (e) insert—
"(ea) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Coal Industry Act 1994 (c. 21)

58 In section 59(3)(e) of the Coal Industry Act 1994 (relevant authorities in relation to all of their functions), after sub-paragraph (ii) insert—
"(iia) the Office for Nuclear Regulation;".

Scotland Act 1998 (c. 46)

59 In Part 2 of Schedule 5 (specific reservations), in section D4 (nuclear energy), after "occurrences." insert—
"The Office for Nuclear Regulation."

Greater London Authority Act 1999 (c. 29)

60 In section 235 of the Greater London Authority Act 1999 (restrictions on disclosure of information), in subsection (2), after paragraph (f) insert—
"(fa) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Regulation of Investigatory Powers Act 2000 (c. 23)

61 In Part 1 of Schedule 1 to the Regulation of Investigatory Powers Act 2000 (relevant authorities for the purposes of sections 28 and 29), after paragraph 20G insert—

"20H The Office for Nuclear Regulation."

Freedom of Information Act 2000 (c. 36)

62 In Part 6 of Schedule 1 to the Freedom of Information Act 2000 (public authorities), at the appropriate place insert—
"The Office for Nuclear Regulation."

Transport Act 2000 (c. 38)

63 In Schedule 9 to the Transport Act 2000 (air traffic: information), in paragraph 3(1), after paragraph (f) insert—

"(fa) for the purpose of facilitating the carrying out by the Office for Nuclear Regulation of any of its functions under any enactment;".

Civil Contingencies Act 2004 (c. 36)

64 In Part 1 of Schedule 1 to the Civil Contingencies Act 2004 (category 1 responders: general), before paragraph 12 insert—

"11B The Office for Nuclear Regulation."

Fire (Scotland) Act 2005 (asp. 5)

65 (1) Section 61 of the Fire (Scotland) Act 2005 (enforcing authorities) is amended as follows.

(2) In subsection (7), for "Health and Safety Executive" (in both places) substitute "appropriate body".

(3) After that subsection insert—

"(7A) For the purposes of subsection (7), "appropriate body" means—

(a) in relation to a workplace which is, or is on, premises for which it is the enforcing authority, the Office for Nuclear Regulation;

(b) in relation to any other workplace, the Health and Safety Executive.

(4) Subsection (9) is amended as follows.

(5) In paragraph (za)—

(a) omit sub-paragraphs (i) and (ii);

(b) for sub-paragraph (iv) substitute—

"(iv) which are a workplace which is, or is on, a construction site, other than one in relation to which the Office for Nuclear Regulation is responsible for health and safety enforcement;".

(6) After that paragraph insert—

"(zaa) in relation to relevant premises—

(i) for which a licence is required by virtue of section 1 of the Nuclear Installations Act 1965 or for which a permit is required by virtue of section 2 of that Act;

(ii) for which such a licence or permit would be required but for the fact that the premises are used by, or on behalf of, the Crown; or

(iii) which are a workplace which is, or is on, a construction site in relation to which the Office for Nuclear Regulation is responsible for health and safety enforcement,

the Office for Nuclear Regulation;".

(7) In paragraph (b)—
(a) in sub-paragraph (i), for "(za)(ii), (iii)" substitute "(za)(iii), (zaa)(ii)";
(b) in sub-paragraph (ii), for "(za)(ii)" substitute "(zaa)(ii)".

(8) After subsection (9) insert—

"(9A) For the purposes of subsection (9)—
(a) "construction site" means a construction site, as defined in regulation 2(1) of the Construction (Design and Management) Regulations 2007, to which those Regulations apply, other than one to which regulation 46(1) of those Regulations applies;
(b) the Office for Nuclear Regulation is responsible for health and safety enforcement in relation to a construction site if, by virtue of regulations under section 18(2) of the Health and Safety at Work etc. Act 1974 (enforcement), it is responsible for the enforcement of any of the relevant statutory provisions (within the meaning of that Act) in relation to the site."

(9) In subsection (10), after "(9)" insert "or (9A)".

Regulatory Reform (Fire Safety) Order 2005 (S.I. 2005/1541)

66 The Regulatory Reform (Fire Safety) Order 2005 (S.I. 2005/2541) is amended as follows.

67 (1) Article 25 (enforcing authorities) is amended as follows.

(2) That Article becomes paragraph (1) and is amended as follows.

(3) In paragraph (b)—
(a) omit sub-paragraphs (i) and (ii);
(b) for sub-paragraph (iv) substitute—

"(iv) any workplace which is, or is on, a construction site, other than one in relation to which the Office for Nuclear Regulation is responsible for health and safety enforcement;".

(4) After that paragraph insert—

"(bb) the Office for Nuclear Regulation in relation to—
(i) any premises for which a licence is required by virtue of section 1 of the Nuclear Installations Act 1965 or for which a permit is required by virtue of section 2 of that Act;
(ii) any premises for which such a licence or permit would be required but for the fact that the premises are used by, or on behalf of, the Crown;
(iii) any workplace which is, or is on, a construction site in relation to which the Office for Nuclear Regulation is responsible for health and safety enforcement;".

(5) In paragraph (e)—
(a) in sub-paragraph (i), for "(b)(ii)" substitute "(bb)(ii)";
(b) in sub-paragraph (ii), for "(b)(ii)" substitute "(bb)(ii)".

(6) After Article 25(1) insert—

"(2) For the purposes of paragraph (1)—

(a) "construction site" means a construction site, as defined in regulation 2(1) of the Construction (Design and Management) Regulations 2007, to which those Regulations apply, other than one to which regulation 46(1) of those Regulations applies;

(b) the Office for Nuclear Regulation is responsible for health and safety enforcement in relation to a construction site if, by virtue of regulations under section 18(2) of the Health and Safety at Work etc. Act 1974 (enforcement), it is responsible for the enforcement of any of the relevant statutory provisions (within the meaning of that Act) in relation to the site."

68 In Article 26 (enforcement of Order), in paragraph (3), after "Health and Safety Executive" (in both places) insert ", Office for Nuclear Regulation".

Government of Wales Act 2006 (c. 32)

69 In Schedule 7 to the Government of Wales Act 2006 (subjects to which Acts of the Assembly may relate), in Part 1, in the exceptions to paragraph 4 (economic development), after "nuclear installations" insert "and the Office for Nuclear Regulation".

Road Safety Act 2006 (c. 49)

70 Section 57 of the Road Safety Act 2006 (which amends section 2 of the Radioactive Material (Road Transport) Act 1991) is repealed.

Regulatory Enforcement and Sanctions Act 2008 (c. 13)

71 In Schedule 6 to the Regulatory Enforcement and Sanctions Act 2008 (enactments specified for the purposes of orders under Part 3), the entry for sections 2 to 6 of the Radioactive Material (Road Transport) Act 1991 is repealed.

Borders, Citizenship and Immigration Act 2009 (c. 11)

72 (1) Part 1 of the Borders, Citizenship and Immigration Act 2009 (which provides for certain functions of the Commissioners for Her Majesty's Revenue and Customs to be exercisable concurrently by the Secretary of State or the Director of Border Revenue) is amended as follows.

(2) In section 1 (general customs functions of the Secretary of State), in subsection (6), after paragraph (a) (but before the "and" immediately following it) insert—

"(aa) sections 77 and 78 of the Energy Act 2012 (HMRC functions in relation to Office for Nuclear Regulation etc.),".

(3) In section 7 (customs revenue functions of the Director of Border Revenue) in subsection (7), after paragraph (a) (but before the "and" immediately following it) insert—

"(aa) sections 77 and 78 of the Energy Act 2012 (HMRC functions in relation to Office for Nuclear Regulation etc.),".

Equality Act 2010 (c. 15)

73 In Schedule 19 to the Equality Act 2010 (public authorities: general), after the entry for the Health and Safety Executive insert—

"The Office for Nuclear Regulation."

SCHEDULE 13

Section 107

TRANSFER SCHEMES UNDER SECTION 107

1 (1) On the transfer date, the designated property, rights and liabilities that are to be transferred from the Oil and Pipelines Agency ("the transferor") to the Secretary of State ("the transferee") are transferred and vest in accordance with the scheme.

(2) The rights and liabilities that may be transferred by a scheme include those arising under or in connection with a contract of employment.

(3) A certificate by the Secretary of State that anything specified in the certificate has vested in the Secretary of State by virtue of a scheme is conclusive evidence for all purposes of that fact.

(4) In this Schedule—

"civil service" means the civil service of the state;

"designated", in relation to a scheme, means specified in or determined in accordance with the scheme;

"property" includes interests of any description;

"the transfer date" means a date specified by a scheme as the date on which the scheme is to have effect;

"TUPE regulations" means the Transfer of Undertakings (Protection of Employment) Regulations 2006 (S.I. 2006/246).

2 (1) A scheme may make provision—

(a) for anything done by or in relation to the transferor in connection with any property, rights or liabilities transferred by the scheme to be treated as done, or to be continued, by or in relation to the transferee;

(b) for references to the transferor in any agreement (whether written or not), instrument or other document relating to any property, rights or liabilities transferred by the scheme to be treated as references to the transferee;

(c) about the continuation of legal proceedings;

(d) for transferring property, rights or liabilities which could not otherwise be transferred or assigned;

(e) for transferring property, rights and liabilities irrespective of any requirement for consent which would otherwise apply;

(f) for preventing a right of pre-emption, right of reverter, right of forfeiture, right to compensation or other similar right from arising or becoming exercisable as a result of the transfer of property, rights or liabilities;

(g) for dispensing with any formality in relation to the transfer of property, rights or liabilities by the scheme;

(h) for transferring property acquired, or rights or liabilities arising, after the scheme is made but before it takes effect;
(i) for apportioning property, rights or liabilities;
(j) for creating rights, or imposing liabilities, in connection with property, rights or liabilities transferred by the scheme;
(k) for requiring the transferee to enter into any agreement of any kind, or for a purpose, specified in or determined in accordance with the scheme;
(l) if the TUPE regulations do not apply in relation to the transfer, make provision which is the same or similar.

(2) Sub-paragraph (1)(b) does not apply to references in primary legislation or in subordinate legislation.

3 For the purposes of this Schedule—
(a) an individual who holds employment in the civil service is to be treated as employed by virtue of a contract of employment, and
(b) the terms of the individual's employment in the civil service are to be regarded as constituting the terms of the contract of employment.

SCHEDULE 14

Section 117

CONSUMER REDRESS ORDERS

PART 1

GAS CONSUMERS

1 (1) The Gas Act 1986 is amended as set out in sub-paragraphs (2) to (7).

(2) After section 30F insert—

"30G Consumer redress orders

(1) This section applies where the Authority is satisfied that—
(a) a regulated person has contravened, or is contravening, any relevant condition or requirement, and
(b) as a result of the contravention, one or more consumers have suffered loss or damage or been caused inconvenience.

(2) The Authority may make an order (a "consumer redress order") requiring the regulated person to do such things as appear to the Authority necessary for the purposes of—
(a) remedying the consequences of the contravention, or
(b) preventing a contravention of the same or a similar kind from being repeated.

(3) A consumer redress order must specify the following—
(a) the regulated person to whom the order applies;
(b) the contravention in respect of which the order is made;
(c) the affected consumers, or a description of such consumers;
(d) the requirements imposed by the order;

(e) the date by which the regulated person must comply with such requirements.

(4) As soon as practicable after making a consumer redress order, the Authority must—

(a) serve a copy of the order on the regulated person to whom the order applies, and

(b) either—

(i) serve a copy of the order on each affected consumer, or

(ii) publish the order in such manner as the Authority considers appropriate for the purpose of bringing it to the attention of affected consumers.

(5) The date specified in a consumer redress order under subsection (3)(e) may not be earlier than the end of the period of 7 days from the date of the service of a copy of the order on the regulated person.

(6) Different dates may be specified under subsection (3)(e) in relation to different requirements imposed by the order.

(7) This section is subject to sections 30H to 30O.

(8) In this section and in sections 30H to 30O—

"affected consumers", in relation to a consumer redress order (or proposed order), are those consumers that the Authority is satisfied have suffered loss or damage, or been caused inconvenience, as a result of the contravention in respect of which the order is (or would be) made;

"consumers" means consumers in relation to gas conveyed through pipes;

"consumer redress order" means an order under subsection (2).

30H Remedial action under a consumer redress order

(1) The things mentioned in section 30G(2) that a regulated person may be required to do under a consumer redress order ("the required remedial action") include, in particular—

(a) paying an amount to each affected consumer by way of compensation for the loss or damage suffered, or for the inconvenience caused, as a result of the contravention;

(b) preparing and distributing a written statement setting out the contravention and its consequences;

(c) terminating or varying any contracts entered into between the regulated person and affected consumers.

(2) Where the required remedial action includes the payment of compensation, the order must specify—

(a) the amount of compensation to be paid, and

(b) the affected consumers, or a description of such consumers, to whom it is to be paid.

(3) Where the required remedial action includes the preparation and distribution of a statement, the order may specify the information to be contained in the statement and the form and manner in which it is to be distributed.

(4) The manner so specified may in particular include—

(a) sending a copy of the statement to each affected consumer;

(b) publishing the statement in such manner as the Authority considers appropriate for the purpose of bringing the statement to the attention of those consumers.

(5) Where the required remedial action includes the termination or variation of a contract with an affected consumer—

(a) the order may specify the terms on which the contract is to be terminated or the way in which it is to be varied,

(b) the requirement has effect only if, and to the extent that, the affected consumer consents to the termination of the contract on those terms or to its variation in that way, and

(c) the order may specify the steps to be taken by the regulated person for the purpose of enabling the affected consumer to give such consent.

30I Other procedural requirements in relation to consumer redress orders

(1) Before making a consumer redress order the Authority must give notice stating that it proposes to make the order.

(2) A notice under subsection (1) must specify—

(a) the regulated person to whom the order will apply,

(b) the contravention in respect of which the order is to be made,

(c) the affected consumers, or a description of such consumers,

(d) the requirements to be imposed by the order and the period within which such requirements are to be complied with, and

(e) the time (not being less than 21 days from the relevant date) by which representations or objections with respect to the proposed order may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(3) Before varying any proposal stated in a notice under subsection (1) the Authority must give notice specifying—

(a) the proposed variation and the reasons for it, and

(b) the time (not being less than 21 days from the relevant date) by which representations or objections with respect to the proposed variation may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(4) Before revoking a consumer redress order the Authority must give notice—

(a) stating that it proposes to revoke the order and the reasons for doing so, and

(b) specifying the time (not being less than 21 days from the relevant date) within which representations or objections to the proposed revocation may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(5) A notice required to be given under this section is to be given—

(a) by serving a copy of the notice on the regulated person, and
(b) either—
(i) by serving a copy of the notice on each affected consumer, or
(ii) by publishing the notice in such manner as the Authority considers appropriate for the purpose of bringing the matters to which the notice relates to the attention of affected consumers.

(6) The "relevant date", in relation to a notice under this section, is—
(a) in a case where the notice is published in accordance with subsection (5)(b)(ii), the date on which it is published;
(b) in any other case, the latest date on which a copy of the notice is served in accordance with subsection (5)(a) and (b)(i).

30J Statement of policy with respect to consumer redress orders

(1) The Authority must prepare and publish a statement of policy with respect to—
(a) the making of consumer redress orders, and
(b) the determination of the requirements to be imposed by such orders (including, in particular, the considerations the Authority will have regard to in determining such requirements).

(2) The Authority must have regard to its current statement of policy—
(a) in deciding whether to make a consumer redress order in respect of a contravention, and
(b) in determining the requirements to be imposed by any such order.

(3) The Authority may revise its statement of policy and, where it does so, must publish the revised statement.

(4) Publication under this section is to be in such manner as the Authority considers appropriate for the purpose of bringing the matters contained in the statement of policy to the attention of persons likely to be affected by them.

(5) The Authority must consult such persons as it considers appropriate when preparing or revising its statement of policy.

30K Time limits for making consumer redress orders

(1) Where no final or provisional order has been made in relation to a contravention, the Authority may not give a consumer redress order in respect of the contravention later than the end of the period of 5 years from the time of the contravention.

(2) Subsection (1) does not apply if before the end of that period—
(a) the notice under section 30I(1) relating to the order is served on the regulated person, or
(b) a notice relating to the contravention is served on the regulated person under section 38(1).

(3) Where a final or provisional order has been made in relation to a contravention, the Authority may give a consumer redress order in

respect of the contravention only if the notice relating to the consumer redress order under section 30I(1) is served on the regulated person—

(a) within 3 months from the confirmation of the provisional order or the making of the final order, or

(b) where the provisional order is not confirmed, within 6 months from the making of the provisional order.

30L Enforcement of consumer redress orders

(1) Compliance with a consumer redress order is enforceable by civil proceedings by the Authority—

(a) for an injunction or interdict,

(b) for specific performance of a statutory duty under section 45 of the Court of Session Act 1988, or

(c) for any other appropriate remedy or relief.

(2) Proceedings under subsection (1) are to be brought—

(a) in England and Wales, in the High Court, or

(b) in Scotland, in the Court of Session.

(3) The obligation of a regulated person to comply with a consumer redress order is a duty owed to any person who may be affected by a contravention of the order.

(4) Without limiting the Authority's right to bring civil proceedings under subsection (1), a duty owed to any person ("P") by virtue of subsection (3) may be enforced by civil proceedings by P for any appropriate remedy or relief.

(5) For the purposes of subsection (4), the duty owed to P may in particular be enforced by P as if it were contained in a contract between P and the regulated person who owes the duty.

30M Appeals against consumer redress orders

(1) A regulated person in respect of whom a consumer redress order is made may make an application to the court under this section if the person is aggrieved by—

(a) the making of the order, or

(b) any requirement imposed by the order.

(2) An application under subsection (1) must be made within 42 days from the date of service on the regulated person of a copy of the order under section 30G(4)(a).

(3) On an application under subsection (1) the court may—

(a) quash the order or any provision of the order, or

(b) vary any such provision in such manner as the court considers appropriate.

(4) The court may exercise the powers under subsection (3) only if it considers it appropriate to do so in all the circumstances of the case and is satisfied of one or more of the following grounds—

(a) that the making of the order was not within the power of the Authority under section 30G;

(b) that any of the requirements under section 30G(4) and 30I have not been complied with in relation to the making of the order and the interests of the regulated person have been substantially prejudiced by the non-compliance;

(c) that it was unreasonable of the Authority to require something to be done under the order (whether at all or in accordance with the provisions of the order).

(5) If an application is made under this section in relation to a consumer redress order, a requirement imposed by the order does not need to be carried out in accordance with the order until the application has been determined.

(6) Where the court substitutes a lesser amount of compensation for an amount required by the Authority in a consumer redress order, it may require the payment of interest on the substituted amount at such rate, and from such date, as it considers just and equitable.

(7) Where the court specifies as a date by which any compensation under a consumer redress order is to be paid a date before the determination of the application under this section, it may require the payment of interest on the amount from that date at such rate as it considers just and equitable.

(8) Except as provided by this section, the validity of a consumer redress order is not to be questioned by any legal proceedings whatever.

(9) In this section "the court" means—

(a) in relation to England and Wales, the High Court;

(b) in relation to Scotland, the Court of Session.

30N Consumer redress orders: miscellaneous

(1) If—

(a) compensation is required to be paid under a consumer redress order, and

(b) it is not paid by the date by which it is required to be paid in accordance with the order,

the unpaid balance from time to time carries interest at the rate for the time being specified in section 17 of the Judgments Act 1838.

(2) The Authority may not make a consumer redress order where it is satisfied that the most appropriate way of proceeding is under the Competition Act 1998.

(3) The Authority's power to make a consumer redress order as a result of a contravention of a relevant condition or requirement is not to be taken as limiting the Authority's power to impose a penalty under section 30A in relation to the same contravention (whether instead of, or in addition to, making a consumer redress order).

(4) The power of the Authority to make a consumer redress order is not exercisable in respect of any contravention before the coming into force of Schedule 14 to the Energy Act 2013.

30O Maximum amount of penalty or compensation

(1) The maximum amount of penalty that may be imposed on a regulated person in respect of a contravention may not exceed 10 per cent of the person's turnover.

(2) The maximum amount of compensation that a regulated person may be required to pay in respect of a contravention may not exceed 10 per cent of the person's turnover.

(3) Subsections (1) and (2) are subject to subsection (4) if, in respect of a contravention, both a penalty is imposed and compensation is required to be paid.

(4) The maximum amount in total of the penalty and compensation combined in respect of the contravention may not exceed 10 per cent of the regulated person's turnover.

(5) The Secretary of State may by order provide for how a person's turnover is to be determined for the purposes of this section.

(6) An order under subsection (5) may make different provision for penalties and compensation.

(7) An order under subsection (5) shall not be made unless a draft of the instrument containing it has been laid before and approved by a resolution of each House of Parliament.

(8) In this section—

"compensation" means compensation that a regulated person is required to pay by a consumer redress order;

"penalty" means a penalty imposed on a regulated person under section 30A."

(3) In section 28 (orders for securing compliance), in subsection (8) for "30F" substitute "30O".

(4) In section 30A (penalties), for subsections (8) and (9) substitute—

"(8A) This section is subject to section 30O (maximum amount of penalty or compensation that may be imposed)."

(5) In the title of section 30E, after "Appeals" insert "against penalties".

(6) In section 38 (power to require information), in subsection (1) for "30F" substitute "30O".

(7) In section 64 (provisions as to orders), in subsection (2) for "30A" substitute "30O".

(8) An order under section 30A(8) of the Gas Act 1986 that is in force immediately before the coming into force of this paragraph—

(a) is, on the coming into force of this paragraph, to have effect as if made in accordance with section 30O(5) of that Act (as inserted by this paragraph), and

(b) is to be taken as applying in relation to a requirement to pay compensation imposed by a consumer redress order made under section 30G of that Act (as inserted by this paragraph) as it applies in relation to a penalty imposed under section 30A of that Act.

PART 2

ELECTRICITY CONSUMERS

2 (1) EA 1989 is amended as set out in sub-paragraphs (2) to (6).

(2) After section 27F insert—

"27G Consumer redress orders

(1) This section applies where the Authority is satisfied that—

(a) a regulated person has contravened, or is contravening, any relevant condition or requirement, and

(b) as a result of the contravention, one or more consumers have suffered loss or damage or been caused inconvenience.

(2) The Authority may make an order (a "consumer redress order") requiring the regulated person to do such things as appear to the Authority necessary for the purposes of—

(a) remedying the consequences of the contravention, or

(b) preventing a contravention of the same or a similar kind from being repeated.

(3) A consumer redress order must specify the following—

(a) the regulated person to whom the order applies;

(b) the contravention in respect of which the order is made;

(c) the affected consumers, or a description of such consumers;

(d) the requirements imposed by the order;

(e) the date by which the regulated person must comply with such requirements.

(4) As soon as practicable after making a consumer redress order, the Authority must—

(a) serve a copy of the order on the regulated person to whom the order applies, and

(b) either—

(i) serve a copy of the order on each affected consumer, or

(ii) publish the order in such manner as the Authority considers appropriate for the purpose of bringing it to the attention of affected consumers.

(5) The date specified in a consumer redress order under subsection (3)(e) may not be earlier than the end of the period of 7 days from the date of the service of a copy of the order on the regulated person.

(6) Different dates may be specified under subsection (3)(e) in relation to different requirements imposed by the order.

(7) This section is subject to sections 27H to 27O.

(8) In this section and in sections 27H to 27O—

"affected consumers", in relation to a consumer redress order (or proposed order), are those consumers that the Authority

is satisfied have suffered loss or damage, or been caused inconvenience, as a result of the contravention in respect of which the order is (or would be) made;

"consumers" means consumers in relation to electricity conveyed by distribution systems or transmission systems;

"consumer redress order" means an order under subsection (2).

27H Remedial action under a consumer redress order

(1) The things mentioned in section 27G(2) that a regulated person may be required to do under a consumer redress order ("the required remedial action") include, in particular—

(a) paying an amount to each affected consumer by way of compensation for the loss or damage suffered, or for the inconvenience caused, as a result of the contravention;

(b) preparing and distributing a written statement setting out the contravention and its consequences;

(c) terminating or varying any contracts entered into between the regulated person and affected consumers.

(2) Where the required remedial action includes the payment of compensation, the order must specify—

(a) the amount of compensation to be paid, and

(b) the affected consumers, or a description of such consumers, to whom it is to be paid.

(3) Where the required remedial action includes the preparation and distribution of a statement, the order may specify the information to be contained in the statement and the form and manner in which it is to be distributed.

(4) The manner so specified may in particular include—

(a) sending a copy of the statement to each affected consumer;

(b) publishing the statement in such manner as the Authority considers appropriate for the purpose of bringing the statement to the attention of those consumers.

(5) Where the required remedial action includes the termination or variation of a contract with an affected consumer—

(a) the order may specify the terms on which the contract is to be terminated or the way in which it is to be varied,

(b) the requirement has effect only if, and to the extent that, the affected consumer consents to the termination of the contract on those terms or to its variation in that way, and

(c) the order may specify the steps to be taken by the regulated person for the purpose of enabling the affected consumer to give such consent.

27I Other procedural requirements in relation to consumer redress orders

(1) Before making a consumer redress order the Authority must give notice stating that it proposes to make the order.

(2) A notice under subsection (1) must specify—

(a) the regulated person to whom the order will apply,

(b) the contravention in respect of which the order is to be made,

(c) the affected consumers, or a description of such consumers,

(d) the requirements to be imposed by the order and the period within which such requirements are to be complied with, and

(e) the time (not being less than 21 days from the relevant date) by which representations or objections with respect to the proposed order may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(3) Before varying any proposal stated in a notice under subsection (1) the Authority must give notice specifying—

(a) the proposed variation and the reasons for it, and

(b) the time (not being less than 21 days from the relevant date) by which representations or objections with respect to the proposed variation may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(4) Before revoking a consumer redress order the Authority must give notice—

(a) stating that it proposes to revoke the order and the reasons for doing so, and

(b) specifying the time (not being less than 21 days from the relevant date) within which representations or objections to the proposed revocation may be made,

and the Authority must consider any representations or objections which are duly made and not withdrawn.

(5) A notice required to be given under this section is to be given—

(a) by serving a copy of the notice on the regulated person, and

(b) either—

(i) by serving a copy of the notice on each affected consumer, or

(ii) by publishing the notice in such manner as the Authority considers appropriate for the purpose of bringing the matters to which the notice relates to the attention of affected consumers.

(6) The "relevant date", in relation to a notice under this section, is—

(a) in a case where the notice is published in accordance with subsection (5)(b)(ii), the date on which it is published;

(b) in any other case, the latest date on which a copy of the notice is served in accordance with subsection (5)(a) and (b)(i).

27J Statement of policy with respect to consumer redress orders

(1) The Authority must prepare and publish a statement of policy with respect to—

(a) the making of consumer redress orders, and

(b) the determination of the requirements to be imposed by such orders (including, in particular, the considerations the Authority will have regard to in determining such requirements).

(2) The Authority must have regard to its current statement of policy—

(a) in deciding whether to make a consumer redress order in respect of a contravention, and

(b) in determining the requirements to be imposed by any such order.

(3) The Authority may revise its statement of policy and, where it does so, must publish the revised statement.

(4) Publication under this section is to be in such manner as the Authority considers appropriate for the purpose of bringing the matters contained in the statement of policy to the attention of persons likely to be affected by them.

(5) The Authority must consult such persons as it considers appropriate when preparing or revising its statement of policy.

27K Time limits for making consumer redress orders

(1) Where no final or provisional order has been made in relation to a contravention, the Authority may not give a consumer redress order in respect of the contravention later than the end of the period of 5 years from the time of the contravention.

(2) Subsection (1) does not apply if before the end of that period—

(a) the notice under section 27I(1) relating to the order is served on the regulated person, or

(b) a notice relating to the contravention is served on the regulated person under section 28(2).

(3) Where a final or provisional order has been made in relation to a contravention, the Authority may give a consumer redress order in respect of the contravention only if the notice relating to the consumer redress order under section 27I(1) is served on the regulated person—

(a) within 3 months from the confirmation of the provisional order or the making of the final order, or

(b) where the provisional order is not confirmed, within 6 months from the making of the provisional order.

27L Enforcement of consumer redress orders

(1) Compliance with a consumer redress order is enforceable by civil proceedings by the Authority—

(a) for an injunction or interdict,

(b) for specific performance of a statutory duty under section 45 of the Court of Session Act 1988, or

(c) for any other appropriate remedy or relief.

(2) Proceedings under subsection (1) are to be brought—

(a) in England and Wales, in the High Court, or

(b) in Scotland, in the Court of Session.

(3) The obligation of a regulated person to comply with a consumer redress order is a duty owed to any person who may be affected by a contravention of the order.

(4) Without limiting the Authority's right to bring civil proceedings under subsection (1), a duty owed to any person ("P") by virtue of subsection (3) may be enforced by civil proceedings by P for any appropriate remedy or relief.

(5) For the purposes of subsection (4), the duty owed to P may in particular be enforced by P as if it were contained in a contract between P and the regulated person who owes the duty.

27M Appeals against consumer redress orders

(1) A regulated person in respect of whom a consumer redress order is made may make an application to the court under this section if the person is aggrieved by—

(a) the making of the order, or

(b) any requirement imposed by the order.

(2) An application under subsection (1) must be made within 42 days from the date of service on the regulated person of a copy of the order under section 27G(4)(a).

(3) On an application under subsection (1) the court may—

(a) quash the order or any provision of the order, or

(b) vary any such provision in such manner as the court considers appropriate.

(4) The court may exercise the powers under subsection (3) only if it considers it appropriate to do so in all the circumstances of the case and is satisfied of one or more of the following grounds—

(a) that the making of the order was not within the power of the Authority under section 27G;

(b) that any of the requirements under sections 27G(4) and 27I have not been complied with in relation to the making of the order and the interests of the regulated person have been substantially prejudiced by the non-compliance;

(c) that it was unreasonable of the Authority to require something to be done under the order (whether at all or in accordance with the provisions of the order).

(5) If an application is made under this section in relation to a consumer redress order, a requirement imposed by the order does not need to be carried out in accordance with the order until the application has been determined.

(6) Where the court substitutes a lesser amount of compensation for an amount required by the Authority in a consumer redress order, it may require the payment of interest on the substituted amount at such rate, and from such date, as it considers just and equitable.

(7) Where the court specifies as a date by which any compensation under a consumer redress order is to be paid a date before the determination of the application under this section, it may require the payment of interest on the amount from that date at such rate as it considers just and equitable.

(8) Except as provided by this section, the validity of a consumer redress order is not to be questioned by any legal proceedings whatever.

(9) In this section "the court" means—

(a) in relation to England and Wales, the High Court;

(b) in relation to Scotland, the Court of Session.

27N Consumer redress orders: miscellaneous

(1) If—

(a) compensation is required to be paid under a consumer redress order, and

(b) it is not paid by the date by which it is required to be paid in accordance with the order,

the unpaid balance from time to time carries interest at the rate for the time being specified in section 17 of the Judgments Act 1838.

(2) The Authority may not make a consumer redress order where it is satisfied that the most appropriate way of proceeding is under the Competition Act 1998.

(3) The Authority's power to make a consumer redress order as a result of a contravention of a relevant condition or requirement is not to be taken as limiting the Authority's power to impose a penalty under section 27A in relation to the same contravention (whether instead of, or in addition to, making a consumer redress order).

(4) The power of the Authority to make a consumer redress order is not exercisable in respect of any contravention before the coming into force of Schedule 14 to the Energy Act 2013.

27O Maximum amount of penalty or compensation

(1) The maximum amount of penalty that may be imposed on a regulated person in respect of a contravention may not exceed 10 per cent of the person's turnover.

(2) The maximum amount of compensation that a regulated person may be required to pay in respect of a contravention may not exceed 10 per cent of the person's turnover.

(3) Subsections (1) and (2) are subject to subsection (4) if, in respect of a contravention, both a penalty is imposed and compensation is required to be paid.

(4) The maximum amount in total of the penalty and compensation combined in respect of the contravention may not exceed 10 per cent of the turnover of the regulated person.

(5) The Secretary of State may by order provide for how a person's turnover is to be determined for the purposes of this section.

(6) An order under subsection (5) may make different provision for penalties and compensation.

(7) An order under subsection (5) shall not be made unless a draft of the instrument containing it has been laid before and approved by a resolution of each House of Parliament.

(8) In this section—

"compensation" means compensation that a regulated person is required to pay by a consumer redress order;

"penalty" means a penalty imposed on a regulated person under section 27A."

(3) In section 27A (penalties), for subsections (8) and (9) substitute—

"(8A) This section is subject to section 27O (maximum amount of penalty or compensation that may be imposed)."

(4) In the title of section 27E, after "Appeals" insert "against penalties".

(5) In section 28 (power to require information), in subsection (1) for "27F" substitute "27O".

(6) In section 106 (regulations and orders), in subsection (2)(b) for "27A" substitute "27O".

(7) An order under section 27A(8) of EA 1989 that is in force immediately before the coming into force of this paragraph—

(a) is, on the coming into force of this paragraph, to have effect as if made in accordance with section 27O(5) of that Act (as inserted by this paragraph), and

(b) is to be taken as applying in relation to a requirement to pay compensation imposed by a consumer redress order made under section 27G of that Act (as inserted by this paragraph) as it applies in relation to a penalty imposed under section 27A of that Act.

Energy Bill

A

B I L L

To make provision for or in connection with reforming the electricity market for purposes of encouraging low carbon electricity generation or ensuring security of supply; for the establishment and functions of the Office for Nuclear Regulation; about the government pipe-line and storage system and rights exercisable in relation to it; about the designation of a strategy and policy statement; for the making of orders requiring regulated persons to provide redress to consumers of gas or electricity; about offshore transmission of electricity during a commissioning period; for imposing further fees in respect of nuclear decommissioning costs; and for connected purposes.

Presented by Secretary Edward Davey,
supported by
The Prime Minister, The Deputy Prime Minister,
Secretary William Hague,
Mr Chancellor of the Exchequer,
Secretary Philip Hammond,
Secretary Vince Cable, Secretary Eric Pickles,
Secretary Owen Paterson, Oliver Letwin,
Gregory Barker and Mr John Hayes.

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July 2011

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by the Secretary of State for Energy and Climate Change
by Command of Her Majesty

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Ministerial Foreword by the Secretary of State

Electricity is a fundamental part of our daily lives. It lights our homes and streets, keeps our schools and hospitals running, and powers our businesses. That's why it is so important that the electricity market works effectively.

Since the market was privatised in the 1980s the system has worked: delivering secure and affordable electricity for the UK. But it cannot meet the challenges of the future.

Around a quarter of our existing capacity – mainly coal and nuclear power stations – will close in the next decade. Keeping the lights on will mean raising a record amount of investment. However, the current market arrangements will not deliver investment at the scale and the pace that we need.

That investment must build an electricity system fit for the future. Traditional fossil fuels leave us open to volatile prices, deepen our dependence on imported energy and emit too much carbon. Instead, we need huge investment in renewables; a new generation of nuclear stations; and, in time, gas and coal plant that can capture harmful emissions. This will diversify supply and wean us away from imported fossil fuels.

By reforming the market, we can ensure future security of supply and build a cleaner, more diverse, more sustainable electricity mix. This White Paper sets out how we will encourage this investment in the most cost-effective way.

This will mean making sure we create the right conditions to attract the investment needed to transform our system, in particular by reducing risks and setting a clear and stable framework for investors.

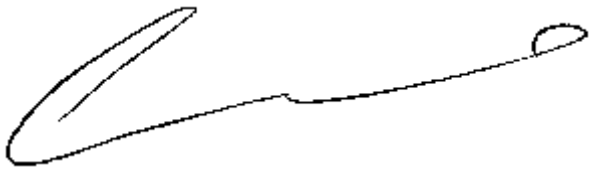
It means establishing a system where, in time, low-carbon technologies can compete against each other on a level playing field to find their place in the energy mix.

And it means making the existing market fairer:

- to consumers, who want investment to take place in the most cost-effective way so they do not pay over the odds for their electricity;
- to low-carbon generators, who currently have to compete in a market in which they are at a natural disadvantage; and
- to new entrants, who struggle to sell their electricity in a market dominated by six big firms.

But this White Paper is about more than encouraging investment in new generating capacity. The Government understands that the most cost-effective way to secure our future supplies is not just to build new power stations. We have put demand reduction and energy efficiency at the heart of our policy programme – and we are committed to making the electricity system more flexible and responsive.

These reforms will yield the biggest transformation of the market since privatisation, securing our future electricity supplies and heralding the shift toward a low-carbon economy. They will put us at the forefront of low-carbon technological development; ready to lead the world in the next energy revolution. And they will deliver secure, affordable and low carbon energy for generations to come.



The Rt. Hon. Chris Huhne MP
Secretary of State for Energy and Climate Change

EXECUTIVE SUMMARY

1. This White Paper sets out the Government's commitment to transform the UK's electricity system to ensure that our future electricity supply is secure, low-carbon and affordable.

2. The package of reforms outlined here will mean that by 2030 we will have: a flexible, smart and responsive electricity system, powered by a diverse and secure range of low-carbon sources of electricity, with a full part played by demand management, storage and interconnection; competition between low-carbon technologies that will help to keep costs down; a network that will be able to meet the increasing demand that will result from the electrification of our transport and heating systems; and we will have made this transition at the least cost to the consumer.

An unprecedented challenge

3. Electricity plays a part in almost every aspect of modern life and is vital to our economic and social wellbeing. Since privatisation in the 1980s, our competitive market and system of independent regulation has served us well; delivering reliable and affordable electricity. It is crucial for the UK's international competitiveness and economic development that this continues. However, we face a number of unprecedented challenges in the coming decades:

   - **security of supply is threatened as existing plant closes**: over the next decade we will lose around a quarter (around 20 GW) of our existing generation capacity as old or more polluting plant close. Modelling suggests that de-rated[1] capacity margins could fall below five per cent around the end of this decade, increasing the likelihood of costly blackouts. In addition to this huge reduction in existing capacity, the future electricity system will also contain more intermittent generation (such as wind) and inflexible generation (such as nuclear). This raises additional challenges in terms of meeting demand at all times, for example when the wind does not blow;

   - **we must decarbonise electricity generation**: it is vital that we take action now to transform the UK permanently into a low-carbon economy and meet our 15 per cent renewable energy target by 2020 and our 80 per cent carbon reduction target by 2050. To put us on this latter trajectory, power sector emissions need to be largely decarbonised by the 2030s. Without reform, the electricity sector would have an emissions intensity in 2030 of over three times the level advised by the Climate Change Committee. Electricity Market Reform will put in place the institutional and market arrangements to deliver the scale of change

1 The de-rated capacity margin is the capacity margin adjusted to take account of the availability of plant, specific to each type of generation technology. It reflects the probable proportion of a source of electricity which is likely to be technically available to generate (even though a company may choose not to utilise this capacity for commercial reasons).

in the power sector needed to meet the UK's carbon budgets, including the recently-adopted fourth carbon budget;

- **demand for electricity is likely to rise**: despite the improvements in household and non-domestic energy efficiency which will be generated through the introduction of the Green Deal and the roll-out of Smart Meters across the country, overall demand for electricity may double by 2050 due to the electrification of the transport, heat and other carbon-intensive sectors; and
- **electricity prices are expected to rise**: increases in wholesale costs, the carbon price and environmental policies are likely to lead to higher bills in the future, even without factoring in the huge investment needed in new infrastructure. The Government is committed to reducing the impact on consumers by making sure investment takes place in the most cost-effective way possible. The cumulative benefits to the economy of Electricity Market Reform are expected to be over £9 billion higher than business as usual over the period 2010-30[2].

4. There is broad consensus that current market arrangements will not deliver the scale of long-term investment needed, at the required pace, to meet these challenges. Nor will they give consumers the best deal. This is in part because of the sheer scale of the investment required. Up to £110 billion[3] investment in electricity generation and transmission is likely to be required by 2020, more than double the current rate of investment.

5. But it is also because the challenges of decarbonisation and security of supply are best met today through a combination of measures. The low-carbon and renewable energy objectives we have set reflect this approach, but current market arrangements do not. In particular:

   - the current market price for electricity is driven by fossil plant, such as unabated gas-fired Combined Cycle Gas Turbine (CCGT), with much lower fixed costs relative to their operational costs in contrast to, for example, nuclear or offshore wind. Investors in non-gas fired generation are also disadvantaged by being exposed to more volatile and uncertain returns when compared to gas;
   - new low-carbon generators often have to overcome relatively high barriers to market entry. High construction costs and market illiquidity make it more difficult for low-carbon generation to compete with fossil fuels and impede market access. Small and independent players are also particularly affected by the risk of not being able to find long-term buyers for their electricity;
   - the social cost of carbon is not fully reflected in the market price as this does not take into account all of the damage caused by climate change.

2 Business as usual means all current policies, including the Renewables Obligation and the Carbon Price Floor.

3 Our analysis shows that around £75 billion could be needed in new electricity generation capacity, and Ofgem's 'Project Discovery' estimated that around an additional £35 billion of investment is needed for electricity transmission and distribution.

The carbon price is also volatile and hard to predict – making long-term investment decisions more uncertain; and

- the capacity and appetite of existing market participants to finance the unprecedented levels of investment needed is uncertain.

6. There are also likely to be insufficiently strong signals to invest in the level and type of capacity that we need in order to guarantee future security of supply. This is also due to the scale of investment needed and failures within the existing market.

Our strategy

7. At the heart of our strategy is a framework that will offer reliable contracts, administered through delivery arrangements that are trusted by investors, to achieve the diverse portfolio of generation we need to meet our goals as efficiently and cost-effectively as possible. Broadly this approach consists of four parts:

   - long-term contracts for both low-carbon energy and capacity;
   - institutional arrangements to support this contracting approach;
   - continued grandfathering, supporting the principle of no retrospective change to low-carbon policy incentives, within a clear and rational planning cycle; and
   - ensuring a liquid market that allows existing energy companies and new entrants to compete on fair terms.

Contracting for Low-Carbon Generation

8. At the heart of our strategy to deliver this transition is a new system of **long-term contracts** in the form of Feed-in Tariffs with Contracts for Difference (FiT CfD), providing clear, stable and predictable revenue streams for investors in low-carbon electricity generation. This is a cheaper, more robust mechanism than the alternative support options available and provides greater certainty that we will meet our carbon emissions targets. These new contracts could be delivered by a range of possible delivery organisations – including private sector bodies.

9. In addition, there are two other complementary measures to decarbonise electricity generation. These are:

   - the introduction of a **Carbon Price Floor** (CPF) to reduce uncertainty, put a fair price on carbon and provide a stronger incentive to invest in low-carbon generation now. This was announced in Budget 2011 and represents an early and long-term signal to investors that the Government is serious about encouraging investment; and
   - an **Emissions Performance Standard** (EPS) set as an annual limit equivalent to 450g CO_2/kWh at baseload to provide a clear regulatory signal on the amount of carbon new fossil-fuel power stations can emit.

This will reinforce the requirement that no new coal-fired power stations are built without Carbon Capture and Storage (CCS).

10. The new contracting approach and wider reforms implement the coalition agreement commitments to introduce an EPS and a new system of Feed-in Tariffs (FiT) and are consistent with the agreed position[4] that new nuclear stations should receive no public support unless similar support is available to other low-carbon technologies.

11. Together, this package of measures will:

- provide a more efficient and stable framework for investors, ensuring that the cost of capital required for new low-carbon generation capacity is lower. This varies by technology but the overall effect of the cost of capital reductions from Electricity Market Reform will be a potential saving of £2.5 billion over the period to 2030[5];
- encourage investment in proven low-carbon generation technologies, but also allow new technologies such as CCS to get off the ground and allow them to become cost-effective and compete without support. This is vital to our ability to adjust to different scenarios for fossil-fuel prices;
- boost competition within the market as it will provide the framework for independent generators and new investors to invest in low-carbon generation. The ability of new entrants to come to the market will also be supported by action from Ofgem to improve liquidity;
- lead to competition within and between different low-carbon generation technologies for their appropriate role in the energy mix, as we move to technology-specific auctions for contracts towards the end of the decade, and technology-neutral auctions further in the future;
- introduce an appropriate policy framework in the electricity sector to contribute towards delivery of the fourth carbon budget; and
- achieve our aims at least cost to the consumer.

12. We also recognise that reducing demand for electricity will lower carbon emissions and is likely to be more cost-effective than building additional generating capacity. As such, we will assess whether there are sufficient support and incentives to make efficiency improvements in electricity usage and consider whether there is a need for appropriate additional measures.

13. Engaging with consumers on energy use will also be crucial. We have already taken decisive action to reduce central Government emissions by 13.8 per cent (exceeding our original target of a 10 per cent reduction)[6]. The introduction of the Green Deal[7] will enable homes and businesses to

4 http://www.decc.gov.uk/en/content/cms/news/en_statement/en_statement.aspx

5 Further detail is set out in the Impact Assessment.

6 In the period between 14 May 2010 to 13 May 2011.

7 The Green Deal will predominately help to reduce costs and carbon emissions around home heating. For the majority of homes this heating will be gas fuelled.

improve energy efficiency with no upfront cost. This will be complemented by a huge programme aimed at making sure every home in Great Britain has smart electricity and gas meters, with businesses and public sector users having smart or advanced energy metering suited to their needs. This will enable consumers to monitor and manage their energy consumption, and pave the way for a transformation in the way in which energy is supplied and used.

Contracting for Security of Supply

14. Historically the UK has benefited from robust security of supply. However the unprecedented nature of the challenge means there is a risk of uncomfortably low capacity margins towards the end of the decade. We need to take action now to address these issues and avoid problems in the future.

15. In addition, there are new opportunities from innovative technologies that will take demand off the system at times of stress, store electricity and connect our market to others in Europe. We need market arrangements that make the most of these opportunities.

16. Although we do not see security concerns until the latter half of the decade, we need to act now to address them. There are three primary challenges under the banner of security of supply:

    - **diversification of supply** – how to ensure we are not over-reliant on one source or technology and reduce our exposure to high and volatile fossil fuel prices;
    - **operational security** – how to ensure that, moment to moment, supply matches demand, given unforeseen changes in both; and
    - **resource adequacy** – how to secure sufficient reliable capacity to cover peak demand.

17. The measures outlined in this White Paper to contract for low-carbon electricity generation will have the effect of making our electricity supply more secure by encouraging a diverse range of new generation capacity and reducing our reliance on energy imports. New capacity will include renewables, CCS on gas and coal and new nuclear stations. It is clear that fossil fuels without CCS, especially gas, will also continue to have a key role to play in the coming years.

18. The System Operator, National Grid, is responsible for ensuring operational security. It does so by making sure supply balances demand at any given moment. Ofgem – as the independent regulator – is currently considering reform of some of the current mechanisms that ensure balance. The Government is supportive of reform and keen that improvements are made.

19. But these responses alone are unlikely to be enough. In order to ensure resource adequacy, the Government will legislate for a new contracting framework for capacity: a new **Capacity Mechanism**. We are seeking further views on the form this mechanism should take.

20. In this White Paper we have set out two options. The first is a targeted mechanism in the form of a Strategic Reserve, a development of the lead option from the December 2010 Electricity Market Reform consultation document, designed to address stakeholder concerns. This comprises centrally-procured capacity which is removed from the energy market and only utilised in certain extreme circumstances. The alternative would be a market-wide mechanism in which all providers willing to offer reliable capacity are provided incentives to do so. Under both options, we plan to ensure a fair and equivalent treatment of demand side resources such as storage and demand side response, alongside generation, with the aim of securing best value investment across the power system.

21. The Government recognises that reducing demand is likely to be more cost-effective than building additional capacity. This will also require better use of existing generation through the development of a more flexible electricity network. Government and Ofgem have made significant progress over the last few years on improving networks. However there are more significant challenges ahead. This White Paper sets out a high-level strategy on networks and system flexibility, detailing work over the coming months, in particular that being undertaken through the Smart Grid Forum. The Government will also develop its electricity systems policy next year, looking at the future system and focusing on challenges around balancing and system flexibility. This will include clarifying the role of demand side response, storage and interconnection, and the development of a smarter grid.

A New Institutional Framework

22. Putting in place an enduring, robust and credible institutional framework is critical to ensuring investor confidence. The institutional arrangements for administering FiT CfDs and capacity-based contracts will need to provide clarity and certainty and be trusted by investors.

23. Government will continue to set policy, ensuring the objectives of security of supply, decarbonising the electricity sector (in line with all carbon budgets) and cost-effectiveness are met.

24. It is likely that an organisation or organisations at arm's length from Government will administer the contracts. Other core functions to deliver the FiT and Capacity Mechanism include: translating the policy objectives into technical requirements, delivering the contracts, data reconciliation, managing payments, and monitoring compliance and enforcement.

25. The Government and the delivery organisation(s), working jointly, will periodically evaluate, according to a planning cycle clearly laid out in advance, their future strategy in the light of possible changes in costs, technological developments and new challenges to the energy system. The first of these assessments will be in 2016 and will also consider whether the new contract structure for low carbon is delivering all the benefits, especially for consumers, and improvements over the existing Renewables Obligation, that we expect, and on this basis consider any amendments to the future approach that may be required. As now, any

changes would be made in the light of our continued commitment to grandfathering and no retrospective change.

26. There are several key criteria that will inform the decision on which organisation(s) is best placed to take on this delivery role, including appropriate levels of accountability, independence, credit-worthiness, skills and value for money.

27. A decision on the roles and responsibilities of Government and those of the delivery institution(s), as well as more detail on functions, contracting and the planning cycle, will be set out around the turn of the year. We will continue to engage with stakeholders, as appropriate, in advance of this decision.

28. We envisage the EPS being administered outside of these arrangements. Subject to more detailed implementation planning, it is likely that the environmental regulators in each part of the UK will be best placed to administer the EPS.

Improving Market Liquidity

29. There are a number of barriers to entry and growth in electricity generation and supply markets. One of the most important is the low level of liquidity in the electricity wholesale market. Significant improvements are essential to promote a competitive market and long-term security of supply. The Government also considers liquidity reform to be critical in enabling Electricity Market Reform to deliver efficiently and cost-effectively.

30. Ofgem has set out proposals aimed at improving overall liquidity and meeting the needs of independent generators and suppliers. The Government welcomes the direction of travel set by Ofgem. Credible reference prices and routes to market are essential for low-carbon generation. The Government is working closely with Ofgem to ensure that, taken together, Electricity Market Reform and the liquidity reforms deliver the necessary improvements, including that there is enough liquidity to offer the means for independent generators of all sizes to compete effectively in the market.

31. To the extent that there are continued barriers to entry that are not addressed through Ofgem's actions, the Government will work with all stakeholders to identify appropriate solutions.

The economic case

32. The package of Electricity Market Reform measures has been designed to be the most cost-effective means to meet our objectives. This is particularly important as electricity prices and, to a lesser extent, bills are likely to rise relative to today with or without reform due to increases in wholesale costs, the carbon price and environmental policies. There is also substantial uncertainty about the outlook for fossil fuel prices, particularly gas – strengthening the case in the longer term for moving away from reliance on fossil fuels with potentially volatile prices.

33. In the short and medium term, the impact of Electricity Market Reform on bills is likely to be marginal compared to a baseline of continuing with the existing support arrangements for low-carbon generation. Average costs for households, businesses and energy intensive industries (EIIs) are likely to vary (either increase or decrease) against this baseline by less than one per cent over the initial period of reform.

34. However, towards the end of the period, reform is expected to have a more substantial impact in curbing rising bills. If we continued with current policies, average annual household electricity bills could rise by around £200 by 2030. With Electricity Market Reform, this increase in bills could be limited to around £160[8] – a saving of £40 or around six per cent. Similar figures for businesses and energy intensive industries are around seven per cent and eight per cent respectively. Energy efficiency measures can help reduce bills further.

35. As part of the transition to a low-carbon economy, we must ensure that energy intensive industries remain competitive and that we send a clear message that the UK is open for business. There would be no advantage – both for the UK economy and in terms of global emissions reductions – in simply forcing UK businesses to relocate to other countries where carbon emissions continue unabated. As such, we commit to announcing in the autumn a package of measures to reduce the impact of government policy on electricity costs for energy intensive manufacturers whose international competitiveness is most affected by our energy and climate change policies and to support EIIs in becoming more energy and carbon efficient, where it would be cost effective for them to do so. We will examine international best practice in determining how to do this. We will also work with UK-based EIIs to ensure they benefit from rapidly increasing demand for materials in low-carbon supply chains.

Making it happen

36. Together, the policies outlined above will ensure secure low-carbon energy supplies, at least cost, and help deliver on the commitment to be the greenest government ever. But to be successful we need to ensure they are implemented effectively and efficiently. That means making sure that there is a smooth transition from existing policies, working closely and collaboratively with the Devolved Administrations to develop and deliver a coherent and seamless package of reform measures in each part of the UK, and ensuring that reforms are consistent with EU law.

Transitional measures

37. It is essential that the period of transition between the current and new market arrangements runs smoothly and allows investment to continue. As such, we support the principle of no retrospective change for low-carbon investments and have listened to industry views on the best way to transition to a new mechanism. Therefore:

    - to ensure ongoing Renewables Obligation (RO) stability, existing accredited generation will continue to be supported under the RO;

8 Current policies include the Carbon Price Floor and the Renewables Obligation.

- once the FiT CfD is introduced and until 31 March 2017, to provide flexibility new renewable generation will have a one-off choice between the RO and FiT CfD;
- the RO will close to new accreditations on 31 March 2017. No generation will be able to accredit under the RO from that date; and
- we will grandfather RO support for all technologies at the rate applicable on 31 March 2017.

38. To ensure the continuity of all low-carbon development, we will work actively with relevant parties to enable early investment decisions to progress to timetable wherever possible, including those required ahead of full implementation of the FiT CfD.

Devolved Administrations

39. The Government believes that by working closely with the Devolved Administrations, we will be able to deliver the level of new low-carbon generation the UK needs. We will continue to work together to design and deliver relevant elements of the policy package and ensure that reform is consistent with the devolution settlements and takes account of existing market arrangements.

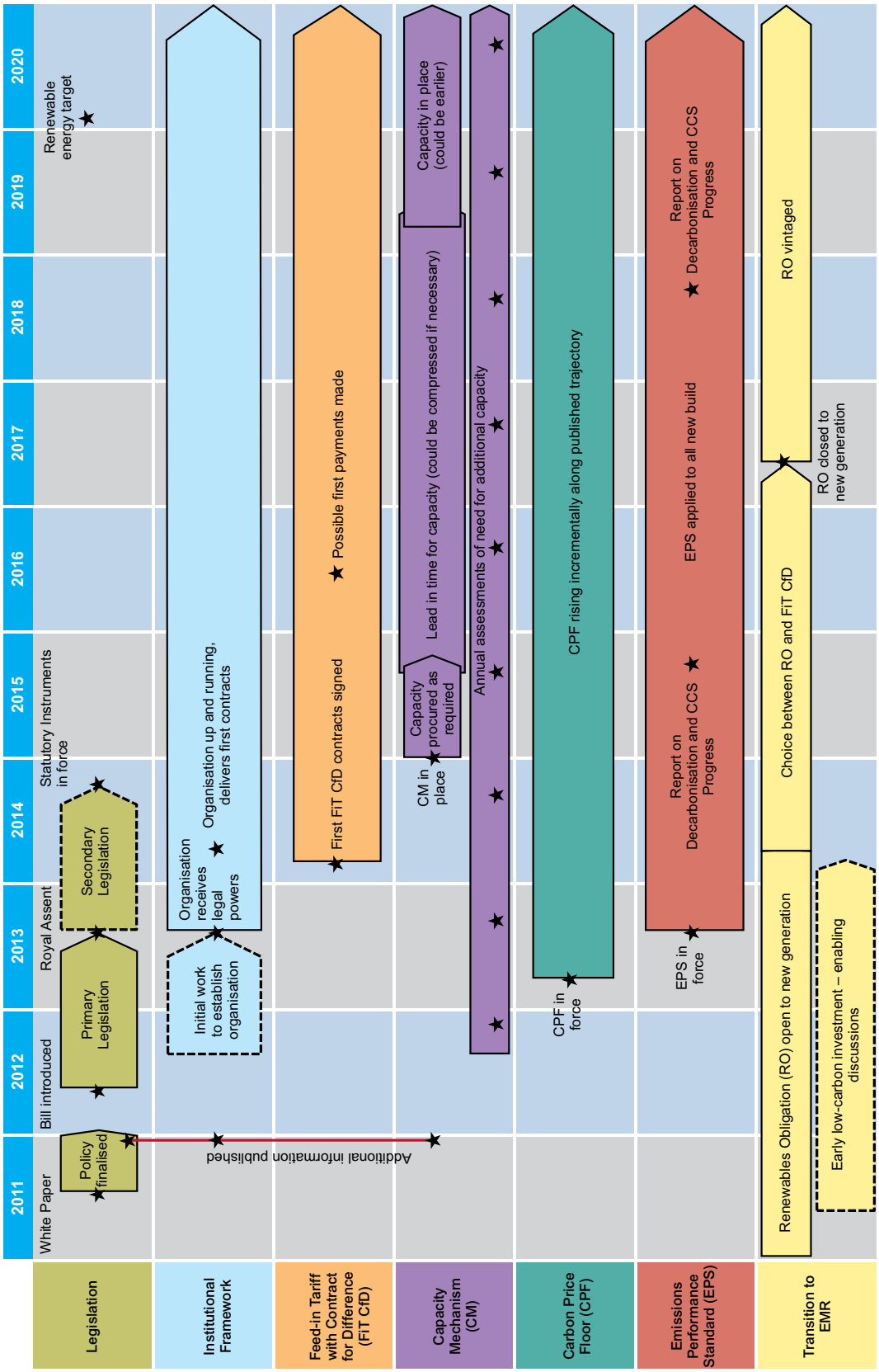
European Union

40. We are working closely with the European Commission and other stakeholders to ensure our reforms are consistent with, and complementary to, the wider integration of the GB market with EU electricity markets, of which we are fully supportive.

Next steps

41. We will publish a technical update by the end of the year. This will include:
    - the detailed design of the Capacity Mechanism; and
    - more details on the institutional arrangements needed to deliver these policies.
42. In addition, we will:
    - undertake an assessment over the coming year to determine whether DECC should take further steps to improve the support and incentives for the efficient use of electricity; and
    - develop an electricity systems policy next year, looking at the future system framework and focusing on challenges around balancing and system flexibility. This will include clarifying the role of demand side response, storage and interconnection, and the development of a smarter grid.
43. The Government intends to legislate for the key elements of this package through primary legislation in the second session, which starts in May 2012. We intend that this legislation will reach the statute book by spring 2013 so that the first low-carbon projects can be supported under its provisions in 2014. These dates are subject to Parliamentary time being available and the will of Parliament.

Figure 1: An indicative timetable for implementation and transition



Chapter 1 – Objectives, policy response and vision of Electricity Market Reform

Summary

- The Electricity Market Reform package will secure long-term electricity supply and decarbonise electricity generation, while minimising costs to the consumer.
- The Government announced in Budget 2011 that it would put in place a Carbon Price Floor to reduce investor uncertainty, put a fair price on carbon and provide a stronger incentive to invest in low-carbon generation.
- We will introduce new long-term contracts Feed-in Tariff with Contract for Difference (FiT CfD) to stabilise revenues and reduce risks to support investment in all forms of low-carbon electricity generation.
- An Emissions Performance Standard set at 450g CO_2/kWh will be introduced to provide a clear regulatory signal that new coal plants must limit their emissions.
- A Capacity Mechanism is needed to ensure future security of electricity supply. We are seeking further views on the type of mechanism required and will report on this around the turn of the year.
- This will be underpinned by a strategy for future electricity networks and work led by Ofgem to improve market liquidity. The Government is also undertaking a series of measures to improve energy efficiency, including the Green Deal.

Introduction

1.1 The electricity market needs wide-ranging reform. The complexity of the market and the scale of our ambition means a number of policy responses will be required in order to realise our goals. The detailed proposals are set out in later chapters of this White Paper. Together, these measures represent a coherent package designed to complement each other and achieve the Government's vision for Electricity Market Reform.

1.2 This section:

- sets out the high-level objectives of Electricity Market Reform;
- outlines the scale of the investment challenge;

- reviews the package of policies as set out in the Electricity Market Reform consultation document[9];
- provides a high-level summary of the responses to the consultation;
- describes the interaction between the various elements of the Government's preferred policy package;
- describes a vision of the future electricity system after market reform; and
- discusses the wider context and how the Electricity Market Reform policy package complements the wider Government agenda.

Objectives

1.3 The primary objectives of Electricity Market Reform are to:

- ensure the future security of electricity supplies;
- drive the decarbonisation of our electricity generation; and
- minimise costs to the consumer.

1.4 The key to achieving these objectives will be to bring foward the level of investment needed in new low-carbon generation capacity and infrastructure at the required pace.

Meeting the Investment Challenge

1.5 Given the scale of the investment challenge (with up to £110 billion needed in electricity generation and transmission in this decade alone), it is important we attract the necessary investment in the most cost-effective way possible.

1.6 Without reform, the existing market will not deliver the scale of long-term investment, at the pace that is needed, nor will it be able to ensure that consumers get the best deal. If we are to meet our long-term carbon and security of supply objectives, we need to reform the market now, and make investment in low-carbon generation in the UK more attractive.

1.7 We believe the package of measures set out in this White Paper will help create long-term, stable and predictable electricity market arrangements which are attractive to investors at home and overseas. This is particularly important as the existing 'Big Six' energy companies are unlikely to be able to finance all the investment at the scale and pace required.

1.8 Overcoming investment constraints will also require additional models of financing to encourage the participation of alternative sources of funding for generation and transmission projects. Given the importance of debt to finance new energy projects and the constraints faced by

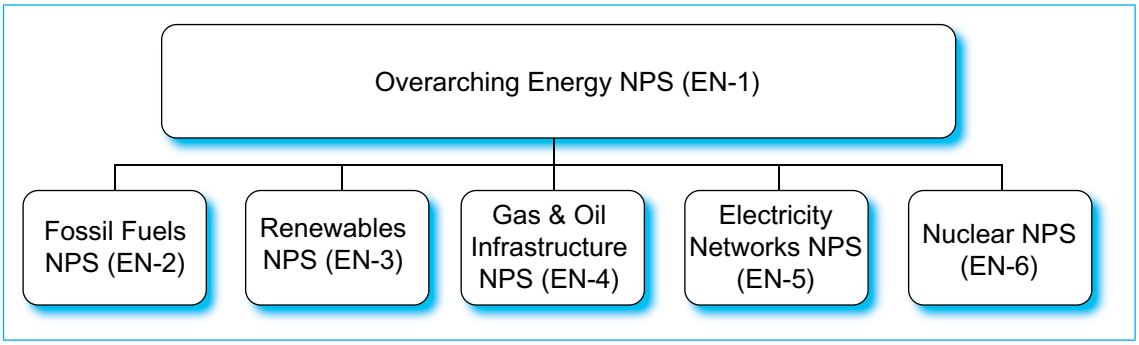
9 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

banks, it is also important that providers of debt are able to refinance their capital commitments in the public debt markets.

1.9 In recognition of these challenges and alongside the new market framework, the Government is creating a Green Investment Bank (GIB). The GIB will offer a range of financial solutions to accelerate private sector investment in the UK's transition to a green economy. The GIB will need to review the market need and potential impact of different interventions.

1.10 If we are to be successful in meeting the investment challenge, investors also need to have confidence in the planning system for major infrastructure projects. This means giving developers greater certainty on the policy framework for decision-making on major infrastructure projects. The Government has therefore put before Parliament six energy National Policy Statements (NPSs) for approval, displayed in Figure 2.

Figure 2: National Policy Statements for energy infrastructure.



1.11 The NPSs set out the need for new energy infrastructure, including electricity from a mixed portfolio of generation types, and (as set out in Chapter 6) the expansion and reinforcement of the transmission system to enable the connection of generation – especially new renewable and other low-carbon generation – into the National Grid.

1.12 The NPSs provide a clear framework for decision-making by setting out the strategic need for new infrastructure and how impacts associated with proposals can be mitigated to an acceptable level.

The Electricity Market Reform Consultation

1.13 In order to develop the measures necessary to tackle this investment challenge, the Government undertook a consultation exercise on Electricity Market Reform in December 2010. This set out a range of proposals to catalyse the cost-effective investment the UK needs to meet its carbon reduction and energy security goals. Responses to the consultation were received from a wide range of stakeholders.

This White Paper serves as the formal Government response[10] and discussion of consultation responses can be found in relevant sections.

1.14 A separate consultation exercise[11] was conducted by HM Treasury on the introduction of a Carbon Price Floor (CPF), at the same time as that carried out on Electricity Market Reform. The response to the HM Treasury consultation was published in March 2011[12].

1.15 The Electricity Market Reform consultation sought views on:

- whether respondents agreed with the Government's analysis that reform of **current market arrangements** was required to deliver our security of supply and decarbonisation objectives;
- options to support investment in low-carbon generation through a system of **Feed-in Tariffs (FiT)**, in particular whether consultees agreed with the Government's preferred option of a Feed-in Tariff with Contract for Difference (FiT CfD);
- the introduction of an **Emissions Performance Standard (EPS)** to place a regulatory limit on the amount of CO_2 produced by new fossil fuel power stations;
- options to provide security of electricity supply through a **Capacity Mechanism**, in particular whether consultees agreed with the Government's preferred option of a targeted mechanism;
- options for **packages of policies** to reform the electricity market, in particular whether respondents agreed with the Government's preferred package of a CPF, a FiT (either a FiT CfD or Premium Feed-in Tariff (PFiT)), an EPS and a targeted Capacity Mechanism; and
- issues surrounding **implementation** of reform.

Consultation Responses

Current market arrangements

1.16 The Electricity Market Reform consultation document described the existing electricity market and explained why the Government did not believe that the current market arrangements remained appropriate to deliver our objectives. There was broad consensus from consultation respondents that, without reform, the existing electricity market would not deliver the scale of long-term investment needed, at the required pace, nor would it give consumers the best deal.

10 All non-confidential responses will be published shortly after this White Paper. A full list of non-confidential respondents can be found in Annex A.

11 http://www.hm-treasury.gov.uk/consult_carbon_price_support.htm

12 http://www.hm-treasury.gov.uk/d/carbon_price_floor_consultation_govt_response

Feed-In Tariffs

1.17 The parallel consultation by HM Treasury set out the Government's proposal to introduce a CPF. However, the Government also explained that this would not in itself be enough to deliver sufficient investment in low-carbon infrastructure to meet our objectives and would not be cost effective. The Electricity Market Reform consultation described a number of other policy responses to achieve our aims, including the Government's preferred option of a FiT CfD and the leading alternative of a PFiT:

- **a PFiT**: a static payment which generators receive in addition to their revenues from selling electricity in the wholesale market; and
- **a FiT CfD**: a long-term contract set at a fixed level under which variable payments are made to top-up the level of payment to the generator to the agreed tariff. The FiT payment would be made in addition to the generator's revenues from selling electricity in the market. The FiT CfD is a two-way mechanism that has the potential to see generators return money to consumers if electricity prices are higher than the agreed tariff.

1.18 Respondents to the consultation generally accepted that a FiT CfD could be introduced, and some believed that the FiT CfD represented the most effective mechanism to increase low-carbon electricity generation, but most requested more detail on how the FiT CfD would work in practice.

1.19 A number of the consultation responses expressed concern about the complexity associated with the FiT CfD. The PFiT was preferred by a number of renewable energy companies. This was in the main because of their similarity to the current Renewables Obligation (RO), which was understood by investors, and was felt to be easier to implement.

1.20 A number of consultation responses sought more information on the impact which the use of long-term contracts (and in particular the FiT CfD) would have on the cost of capital for those building low-carbon generation.

1.21 Many of the consultation responses observed that the FiT CfD approach set out in the consultation may need to be tailored to different types of technology.

Emissions Performance Standard

1.22 The Electricity Market Reform consultation proposed to set an annual limit on the total amount of CO_2 per unit of installed capacity that new fossil fuel power stations are allowed to emit and sought views on whether that limit should be set at either:

- a level equivalent to 600g CO_2/kWh, consistent with demonstrating post-combustion Carbon Capture and Storage (CCS) on a new, supercritical coal-fired power station; or

- a level equivalent to 450g CO_2/kWh, with specific exemptions for plant forming part of the UK's CCS Demonstration Programme or benefiting from European funding for commercial-scale CCS projects.

1.23 There was no consensus from respondents on the need to introduce an EPS. Some felt that an EPS would provide a useful backstop as part of a suite of measures intended to drive decarbonisation. Others felt further regulation was unnecessary and could deter investment Consultation responses were generally split on the preferred EPS level, with some supporting the higher EPS level, and other stakeholders advocating a more stringent EPS level. Some wanted the EPS level to reduce over time.

Capacity Mechanism

1.24 The consultation set out the Government's view that, while options to improve the existing market such as improving liquidity would provide security of supply benefits, significant risks to security of supply remained. The Government consulted on the introduction of a Capacity Mechanism, with a preferred option of a targeted, rather than a market-wide, mechanism.

1.25 A number of respondents emphasised the importance of ensuring the Government was clear on the nature of the problem we were trying to solve with a Capacity Mechanism, and how it related to short-term balancing of the system. On the question of whether a Capacity Mechanism was required, some stakeholders took the view that capacity margins during this decade meant that a mechanism is likely to be needed. Others were sceptical of the need for a Capacity Mechanism and argued that the case for a significant market intervention had not been made.

1.26 A number of stakeholders expressed strong concerns about the consultation proposal to introduce a targeted mechanism. Most concerns related to the potential impacts of this mechanism on the way the electricity market operates. In particular some felt that a targeted mechanism would lead to a 'slippery slope' effect[13] under which an increasing number of fossil/peaking plants would be included in the mechanism rather than operate in the market; and/or that a targeted mechanism would simply displace generating capacity which would have been available anyway. Some stakeholders suggested that a market-wide approach would avoid some of these problems and could be a more viable in the long term. A number of stakeholders highlighted the importance of the role of non-generation forms of reliable capacity such as demand side response, storage and interconnection.

13 If being in the capacity mechanism and receiving a capacity payment was more attractive than remaining wholly in the market, it could lead to lack of investment outside of the mechanism, meaning that the central body would have to procure ever more generating capacity.

Packages

1.27 Four potential packages for reform were put forward in the consultation. The consultation set out the Government's view that all four packages were capable of delivering the Government's decarbonisation goals and ensuring security of supply. However, the Government's preferred option was for a CPF; an EPS; a FiT CfD; and a targeted Capacity Mechanism. This was because the Government believed that this was the most coherent and most cost-effective package. A further package, which included a PFiT rather than a FiT CfD, was also identified as a credible alternative.

1.28 Some respondents supported the Government's preferred package. The main reasons given were that this package was the most likely to bring forward investment across low-carbon generation as a whole, and that it had the potential to be the most cost-effective and thus most affordable for consumers.

1.29 The alternative package – including the PFiT – was the preferred option for other respondents. The main argument given was that it was the most similar to the existing RO and that this would provide the greatest certainty to renewable generators and investors.

1.30 A number of stakeholders also argued that a one-size-fits-all approach was not appropriate given varied characteristics of low-carbon technologies. For instance, some advocated the adoption of both a FiT CfD and PFiT; suggesting that it might be appropriate to have different arrangements for different types of technologies.

Implementation

1.31 The consultation also considered implementation issues, particularly the institutional arrangements necessary to deliver the FiT CfD and the Capacity Mechanism, and the transitional measures required to ensure there is no hiatus in investment while Electricity Market Reform is put in place.

1.32 On the institutional arrangements for the delivery of FiT CfD, respondents flagged the need for a credible and durable counterparty to the contracts. Views differed on who could deliver this function. Respondents also stressed that anybody with obligations under FiT CfD should be creditworthy to ensure payments can be met over the long term. Several responses also highlighted the need for the institution to have the appropriate expertise and skills to deal with these long-term mechanisms and the technologies involved.

1.33 In the case of a Capacity Mechanism, most respondents suggested that a central body should be responsible for delivery. Some suggested that the System Operator's (SO) role could be extended to cover this, but a few respondents thought that this should be independent of other commercial activities and political influence. Some respondents suggested that a central agency should be established to manage the capacity contracts as this would allow for greater transparency.

1.34 The Electricity Market Reform consultation also set out proposals for a transitional framework from the current Renewables Obligation (RO) system to FiT CfDs. Most respondents supported 'grandfathering'[14] existing investments under the RO. They also called for RO 'vintaging'[15] arrangements to be clarified as early as possible. Given the size and scale of many projects under development, there was however, some concern that the 2017 cut-off date proposed for the RO may not allow a long enough lead in time for such projects, and a number of stakeholders supported a choice between the RO and FiT CfD.

Our Proposals

1.35 The Government has carefully considered the issues raised in the consultation and this White Paper contains proposals for reform of the electricity market which represent a coherent and complementary package designed to ensure the security of future electricity supply and the decarbonisation of electricity generation, at least cost. The policy package includes:

- as announced in Budget 2011, the introduction of a **CPF** starting in 2013 to reduce uncertainty, put a fair price on carbon and provide a stronger incentive to invest in low-carbon generation;
- we will introduce **new long-term contracts** (FiT CfD) to stabilise revenues and reduce risks to support investment in all forms of low-carbon electricity generation;
- an **EPS** set as at annual limit equivalent to 450g CO_2/kWh at baseload, to provide a clear regulatory signal on the amount of carbon new fossil-fuel power stations can emit; and
- a **Capacity Mechanism** to guarantee future security of electricity supply as a quarter of ageing plant closes during this decade and the proportion of intermittent or less flexible low-carbon generation rises. We will confirm our decision on the type of mechanism around the turn of the year.

1.36 In addition, we are also undertaking further work to:

- develop by the turn of the year the detailed design of the Capacity Mechanism and more details on the institutional arrangements needed to deliver these policies;
- undertake an assessment over the coming year to determine whether DECC should take further steps to improve the support and incentives for the efficient use of electricity;

14 Grandfathering is the policy intention to maintain a fixed level of Renewables Obligation (RO) support for the full lifetime of a generating station's eligibility for the RO, from the point of accreditation. Further detail can be found in Annex D.

15 'Vintaging' the Renewables Obligation (RO) system means that it will no longer be open to accreditation for new stations. The closure of the RO to new stations will create a closed pool of capacity which will decrease over time as we approach the end date for the RO of 31 March 2037.

- develop an electricity systems policy next year, looking at the future system framework and focusing on challenges around balancing and system flexibility. This will include clarifying the role of demand side response, storage and interconnection, as part of the development of a smarter grid.

Coherence of the Policy Package

1.37 The Government recognises that it needs to provide the right market framework for industry to be able to deliver the necessary investment. Together, these measures create appropriate incentives to support investment, while ensuring that the costs to consumers are minimised.

1.38 The CPF, FiT CfD and EPS will together all drive the decarbonisation of the UK's electricity system. The CPF and FiT CfD are economic signals which act in a complementary manner, while the EPS provides a backstop regulatory signal.

1.39 The CPF builds on the existing EU Emissions Trading System (EU ETS) and provides a transparent and predictable carbon price which will make investment in low-carbon generation relatively more attractive, encouraging increasing amounts of investment as the carbon price rises and ensuring that the costs of carbon emissions are reflected fairly.

1.40 The FiT CfD will provide low-carbon electricity generators with increased confidence in their revenues through agreement of a long-term contract. If the wholesale electricity price is below the price agreed in the contract, the generator will receive a top-up payment to make up the difference. If the wholesale price is above the contract price, the generator pays the surplus back. This means that, as the CPF gradually increases the wholesale electricity price, the support needed for low-carbon generators is reduced.

1.41 The interaction of the Capacity Mechanism with the FiT CfD will depend on the type of mechanism chosen. A targeted Capacity Mechanism would require payments to be made to secure only the amount of generation capacity required to make up the expected shortfall in the market. In this mechanism, there is little interaction with the FiT CfD. There are a number of options for how a market-wide Capacity Mechanism would operate. In designing a market-wide mechanism we would consider as a key element any potential interaction with the FiT CfD.

1.42 Box 1 describes a vision of the electricity system in 2030 in which we have succeeded in attracting the necessary investment to the UK and reformed the market effectively.

Box 1: The Electricity System Following Reform

Achieving the objectives for Electricity Market Reform – together with other wider energy policy measures – will mean that in 2030 our electricity will be secure, sustainable and affordable. And the benefits of this will be felt throughout the energy sector and the wider economy.

By 2030, we will have achieved a reduction in our greenhouse gas emissions across the whole economy in line with our carbon budgets and will be firmly on track to achieving at least an 80 per cent reduction by 2050. We have substantially decarbonised electricity supply and also get more than one third of electricity generation from renewable sources.

The changes have enabled us to reduce our dependence on imported fossil fuels and lessened the impact of global price shocks and supply interruptions from overseas. A more diverse range of generation technologies has also increased our energy security and prices are being driven down by competition between technologies.

Wind power forms a substantial part of our generation mix with cost competitive wind turbines both on and offshore; wave and tidal energy technologies have proven themselves as dependable and are becoming significant means of generation; sustainable bio-energy is contributing to our electricity needs; a new generation of nuclear plants is in operation; and Carbon Capture and Storage is widely deployed on existing and new fossil fuel plants meaning carbon is stored safely underground rather than released into the atmosphere.

This range of new generation capacity is being used to power an increasing proportion of our transport and heating needs. Plug-in vehicles and heat pumps are commonplace.

The electricity market is now functioning more effectively, with fewer failures and barriers to entry than would have been the case without reform. And the transition has been made at least cost, resulting in lower bills for households and businesses than with an unreformed market.

Consumers are engaged in their electricity consumption and have the means by which to use energy more intelligently and effectively. Demand is responsive, making efficient use of available generation and network assets, meaning individuals save money and lower their personal impact on the planet. Meanwhile, investment in home insulation and energy saving devices has improved energy efficiency dramatically.

The electricity grid has evolved to accommodate more localised and intermittent sources of generation, as well as being smarter and more responsive. And we are connected much more extensively to European markets, helping to balance supply and demand by drawing on generation from across the continent when UK demand is high and exporting to other markets when there is surplus UK output.

Box 1: The Electricity System Following Reform *(continued)*

Commitment to the achievement of the UK's emissions reduction and renewable energy targets has provided the basis for business and economic development in these new sectors and the creation of green jobs. Our early move has given the UK a comparative advantage in the low-carbon sector and we are a world leader, at the forefront of technological development in this area. A large and highly skilled workforce has developed in response to the growth in the sector.

Wider Policy Context

1.43 The policy proposals within this White Paper form part of a much wider DECC agenda aimed at energy decarbonisation and security of supply. These include:

Decarbonisation

- a massive drive to improve energy efficiency through the Green Deal, the Energy Company Obligation, the roll-out of Smart Meters, the establishment of a new Office within DECC and a new commitment to reduce central government greenhouse gas emissions by 25 per cent by 2015;
- the world's first Green Investment Bank (GIB) to address market failures and help meet the low-carbon investment challenge;
- £1 billion for the creation of one of world's first commercial-scale CCS demostration plants – strengthening the UK's position as a world leader in cleaner technology;
- over £200 million to support new low-carbon innovation, including up to £60 million for offshore wind manufacturing infrastructure at ports, up to £30 million to support innovation in offshore wind component manufacture and up to £20 million for the development of marine technologies;
- the Renewables Roadmap (published alongside this White Paper), which sets out our proposals for facilitating renewables deployment to 2020, and the Microgeneration Strategy, which sets out the actions to overcome a range of non-financial barriers that could prevent the microgeneration sector from realising its full potential;

Security of Supply

- as part of the current Energy Bill, giving Ofgem powers to sharpen the commercial incentives on gas market participants to reduce the duration, likelihood, or severity of a gas emergency. Ofgem is also considering, under its 'Significant Code Review', the case for enhanced supply obligations on gas market participants (which could be implemented via legislation or licences). This should help underpin commercial demand for additional supply (or demand) side flexibility such as additional long-term contracts and storage facilities;

- maximising the economic recovery of our remaining indigenous resources of oil and gas by launching a new offshore licensing round in 2012 – subject to the outcome of the Strategic Environmental Assessment; and
- working internationally – with the EU and more widely – to promote low-carbon growth, improve interconnection, encourage necessary transitional investment in oil and gas production, and promote more reliable transit of energy.

Chapter 2 – Decarbonisation

2.1 THE CHALLENGE

2.1.1 The Government believes that climate change is one of the gravest threats we face, and that urgent action at home and abroad is required. Decarbonisation of the economy in general and the generation of electricity in particular is a key priority. Our analysis shows that change is needed to meet our 2050 targets, in particular it indicates that the majority of decarbonisation of the power sector will need to be completed by the 2030s. Decarbonising the power sector is essential for facilitating decarbonisation of other sectors in the economy.

2.1.2 The UK faces a huge investment challenge to meet our targets for electricity decarbonisation, while ensuring security of supply, and keeping electricity bills affordable. Ofgem has estimated that we need at least £110 billion[16] of new investment in electricity generation and transmission in the period to 2020. To put this in context, in the last decade the market invested less than half that amount. In a world of global competition for capital, this means both significantly increased investment by existing market participants and attracting investment from new sources of capital.

2.1.3 To meet our decarbonisation targets the majority of this new investment must be in a diverse range of low-carbon generation such as renewables, gas and coal Carbon Capture and Storage (CCS), and nuclear. Investing in diversity is key to preserving and enhancing the UK's security of supply.

The problem

2.1.4 The market has served us well. It has delivered enough capacity to keep the lights on, and to drive the UK's economy, while giving consumers some of the lowest prices in Europe.

2.1.5 However, in order to meet the challenges of the coming decades it is essential that the majority of new generation built is low carbon. Without incentives such as the current Renewables Obligation (RO), a number of factors combine to make low-carbon investment slow to come forward in the UK market and expensive to develop:

- **the EU Emissions Trading System (EU ETS) carbon price has not been certain or high enough to encourage sufficient investment in low-carbon electricity generation in the UK.** The Stern Review[17] set out the case for addressing the negative

16 Our analysis shows that around £75 billion could be needed in new electricity generation capacity, and Ofgem's 'Project Discovery' estimated that around an additional £35 billion of investment is needed for electricity transmission and distribution.

17 The Stern Review on The Economics of Climate Change, HM Treasury, 2006, http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/sternreview_index.htm

externalities associated with greenhouse gas emissions. It made clear that it is desirable for polluters to face the full social cost associated with the environmental damage they cause. The review concluded that a transparent and predictable carbon price is the most cost-effective way to encourage emitters to invest in alternative low-carbon technologies and change consumer spending patterns; and that acting sooner will also ensure a more equitable distribution of the costs of climate change for future generations;

- **the current market price for electricity is driven mainly by gas plant, such as Combined Cycle Gas Turbines (CCGTs)**, with much lower fixed costs relative to their operational costs and much lower capital costs per MW of capacity in contrast to, for example, nuclear or offshore wind; and
- **new low-carbon generators often have to overcome relatively high barriers to market entry**. These include poor market liquidity, together with high regulatory burdens and off-take risk which particularly affects smaller players.

Box 2: Why investment in low-carbon technologies differs from standard investment choices

Gas-fired power stations are a mature technology with low and predictable capital expenditure. They are quick to build and their fuel costs, which are a large proportion of operating costs, are naturally hedged because the price of electricity moves in line with the price of gas, since gas (or sometimes coal) is typically the price-setting (or marginal) plant. Their generation costs will tend to fall in line with any fall in revenues as electricity prices fall, preserving profitability.

Gas-fired power stations are able to run flexibly and can therefore relatively easily respond to shifting demand. The costs of flexing a gas plant to respond to daily peaks in demand are relatively modest although more frequent stop/start and fast ramp-up operations do have a significant impact on maintenance costs.

Each of the low-carbon technologies the Government is considering differs materially from this standard investment choice. In particular, low-carbon generation typically has high construction (capital) costs and low operating costs, and as a result low-carbon plants are wholesale price takers. It is therefore difficult to make an investment case for them in a market where wholesale electricity prices are predominantly set by the short-run marginal costs[18] of unabated gas and coal plant, even if the carbon price was high enough for their levelised costs to be similar.

2.1.6 We cannot afford to wait any longer to address the decarbonisation challenge. Doing nothing will lead to consumers paying more in the long term. We must act now because low-carbon infrastructure requires

18 The incremental cost of providing an additional unit of electricity in the short term. Typically this only includes variable costs (such as fuel) that are needed to provide the additional electricity.

significant upfront capital investment as well as a number of years to build. Decarbonisation of the power sector is also essential for facilitating the decarbonisation of other sectors of the economy as clean power generation is extended to plug-in vehicles and electric heat.

2.1.7 However, current market arrangements will not deliver the scale of investment required, or deliver it at the pace needed to keep the lights on while meeting our decarbonisation targets. To facilitate this shift the market must be reformed.

2.1.8 The Carbon Price Floor (CPF), which builds on the EU ETS, provides a floor for the cost of carbon and as a result helps to drive investment in low-carbon generation. However, the CPF alone will not cost-effectively drive all of the investment in low-carbon generation that we require.

2.1.9 The introduction of Feed-in Tariff with Contract for Difference (FiT CfD) is expected to drive decarbonisation, in a cost-effective manner. These long-term contracts will provide greater revenue certainty to investors in all forms of low-carbon generation, and remove exposure to the volatile gas price, leading to a lower cost of capital for low-carbon generation.

2.1.10 These two instruments are complementary. The CPF provides a transparent and predictable carbon price which will gradually increase the wholesale electricity price. The FiT CfD will provide low-carbon electricity generators with a guaranteed price throughout the period of the long-term contract. As the price of carbon increases and gradually raises the electricity price, the support needed for low-carbon generators through the FiT CfD is reduced. Together the package of measures are the most cost-effective means of achieving our aims.

2.1.11 Alongside these two clear economic signals to the market, the Emissions Performance Standard (EPS) will act as a regulatory backstop which will limit the emissions from new fossil-fired power stations.

2.1.12 Together these three measures will operate as a coherent package whose constituent parts reinforce each other and deliver the level of decarbonisation needed at a lower cost to consumers.

2.1.13 In the longer term, post 2030, we anticipate there will come a point at which the electricity sector is significantly decarbonised and long-term FiTs are no longer required for new generation.

Wider Context

2.1.14 In the Fourth Carbon Budget, the Government set a legally-binding goal for reducing greenhouse gas emissions for the period of 2023 to 2027 of 1950 million tonnes of CO_2 equivalent – a 50 per cent reduction on 1990 levels.

Box 3: The Government's emissions and renewables targets

The Climate Change Act 2008 establishes a long-term framework to tackle climate change. The Act aims to encourage the transition to a low-carbon economy in the UK through unilateral legally binding emissions reductions targets. This means a reduction of at least 34 per cent in greenhouse gas emissions by 2020 and at least 80 per cent by 2050.

The first three carbon budgets, covering 2008-12, 2013-17 and 2018-22 were set in law in spring 2009 and require greenhouse gas emissions to be reduced by at least 34 per cent below the 1990 baseline by 2020.

The level of the Fourth Carbon Budget for the period 2023-2027 was set in law at 1950 mtCO_2at the end of June 2011. The level set equates to a 50 per cent reduction in greenhouse gas emissions on 1990 levels for each year over the Fourth Carbon Budget period.

The Renewable Energy Directive sets a target for the UK to achieve 15 per cent of its energy consumption from renewable energy sources by 2020. At least 10 per cent of energy used by transport is also required to come from renewables by 2020.

2.1.15 Under current carbon accounting rules, the emissions reductions in the power sector that we count against our carbon budgets are calculated by reference to the EU ETS cap. The Government will review progress towards the EU emissions goal in early 2014. If at that point our domestic commitments place us on a different emissions trajectory than the ETS trajectory agreed by the EU, we propose, (depending on advice from the Committee on Climate Change and the views of the Devolved Administrations), to revise our budget to align it with the actual EU trajectory. Nonetheless it is clear that significant decarbonisation of the power sector is key to our longer-term climate change goals such as our 2050 target to reduce emissions by at least 80 per cent and action in the 2020s will be key to putting us on this pathway.

2.1.16 The Fourth Carbon Budget will put us on a pathway to our 2050 target. Government is currently carrying out further work looking at how we might deliver the necessary emissions reductions to meet the Fourth Carbon Budget and we plan to publish a report on this in the autumn. As shown in Chapter 7, the Government's proposed Electricity Market Reform policy package could if necessary deliver the kind of ambition in the power sector proposed by the Committee on Climate Change (CCC). We will be doing further work on this, looking at feasibility of different levels of emissions reductions in the power sector, over the coming months and beyond.

2.1.17 The Government is already committed to ensuring that the electricity sector delivers its share of the renewable energy target. In some scenarios this could mean approximately 30 per cent of our electricity

being generated from renewables by 2020. Much of this will be from wind power, onshore and offshore, though biomass could also play an important role. Looking beyond 2020, the Government believes that renewables have a strong role to play as part of our broader low-carbon portfolio and that emerging technologies such as wave and tidal may begin to play an increasing role. We will need to have largely decarbonised our electricity sector by the 2030s[19].

2.1.18 The recent CCC advice to Government on renewable energy concluded that there is scope for significant penetration of renewable energy to 2030 and advised pursuing a portfolio approach with each of the different low-carbon technologies playing a role.

2.1.19 Electricity Market Reform sets the economic and regulatory framework for meeting this challenge. The market reforms are complemented by both the Renewables Roadmap[20] and the Microgeneration Strategy.[21] These documents set out positive action to tackle some of the obstacles which could otherwise slow the decarbonisation of electricity. As part of this work, the Government recognises the benefit that decentralised supply and distributed generation can play, particularly in the context of delivering solutions that maximise local opportunities and meet the need and demands of local people and their communities. It is expected that distributed generation using eligible low-carbon technologies will be able to access the FiT CfD on the same terms as other generation types.

Box 4: The Renewables Roadmap

The Renewables Roadmap is published alongside the Electricity Market Reform package. The Roadmap focuses in particular on the eight technologies which evidence from the market suggests now have either the greatest potential to help the UK meet the 2020 renewable energy target in a cost-effective and sustainable way, or offer the greatest potential for the decades that follow. It outlines specific actions to remove the barriers to renewables deployment. Alongside the Roadmap, the Microgeneration Strategy sets out the actions that the Government is taking to tackle the non-financial barriers which could prevent the microgeneration sector from realising its full potential.

Taking these actions will not only help drive renewable deployment across the UK but will also be key to reducing costs for consumers and enabling mature renewables to compete on a level playing field against other low-carbon technologies in the longer term.

19 DECC's 2050 analysis (http://www.decc.gov.uk/en/content/cms/tackling/2050/2050.aspx) shows that power sector emissions need to be largely decarbonised by the 2030s. The Committee on Climate Change proposed that the power sector should be close to zero-carbon by 2030.

20 http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/renewable_ener.aspx

21 http://www.decc.gov.uk/en/content/cms/meeting_energy/microgen/stragtegy/strategy.aspx.pdf.

2.1.20 Energy efficiency has an important role to play in reducing the amount of power we need and, as a result, reducing the amount of carbon emitted through electricity generation. Both demand side and supply side measures will be necessary. The Government is keen to ensure that electricity consumers contribute an appropriate share of the UK's overall improvement in energy efficiency. We will assess whether the existing package of efficiency measures is providing adequate encouragement for efficiency improvements in electricity usage and, in parallel, will study international examples to determine whether there might be appropriate additional measures we could introduce to the UK market.

2.1.21 In support of this greater focus on energy efficiency, the Government will establish a new Office within DECC to drive a step-change in national energy efficiency in the autumn. This new Office will work with leading industry experts to identify ways to drive further carbon abatement across the economy and to learn from best practice in other countries.

2.1.22 The Government will also ensure that regulations around heat products, efficiency standards and product lifecycle standards are properly aligned and that the UK engagement with the European Commission focuses on ensuring that devices, as well as the way we use them, become more efficient.

2.1.23 The Government recognises that heating and cooling accounts for a significant proportion of the UK's total energy consumption and nearly half of CO_2 emissions. Decarbonising the supply of heat across all sectors is therefore an essential component of reducing emissions by 80 per cent. The Government is therefore considering what actions are required now and through the next decade in order to ensure the supply of low-carbon, secure and affordable heating (and cooling) for homes, businesses and industry. This will complement work on Electricity Market Reform, by helping to reduce overall electricity demand and support system balancing.

2.1.24 Alongside these steps to reduce costs through domestic action, we have the potential to work with our European partners on renewables deployment. Such collaboration could provide an important mechanism to safeguard UK consumers in the event that the costs of domestic deployment do not come down and alternative, cheaper opportunities arise in other countries where the UK could 'trade' using the flexibility mechanisms set out in the Renewable Energy Directive. We plan to take powers to 'trade' renewable energy to provide this safeguard.

2.1.25 But this should not be viewed as a one-way exercise – trading also presents an opportunity for the UK. We have an abundant offshore wind resource and should also explore the possibility of exporting energy generated in UK waters to neighbouring Member States. As part of this we could see offshore wind projects connected to both the UK and mainland Europe, increasing our security of supply as part of an 'All Islands Approach'[22]. By exploiting our North Seas resources together we could also provide new manufacturing and jobs in the UK.

22 The All Islands Approach will develop an approach to energy resources across the British Islands and Ireland, to facilitate the cost-effective exploitation of the renewable energy resources available, increase integration of our markets and improve security of supply.

2.2 THE CARBON PRICE FLOOR

Summary

- In Budget 2011, the Government announced the introduction of a Carbon Price Floor (CPF) from April 2013. This is designed to top up the EU Emissions Trading System (EU ETS) carbon price to a target level for the electricity generation sector.
- The CPF will be introduced by removing from the Climate Change Levy (CCL) the current exemption for supplies of fossil fuels which are used to generate electricity in the UK. For generators who use oil to generate electricity, the amount of fuel duty they can reclaim will be varied.
- The CPF is the necessary first step in delivering a package of reforms for the electricity market to support low-carbon investment, but alone it will not drive the required investment.
- The CPF as announced in the Budget begins at around £15.70/tCO_2 in 2013 and follows a straight line to £30/tCO_2 in 2020, rising to £70/tCO_2 in 2030 (real 2009 prices).

Introduction

2.2.1 This section sets out why we consider the CPF to be a key measure to drive the necessary investment in low-carbon technology and explains how it will work alongside the EU ETS and the wider Electricity Market Reform package.

Context

The case for a Carbon Price Floor

2.2.2 The CPF is the first step to reforming the electricity market to support low-carbon investment. It gives an early and credible long-term signal to investors that the Government is serious about encouraging investment in low-carbon electricity generation.

2.2.3 Having certainty about the price of carbon is particularly important given the long lead times between the decision to invest in low-carbon generation and the plant generating electricity. High levels of uncertainty over future profitability and rates of return could increase the cost of capital for investors and deter investment altogether. If uncertainty is too great, investment will either not go ahead or capital could be diverted to less risky but more polluting forms of generation. If developers have confidence that the Government will support the carbon price over the long term, this should make a significant difference to investment decisions for new low-carbon generation.

2.2.4 The EU ETS, a cap and trade system covering the EU electricity generation sector and energy intensive industries[23], has created a market in carbon so that emissions across the EU can be abated at least cost. Although the EU ETS has achieved certainty over EU net emissions, along with a strong signal regarding the future level of the declining cap, the level of this cap (and associated carbon price) is not consistent with the pace and scale of decarbonisation that is needed for the UK to meet its 2050 targets. Thus the carbon price signal resulting from this cap has not been stable, certain or high enough to encourage sufficient investment in low-carbon electricity generation in the UK.

2.2.5 To enable a secure low-carbon transition in the UK power sector and encourage investment, the Government believes that there is a strong rationale to provide greater certainty and support to the carbon price faced by the sector. Therefore, the Government has moved to providing a stronger carbon price to promote investment in low-carbon generation over the longer term, to allow investors to include it as part of their investment appraisal.

Description of mechanism

2.2.6 Following consultation[24], the Government announced in Budget 2011 a price floor that targets £30/tCO_2 in 2020 rising to £70/tCO_2[25] in 2030 (2009 real prices[26]). A price floor of £40/tCO_2 in 2020 would have led to a faster decarbonisation trajectory and higher level of low-carbon investment. However, there would have been larger impacts on existing generators and on electricity bills, which could have undermined competitiveness and would have increased fuel costs unnecessarily. On the other hand, a price floor of £20/tCO_2 in 2020 would not have sent a strong enough signal to encourage investment. The £30/tCO_2 in 2020 CPF is shown in Figure 3.

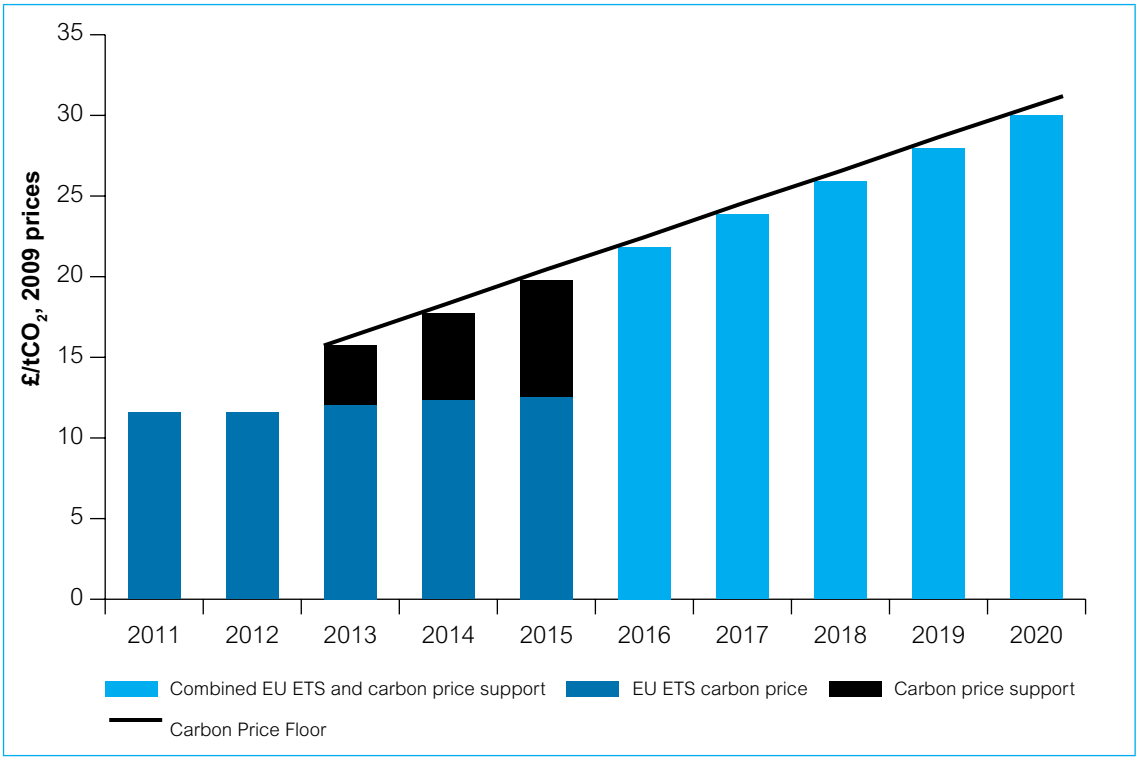
23 The EU ETS will include aviation from 2012 http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/eu_ets.aspx.

24 http://www.hm-treasury.gov.uk/d/consult_carbon_price_support.htm http://www.hm-treasury.gov.uk/d/carbon_price_floor_consultation_govt_response.pdf.

25 The Government's current estimated carbon price consistent with global action to limit the increase in temperature to 2°C is £70/tCO_2 in 2030. This estimate is subject to the progress of international negotiations and may be revised as the science of climate change develops.

26 This means prices expressed in real terms after removing the effect of inflation.

Figure 3: Carbon Price Floor to 2020.



2.2.7 Over the period 2013-30, a price floor targeting £30/tCO_2 will provide £1.9 billion of net present value benefits, achieving the right balance of encouraging investment without undermining the competitiveness of UK industry. It is expected to drive investment in low-carbon electricity generation equivalent to 7.5-9.3 GW of new capacity by 2030.

2.2.8 The carbon price support rates for 2013-14 announced in Budget 2011 are equivalent to £4.94/tCO_2. These rates represent the difference between the Government's target carbon price (the floor) and the future market price for carbon in the EU ETS in 2013. Future rates will be announced at subsequent Budgets[27] depending on the prevailing carbon price. A sustained increase in the carbon price would reduce the tax rate necessary to meet the floor. These rates will be set two years in advance to allow generators time to plan hedging strategies and avoid damaging liquidity[28].

2.2.9 From 1 April 2013, supplies of fossil fuels used in most forms of electricity generation will become liable either to the CCL or fuel duty. Supplies will be charged at the relevant carbon price support rate, depending on the type of the fossil fuel used. The rate is determined by the average carbon content of each fossil fuel.

27 For a detailed explanation of how rates are calculated, see http://www.hm-treasury.gov.uk/consult_carbon_price_support.htm

28 Further details on the interactions between Electricity Market Reform and liquidity are set out in Chapter 5.

2.2.10 The CPF is not sufficient on its own to encourage the investment needed. Therefore, it needs to be combined with a Feed-in Tariff (FiT) mechanism to be able to meet the Government's decarbonisation and renewables objectives. For the CPF to drive all of the decarbonisation which is necessary, it would have to rise significantly higher than the level delivered through EU ETS (i.e. to at least £50/tCO_2 by 2020 – £20/tCO_2 higher than the current CPF target).

2.2.11 The Government's view is that the CPF will complement the Feed-in Tariff with Contract for Difference (FiT CfD), the Government's preferred model of a Feed-in Tariff (further detail can be found in the next section). Under the FiT CfD, long-term electricity prices (driven for example by gas prices or the carbon price) do not significantly affect the overall returns earned by low-carbon generators as they adjust automatically to differences in electricity prices. Therefore while the FiT CfD and CPF together provide more certainty of revenues and make investment in low-carbon technology more attractive, they also avoid generators making excess profits and therefore minimises consumer costs.

Devolved Administrations

2.2.12 The CPF is a UK-wide policy and will drive further investment in low-carbon technologies. In that respect, the Government recognises the different structure of the Northern Ireland energy market, and will work closely with the Northern Ireland Executive to monitor the interaction with the island of Ireland Single Electricity Market, and Northern Ireland's commitment to a higher level of investment in renewable electricity.

Next steps

2.2.13 The Government has already consulted on draft primary legislation on the CPF. The primary legislative powers to implement the CPF were presented to Parliament in the 2011 Finance Bill last March[29]. Legislation relating to specific tax reliefs for Carbon Capture and Storage (CCS) and Combined Heat and Power (CHP) will be introduced in the 2012 Finance Bill, to be followed by secondary legislation later in 2012.

29 http://services.parliament.uk/bills/2010-11/financeno3.html

2.3 FEED-IN TARIFF

Summary

- Long-term contracts will be the key mechanism for encouraging investment in low-carbon generation by providing greater long-term revenue certainty to investors.
- These long-term contracts, Feed-in Tariffs with Contracts for Difference (FiT CfDs), which stabilise revenues, should increase the rate of investment and lower the cost of capital, thereby reducing costs to consumers.
- In our central scenario, the FiT CfD reduces the cost of decarbonisation to 2030 by £2.5 billion compared to using the Premium Feed-in Tariff (PFiT) to deliver the same investment.
- Under high fossil fuel price scenarios the FiT CfD can scale back support, reducing the risk of unnecessarily high returns being paid to generators as they might be under a PFiT. The ability to avoid excessive support is a key advantage of the FiT CfD.
- To reflect the different commercial and operational behaviour among different classes of generation, the Government will tailor the design of the FiT CfD for different generation types.

Introduction

2.3.1 This section sets out:

- an overview of consultation responses on the low-carbon generation support mechanism and further work undertaken as a result;
- the rationale for choosing a FiT CfD as opposed to a PFiT;
- headline proposals for the design of the FiT CfD (including on reference prices) and on the form of price discovery, highlighting where further work is needed; and
- our broad approach to wider issues relevant to the FiT CfD.

Rationale for a Feed-in Tariff with Contracts for Difference

2.3.2 As set out in Section 2.1, without further reform the existing market will not deliver the scale of long-term investment in low-carbon generation, at the pace we need, nor will it give consumers the best deal. If we are to meet our long-term carbon targets, we need to reform the market now.

2.3.3 In the Electricity Market Reform consultation document[30], the Government proposed a FiT CfD as the lead option for driving decarbonisation. A PFiT was suggested as a fall back option.

30 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

Box 5: Descriptions of Feed-in Tariff mechanisms

A **Feed-in Tariff with Contract for Difference (FiT CfD)** is a long-term contract between an electricity generator and a contract counterparty. The contract enables the generator to stabilise its revenues at a pre-agreed level (the strike price) for the duration of the contract. Under the FiT CfD, payments can flow from the contract counterparty to the generator, and vice versa.

A 'two-way' FiT CfD provides for payments to be made to a generator when the market price for its electricity (the reference price) is below the strike price set out in the contract. However, when the reference price is above the strike price, the generator pays back the difference. That is, generators return money to consumers if electricity prices are higher than the agreed tariff.

Figure 4: The operation of a baseload Feed-in Tariff with Contract for Difference

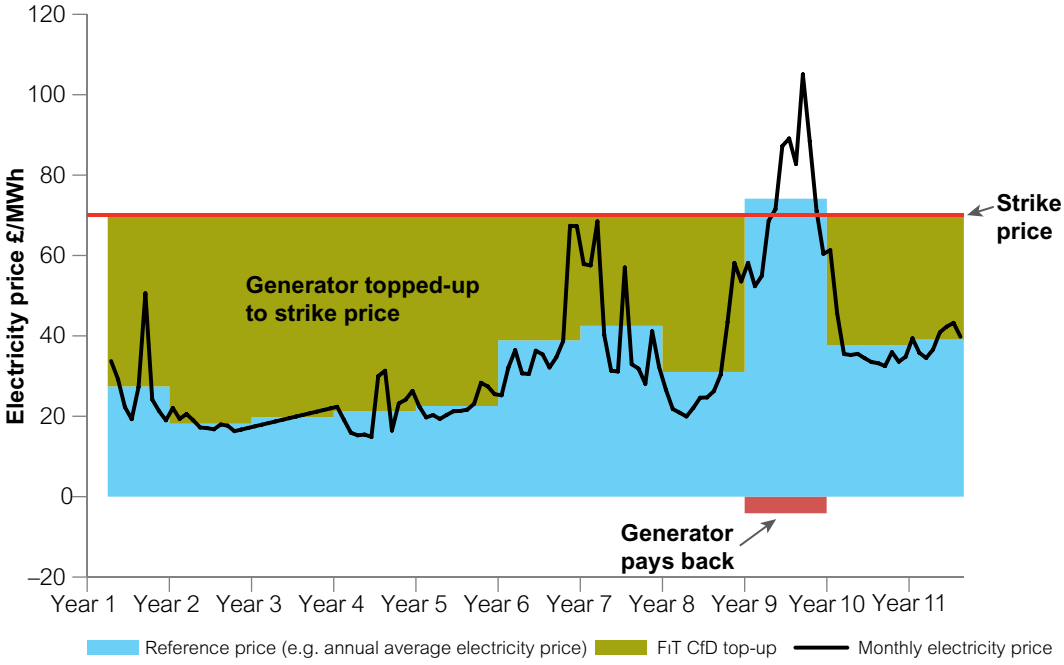
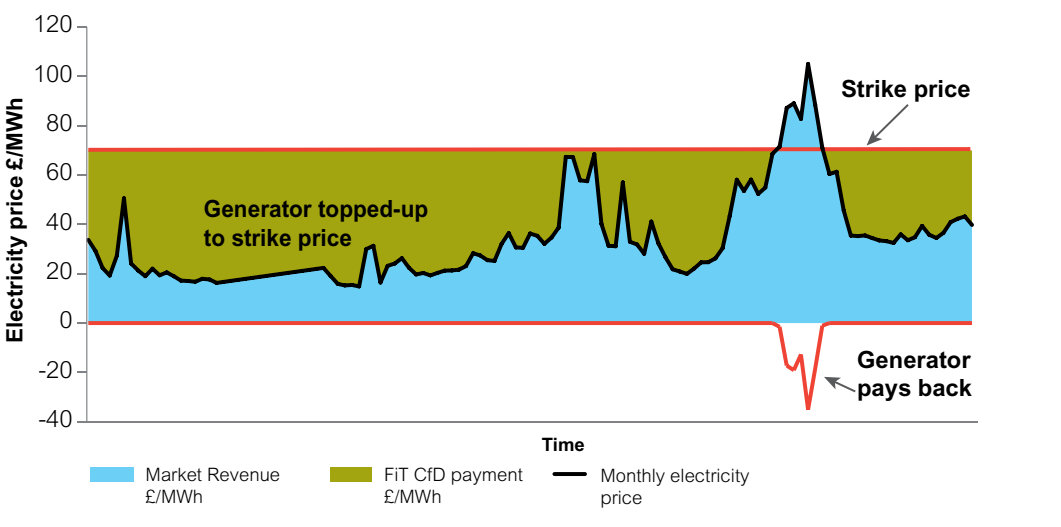


Figure 5: The operation of an intermittent Feed-in Tariff with Contract for Difference

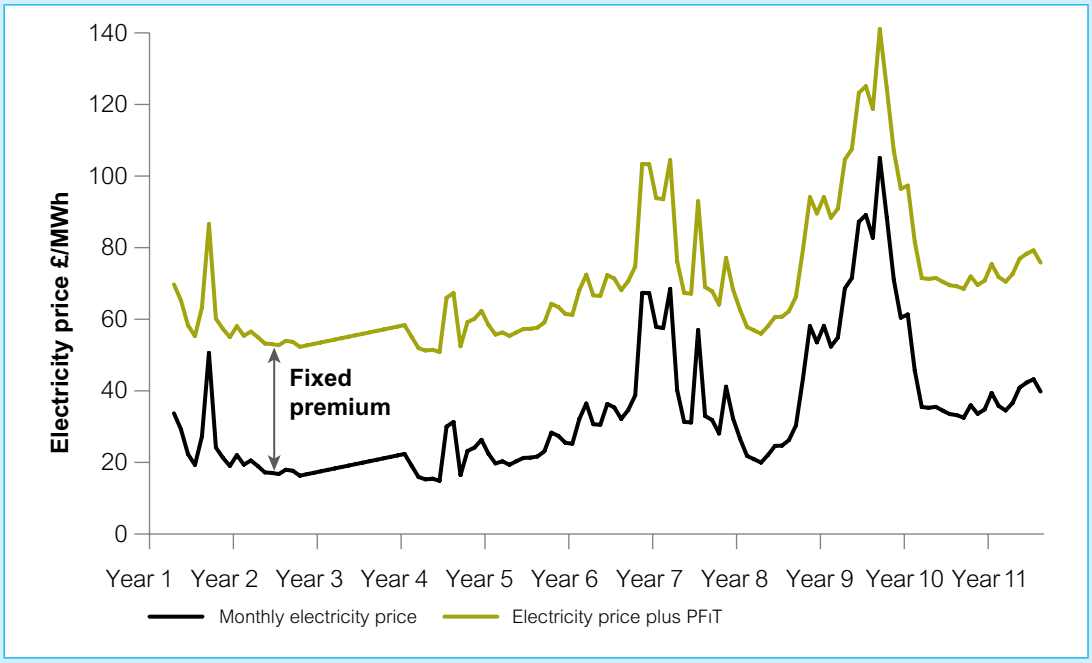


Box 5: Descriptions of Feed-inTariff mechanisms *(continued)*

This is similar to the model of FiT used in the Netherlands for renewables (though they call it a 'sliding premium') and in Denmark for offshore wind. It provides a similar level of revenue certainty to a Fixed FiT, but by setting the level of support according to the average price it preserves the efficiencies created by the market price signal, i.e. generators will have an incentive to sell their output above the average price because they will keep any upside.

A **Premium FiT (PFiT)** is a static payment which generators receive in addition to their revenues from selling electricity in the wholesale market.

Figure 6: The operation of a Premium Feed-in Tariff



2.3.4 The Electricity Market Reform consultation document established four criteria against which decarbonisation mechanisms would be judged. These were cost-effectiveness, coherence with the rest of the reform package, durability and practicality. The FiT CfD was identified as the support mechanism for low-carbon generation which offered the best balance of results across the four key criteria, because it was:

- potentially more cost-effective than the alternatives due to lower scope for rents in high electricity price scenarios and reduced cost of capital as a result of removing long-term electricity price exposure and providing long-term revenue certainty;
- complementary to other elements of the reform package, interacting particularly effectively with the Carbon Price Floor (CPF);
- a more resilient and flexible mechanism which will operate effectively in a wider range of scenarios and can deal with unanticipated

outcomes on carbon prices, fossil fuel prices or technology costs; and

- able to provide more certainty that carbon targets will be met than PFiTs, because the impact of uncertain future wholesale prices is removed in favour of predictable revenue.

2.3.5 Following the consultation, we carried out further analysis to test some of the initial conclusions set out above; and ensure that there could be a manageable transition to the new framework.

2.3.6 In particular, the Government undertook further modelling to understand:

- the impact FiT CfDs would have on cost of capital for investors in low-carbon generation in more detail;
- whether we could develop a viable model for the FiT CfD which would work in the UK market; and
- how to manage the variability of the net costs of FiT CfDs.

If these issues could not be addressed then Government indicated that a PFiT mechanism could be an effective fall-back to drive investment in low-carbon generation.

2.3.7 Support for low-carbon generators under Electricity Market Reform is likely to fall under the definition used by the ONS for indirect taxation and spending. Similar arrangements to those in place to manage the overall impact of DECC levy-funded spending, including the existing RO, would therefore apply. Decisions on the overall size of the envelope for contracts will be taken at fiscal events (Spending Reviews and Budgets) in order to consider the cost of support in the round against other pressures on Government finances.

Further analysis of the preferred option

2.3.8 Respondents to the consultation generally accepted that, in principle, a FiT CfD could be introduced, and some believed that this represented the most effective mechanism to encourage investment in low-carbon generation. However, this view was largely offered subject to the Government providing more detail on how the FiT CfD would work in practice. While a number of the consultation responses expressed concern about the perceived complexity of the FiT CfD. PFiTs were preferred by a number of stakeholders involved in developing renewable energy projects. This was in the main because of their similarity to the current system, which was understood by investors, and which meant they would be easier to implement.

2.3.9 A number of consultation responses sought more information on the impact the use of long-term contracts (and in particular the FiT CfD) would have on the cost of capital for those building low-carbon generation. There was scepticism from some stakeholders about the impact FiT CfDs could have on reducing the cost of capital.

Cost-effectiveness

2.3.10 The FiT CfD should deliver low-carbon generation in the most cost-effective manner possible. The FiT CfD promotes this cost-effectiveness in three different ways: reductions to the cost of capital those building low-carbon generation face; reductions to the overall cost of support to consumers; and impacts on individual consumer bills. We have conducted further work on each of those areas.

a) Cost of Capital

2.3.11 Following responses to the consultation, we commissioned industry analysts to undertake further work to refine our understanding of the impact long-term contracts could have on the cost of capital[31]. This new analysis[32] explicitly takes into account the views of industry participants regarding how investors make decisions. The analysis came to a similar conclusion to that conducted previously i.e. that a FiT CfD could deliver a lower cost of capital than might otherwise be achieved. It also confirmed the conclusion that the FiT CfD should reduce the cost of capital to a greater extent than the PFiT, as a result of the increased revenue certainty the FiT CfD provides.

2.3.12 Figure 7 sets out the conclusions on expected cost of capital reductions compared to business as usual. These would lead to an overall saving with a Net Present Value (NPV)[33] of around £2.5 billion over the period up to 2030.[34]

31 See the accompanying Impact Assessment for more detail.

32 Conducted by Cambridge Economic Policy Associates and published alongside this White Paper.

33 'Net Present Value' (NPV) is a way of accounting for the sum of a project's future cash flows in today's terms – showing the difference between a future stream of benefits and costs. NPV recognises that society would prefer £1 today to £1 in the future – this is known as 'time preference'. Therefore due to time preference, future cash flows are 'discounted' (using a discount rate) when calculating NPV.

34 The Total net consumer cost of support to 2030 under central scenario is £25bn NPV 2009. This is explained in more detail within the accompanying Impact Assessment.

Figure 7: Comparison of the impact of possible decarbonisation mechanisms on cost of capital

Technology	Reduction in cost of capital due to PFiT (%)	Reduction due to FiT CfD (%)	How reduction in cost of capital under FiT CfDs compares to that under PFiTs
Onshore Wind	0%	0% to 0.3%	0% to 0.3% lower under FiT CfD
Offshore Wind (emerging)	0%	0.5% to 0.8%	0.5% to 0.8% lower under FiT CfD
Offshore wind (established)	0%	0.5% to 0.8%	0.5% to 0.8% lower under FiT CfD
CCGT with CCS	0.1%	0.1%	0% (reduction is the same under each)
Coal with CCS	0.4%	0.4%	0% (reduction is the same under each)
Nuclear	0.9%	1.5%	0.6% lower under FiT CfD
Biomass (power only)	0%	0.5%	0.5% lower under FiT CfD

b) Cost of Support

2.3.13 The claw-back element of the FiT CfD ensures that the mechanism stabilises the revenue of generators, as they have to pay back the proportion of support provided when the electricity (reference) price is above the strike price. FiT CfD ultimately stabilise generators' revenues without providing support when it is not required. A PFiT in contrast pays a set top-up amount for the duration of the contract. If, as is expected, the wholesale electricity price (including the price of carbon) rises over time, the amount of revenue paid to the generators under PFiTs will continue to rise for the whole period of the contract.

2.3.14 As a result of the lower cost of capital under the FiT CfD, and the scope for greater efficiency of the mechanism in avoiding over-rewarding generators when electricity prices are high, support costs under the FiT CfD could be 30 per cent lower than under the alternative PFiT model in the period to 2030. Even in a scenario where gas prices are low and the scope for excess rents in the PFiT is reduced, analysis suggests the average annual cost of FiT CfD to bill payers is around nine per cent lower than PFiT.

c) Bill impacts

2.3.15 As a result of lower support costs the FiT CfD would also lead to lower consumer bills relative to the PFiT. By 2030, the FiT packages could mitigate the impact of rising bills by six per cent (around £40) on average for domestic consumers, compared to the baseline.[35] In contrast, average annual electricity bills in the PFiT package of policies for reform could reduce the increase in bill levels by between one and five per cent depending on the choice of Capacity Mechanism.

d) Developing a viable Feed-in Tariff with Contracts for Difference

2.3.16 The consultation document emphasised the importance of developing a FiT CfD design which worked for all forms of low-carbon generation. This was echoed by responses from stakeholders. The Government acknowledges the need for more certainty and detail around how the FiT CfDs would function in order to avoid investors delaying their decisions unnecessarily. This section gives a brief, high-level overview of the Government's design proposals for the FiT CfD. Annex B sets out the detailed rationale supporting these proposals, and the accompanying Impact Assessment published alongside this White Paper provides further information on the costs and benefits associated with the FiT CfD.

Tailoring the Feed-in Tariff with Contracts for Difference to different types of generation

2.3.17 Many of the consultation responses observed that the FiT CfD approach set out in the consultation may not suit all types of generation. Both now and in the future the UK will rely on a diverse range of generation to meet its electricity needs. It will also be important to create the right conditions for the new technologies whose early commercialisation is vital if we are to achieve our low-carbon energy goals.

2.3.18 Different types of generation have different characteristics. For example, intermittent generation such as wind operates differently to baseload plant such as nuclear, and is subject to different levels of certainty regarding output. Compared to wind, nuclear tends to provide a steady amount of output at all times when it is operating. More flexible plant, (mainly traditional fossil fuel at present, potentially Carbon Capture and Storage (CCS), biomass, good quality gas Combined Heat and Power (CHP) and new nuclear in future), has the ability to vary its output to follow demand, and may even turn off in response to prolonged periods where there is forecast to be either high levels of wind output or low demand.

2.3.19 These differing types of generation respond to different incentives. As a result, the Government will vary the key features of the FiT CfD to develop an approach that is best suited to each of the low-carbon generation types. The key aspects of the FiT CfD designs are illustrated in Figure 8 and discussed in detail in Annex B.

35 The baseline bill is one which would result in the event that current policies including the Renewables Obligation and Carbon Price Floor are continued.

Figure 8: Low-carbon Feed-in Tariff with Contracts for Difference proposals[36]

	Intermittent	Baseload
Contract Form	• Two-way FiT CfD	• Two-way FiT CfD
Strike price	• Annual inflation indexation[37]	• Annual inflation indexation • Minded not to include fuel indexation for biomass. To be confirmed for CCS.
Market Reference Price	• Day-ahead price • Choice of baseload or hourly prices • Not averaged over a longer period	• Year-ahead baseload price • Choice of price sources
Contract Volume	• Metered output	• To be confirmed, metered output or firm volume

2.3.20 A different structure may be required to influence investment in flexible low-carbon generation and one potential way to do this is through a one-way FiT CfD. Annex B provides further information. DECC will undertake further work on the arrangements for flexible generation and will produce firm proposals around the turn of the year.

Price discovery

2.3.21 In the Electricity Market Reform consultation document, the Government signalled that it was attracted to a greater use of auctioning or tendering as a mechanism to set the level of FiT CfD support. This was because the price discovery characteristics of an auction should enable financial support to be set at a level just high enough to promote deployment but not high enough to lead to excessive profits, with bids driven down by competition. However, the Government also made it clear that auctions would only be adopted if a practical way could be found to make them function in the UK electricity market and for newer technologies. The majority of respondents were sceptical about the use of auctions to set the level of support for low-carbon generation.

2.3.22 Since the consultation the Government has explored possible options for price discovery, working with experts to identify key challenges. The Government is committed to making the transition to the reformed market as smooth as possible. The Government is minded to move from administrative price discovery processes for low-carbon technologies to more competitive forms of price discovery such as auctions or tenders when the wider conditions in the market will support their successful deployment.

36 These proposals are subject to the final design of any Capacity Mechanism.

37 We recognise the need for investors to achieve a return reflecting real terms; a link between the strike price and a measure of inflation would remove the inflation risk of the investment.

2.3.23 Successful auctions or tenders minimise the risk of collusion while supporting participation from both incumbents and new entrants. They have been widely used as a result of this (examples include the 3G Telecom Licences auction and the Offshore Electricity Transmission (OFTO) auctions). There are a number of factors that will affect the ability of the institution to introduce auctions or tenders (see Chapter 4) and these include:

- having confidence that there are enough potential participants in the auction or tender for there to be competitive tension;
- knowing that the development capacity of the potential participants exceeds the volume of new development sought by the institution in a given time period or tendering round; and
- knowing that the projects or technologies eligible for the tender or auction are comparable so that the strike price is a meaningful way to discriminate between them.

2.3.24 Given the challenges involved in transition we do not believe that these conditions exist in the current market, however we will move towards technology-specific auctions or tenders towards the end of the decade and look for ways of introducing greater competition between technologies towards and into the early 2020s.

Renewables auctions or tenders

2.3.25 The UK electricity market already contains a wide range of firms that are able to invest in a broad range of renewable technologies. Furthermore, a number of the technologies that they invest in are mature (onshore wind) or rapidly maturing (offshore wind, solar, biomass), which means that the risks and uncertainties facing investors are diminishing.

2.3.26 As a result of there being a broad range of developers and diverse set of potential investments, the Government believes that it should be possible to move to more competitive types of price discovery for renewables. The move from the current price discovery system to a more competitive one will require the Government to be clear that this would not jeopardise adequate deployment of renewables.

Other low-carbon technologies

2.3.27 Other low-carbon technologies such as coal or gas CCS or nuclear have less mature markets with fewer participants. For example, there are currently only three nuclear consortia with access to sites which have been identified as strategically suited to new nuclear build. The sheer scale of the capital costs associated with these projects and the risks they face mean there is lower scope for new entry in the short term.

2.3.28 In the medium term, technology-specific auctions or tenders for commercially deployable nuclear and CCS generation should be possible. The Government intends to introduce an auction or tender process for price-setting for specific technologies from 2017. Tariffs for generation that will be commissioned prior to 2020 are most likely to be set through an administrative price setting process.

Institutional arrangements

2.3.29 The FiT CfD will require new or existing organisations to take on additional roles and responsibilities. Chapter 4 sets out the institutional arrangements and governance principles that Government is likely to apply, including to assess the impact in practice of these new contracts and to inform decisions on any necessary amendments.

Interactions with other Electricity Market Reform measures

2.3.30 The Government recognises that there will be interactions between FiT CfDs and the options for the Capacity Mechanism. We are committed to continuing to develop these mechanisms in a coherent and complementary manner. Consequently, whichever Capacity Mechanism is chosen will be developed in a manner which works effectively with the FiT CfD. See Chapter 3 for more detail.

Liquidity

2.3.31 Liquidity is a term used to describe volume of trading or ‘depth’ of the market. Liquid markets enable companies to buy or sell a product without causing a significant change in its price and without incurring significant transaction costs. Liquid markets also provide market participants with confidence in the accuracy of traded prices. This in turn informs investment decisions and can help facilitate new entry.

2.3.32 In the electricity market, the ability to buy or sell electricity quickly and without incurring significant costs is crucial to new investors unfamiliar with the market. It also gives confidence to generators that they can manage periods when they are short (or long) on electricity compared with their contractual requirements by trading electricity to manage their position. The ability to trade to balance a position is a particular issue for independent generators and therefore for potential new entrants.

2.3.33 A significant proportion of consultation respondents underlined that improving liquidity could be essential for supporting the operation of FiT CfDs. A number of stakeholders have expressed concerns that there is currently insufficient market liquidity to support an effective FiT CfD. The Government acknowledges these concerns, and agrees that it is crucial that there is strong liquidity in the electricity wholesale market for the FiT CfD to function effectively. The FiT CfD requires a robust reference price which is reflective of market fundamentals and cannot be manipulated. This is to ensure that payments made under FiT CfD cannot be distorted, which could leave consumers paying more than is necessary.

2.3.34 The Government welcomes Ofgem's commitment to tackle liquidity. Their recent consultation proposes interventions to provide the electricity market liquidity that market participants, in particular independent market players, require to compete against existing firms and to encourage competition between vertically-integrated players. The Government will continue to work closely with Ofgem to ensure that Electricity Market Reform and Ofgem's work on liquidity are effectively aligned.

2.3.35 Chapter 5 describes some of the barriers to entry faced by independent generators, including new entrants. Market liquidity is a key issue, but there are related concerns that in part may be a consequence of poor liquidity, including potentially limited routes to market for some independent generation and new entrants.

Offtake risk

2.3.36 Independent renewable electricity generators have raised concerns that poor levels of liquidity could leave them reliant on Power Purchase Agreements (PPAs) – an agreement to supply to another company – to secure finance for investment and that in the absence of a renewable obligation from 2017, PPAs would only be available at a steep discount. We note these concerns and are considering whether further action is necessary. See Chapter 5 for more detail.

Devolved Administrations

2.3.37 By working closely with the Devolved Administrations, the UK will be able to deliver the required new generation of secure low-carbon power sources. We have been discussing the FiT CfD proposals with the Devolved Administrations, and we will continue to work closely with them as we develop our proposals.

2.3.38 Our preference remains a UK-wide FiT CfD. However, because electricity policy – with the exception of nuclear generation – is devolved to Northern Ireland, we will work in partnership with the Northern Ireland Executive, which is conducting further analysis of options. We will engage constructively with the Northern Ireland Executive on its preferred solution, to ensure that, where appropriate, any Northern Irish solution can work alongside the FiT CfD in a UK-wide context.

Next steps

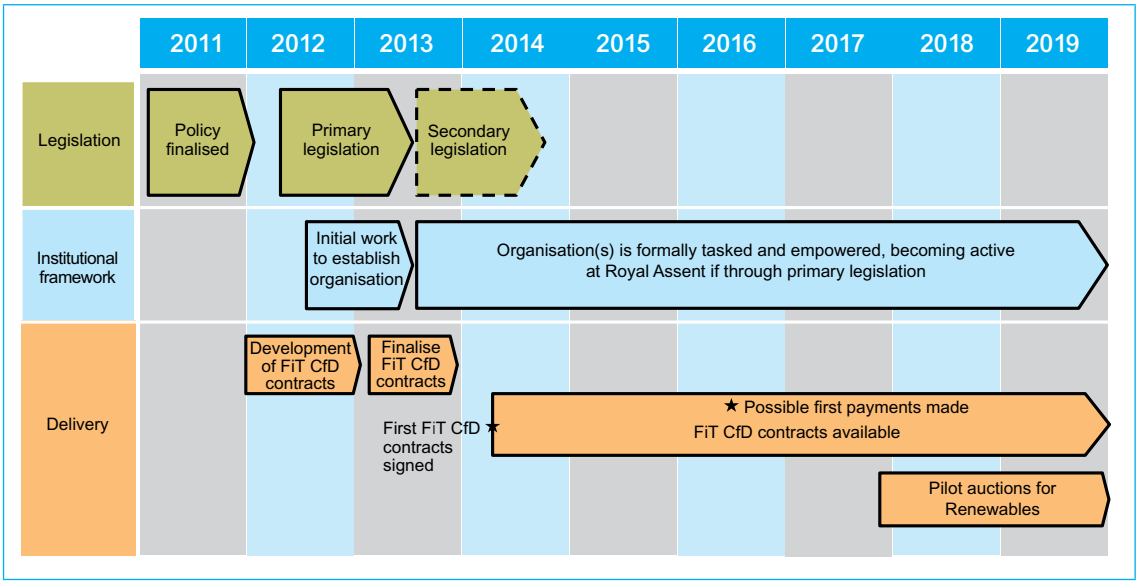
2.3.39 The Government will use FiT CfD as the key mechanism to drive decarbonisation, alongside the CPF. This is because the analysis undertaken by the Government and the responses to the consultation suggest that FiT CfD are cost-effective, offer certainty, could operate effectively in the electricity market, facilitate market entry and are resilient enough to adapt to the wide range of future scenarios.

2.3.40 Moving forward the Government will:

- continue to work closely with Ofgem to ensure the Electricity Market Reform proposals and their liquidity reforms are fully complementary;
- continue to develop its thinking on contract-letting processes and consider the best means of ensuring the processes smaller developers follow are fair, rigorous and proportionate;
- consider carefully the interactions between the FiT CfD and the Capacity Mechanism, developing both mechanisms in a coherent and complementary manner. One option might be to include an element of payment for capacity within the FiT CfD;
- bring forward legislative provisions in the second session; and
- ensure that the implementation of FiT CfD allows adequate assessment of the efficiency and effectiveness of this new mechanism.

2.3.41 Figure 9 sets out an illustrative timeline for implementation.

Figure 9: An indicative timetable for the implementation of a Feed-in Tariff



2.4 THE EMISSIONS PERFORMANCE STANDARD

Summary

- An Emissions Performance Standard (EPS) regime applicable to new fossil fuel power stations will support the UK's decarbonisation objectives.
- As set out in the Coalition Agreement, the EPS will help deliver the Government's commitment to prevent the most carbon intensive (i.e. unabated coal) power stations from being built.
- It provides a regulatory back stop on the amount of emissions that a new fossil fuel power station can emit, and in the longer term it could be used to give a clear regulatory signal to back up the economic signals provided by the Electricity Market Reform package and existing policies.
- The EPS will initially be set at a level equivalent to 450g CO_2/kWh (at baseload) for all new fossil fuel plant, except Carbon Capture and Storage (CCS) demonstration plants. It will not be retrospective.
- The EPS will be subject to regular reviews as part of the process of three-yearly reports on decarbonisation under the Energy Act 2010.
- Any changes in the level of the EPS will not apply to plant consented under the framework for a specified period. Details of this 'grandfathering' period will be determined following further engagement with stakeholders.

Introduction

2.4.1 Unabated coal plants are one of the most carbon-intensive forms of electricity generation. Although coal may have an important role to play within the UK's diverse generation mix, it is important it does so in a manner which complements the transition to a low-carbon economy.

2.4.2 This section sets out:

- the principles for applying the EPS;
- the level at which the EPS will be set;
- the treatment of existing plant under the EPS;
- the treatment of biomass and heat; and
- the flexibilities that will apply to the EPS.

Context

2.4.3 Coal and gas-fired plants will continue to play an important role in our electricity mix as the UK makes the transition to a low-carbon economy. In 2010, they provided around 75 per cent of the UK's electricity[38]. Gas in particular will be needed to provide vital flexibility to support an

38 Energy Trends, May 2011 (5.4) http://www.decc.gov.uk/publications/basket.aspx?filepath=statistics%2fsource%2felectricity%2fet5_4.xls&filetype=4&minwidth=true#basket

increasing amount of low-carbon generation and to maintain security of supply as we make the transition to a low-carbon electricity system.

2.4.4 Electricity generated from coal typically produces twice the emissions of electricity generated from gas. The UK cannot, therefore, sustain investment in new, wholly unabated coal plants if it is to meet its decarbonisation targets. New coal could perform a role in providing both security of supply and low-carbon electricity if, instead of its carbon being emitted into the atmosphere, it were captured and permanently stored in underground geological formations. This is why any new coal plant is already required to be built with CCS on at least 300 MW (net) of its capacity, and we expect that plant builts under this policy will retrofit CCS to their full capacity during their lifetime.

2.4.5 To support this and provide greater regulatory certainty, the Government also committed, in the Coalition Agreement, to the introduction of an EPS.

Rationale for an Emissions Performance Standard

2.4.6 The objective of the EPS is to ensure that while fossil fuel-fired electricity generation continues to make an important contribution to security of supply, it does so in a manner consistent with the UK's decarbonisation objectives. The EPS will act as a backstop to limit how much carbon new fossil fuel plants can emit, and work alongside the other policies set out in this White Paper as part of a suite of measures to drive decarbonisation while maintaining security of supply and affordable prices.

2.4.7 The mechanism will provide further clarity on the regulatory environment for fossil fuel power stations, building on the requirement that new coal-fired power stations must be constructed with CCS. The EPS will complement the economic signals provided by the Carbon Price Floor (CPF) and Feed-in Tariff with Contract for Difference (FiT CfD). Initially it will support the requirements set out in the National Policy Statements (NPS), and in the longer term could be used to give a clear regulatory signal on emission reductions.

2.4.8 In the future it may be appropriate to use the EPS in a different way, for example to require full CCS on some or all new fossil fuel plant once the commercial and technical viability of CCS is better understood. Introducing the measure now will provide a framework for this, without prejudging what actions may be needed in the future. Accordingly, the Government considers that the measure should be introduced in a way which provides certainty on emission limits for new plant built under this framework, but it will periodically review the impacts of the mechanism and consider whether it should be modified as part of the process of providing decarbonisation reports to Parliament under the 2010 Energy Act.

Options for an Emissions Performance Standard

2.4.9 In the Electricity Market Reform consultation document[39], the Government proposed setting an annual limit on the total amount of CO_2 per unit of installed capacity that new fossil fuel power stations are allowed to emit. The Government proposed to apply an ongoing principle of grandfathering, i.e. the level of the EPS on the date of consent of a new power station will apply for the economic life of the installation.

2.4.10 The Government sought views on two options for the level of the EPS:

- a level equivalent to 600g CO_2/kWh, consistent with demonstrating post-combustion CCS on a new, supercritical coal-fired power station; and
- a level equivalent to 450g CO_2/kWh, with specific exemptions for plant forming part of the UK's CCS Demonstration Programme or benefiting from European funding for commercial-scale CCS projects.

2.4.11 There was no consensus among respondents on the need to introduce an EPS. Some respondents felt that it would be a useful backstop as part of a suite of measures intended to drive decarbonisation. Others felt further regulation would be unnecessary and could deter investment. Consultation responses were generally split on the preferred EPS level, with some supporting the higher EPS level, and others advocating a more stringent EPS level.

2.4.12 Consultation responses largely supported an annual EPS limit calculated at baseload, mostly favoured to help minimise the security of supply risk. There were mixed views on the scope of an EPS scope, and whether it should be fuel-specific or technology-neutral. Many stakeholders, including generators, and some in the wider energy industry, were concerned that applying an EPS to gas would deter investment in new gas plants, whereas others expressed concern that applying an EPS exclusively to coal would drive investment in unabated gas.

Chosen Option

2.4.13 The Government has concluded that an EPS for fossil fuel plant, set at an annual limit of CO_2 equivalent to 450g/kWh (at baseload) should be introduced[40]. As a first step, this will build on and support the requirement to demonstrate CCS as part of the consenting process. An EPS at an equivalent of 450g CO_2/kWh will provide a clearer regulatory signal on the need to reduce emissions, and means that typical coal-fired power stations subject to the requirement must limit their emissions by 40 per cent compared to what they could otherwise emit. As part of the package of reforms outlined in this White Paper, it is also consistent with the UK's decarbonisation objectives. The level is also

39 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

40 The appropriate definition of 'Fossil Fuel' for these purposes will be the subject of further consideration prior to the introduction of any legislation.

consistent with the current average carbon emission intensity across the electricity sector[41], but without restricting the new gas plant the UK needs to be built to maintain sufficient capacity. An exemption for plant in the UK CCS Demonstration programme, or benefiting from European funding for commercial scale CCS, will provide flexibility for the UK to demonstrate the full range of CCS technologies.

2.4.14 As an annual limit on allowed emissions of CO_2 the EPS will offer the flexibility necessary to operate plant equipped with CCS, while also providing a clear requirement that new coal plant will have to reduce emissions. It will also help minimise security of supply risks, a point largely supported by consultation responses.

2.4.15 The Government will apply the EPS to individual plant rather than across a generator's portfolio. We believe that this is currently the most transparent approach to implementing the EPS.

Review

2.4.16 The EPS must provide long-term certainty to investors over regulatory measures, but at the same time, we recognise that in the future it may be appropriate to use a tighter EPS. For example, this may be appropriate once the commercial and technical viability of CCS technology, as well as costs, are better understood (respecting the key principle of grandfathering, see below). However, the Government considers that specifying a future, tighter EPS for new plant at this time would not be based on adequate evidence and could add significant investment risk given that CCS has not yet been proven for commercial-scale electricity generation.

2.4.17 There is already a statutory requirement under the Energy Act 2010 for the Government to report on progress in decarbonising the GB electricity system and on the development and use of CCS. The first reporting period ends in 2011, with further periods running on a three-year basis starting in 2012. As part of this, the Government will also review key elements of the EPS (including its level) as appropriate. In practice, the first review of the EPS will be as part of the report due by the end of 2015.

Grandfathering

2.4.18 Creating sufficient certainty for investors is a key objective of the reforms. It is important to provide investors with a sufficiently clear understanding of the regulatory environment that will govern their plant, as failure to do so may push investors towards different markets that are perceived to be less risky. With this in mind the operation of the EPS will not be retrospective. It is intended that plants which are

41 The average carbon emission intensity across power stations on an 'electricity generated' basis in 2010 was 449.4g/kWh. This figure is derived from the total electricity generated by power stations in 2010: 347601 GWh (Energy Trends, Table 5.4: Electricity production and availability from the public supply system: http://www.decc.gov.uk/publications/basket.aspx?filepath=statistics%2fsource%2felectricity%2fet5_4.xls&filetype=4&minwidth=true#basket), and total carbon emissions from power stations in 2010: 156.2 $MtCO_2$ (UK greenhouse gas emissions: provisional data tables 2010: http://www.decc.gov.uk/publications/basket.aspx?filetype=4&filepath=Statistics%2fclimate_change%2f1514-ghg-emissions-provisional-2010.xls&minwidth=true#basket)

consented before the EPS is legislated for will not be subject to the mechanism.

2.4.19 Furthermore, in order to provide sufficient certainty for investment in new plant, the Electricity Market Reform consultation proposed a principle of grandfathering for the economic life of a power station. This would mean that the level of the EPS in place at the point that a power station is consented remains at the level which is relevant for its economic life.

2.4.20 Many consultation respondents viewed the principle of grandfathering as an important provision, which reduces regulatory uncertainty and enables them to proceed with investments.

2.4.21 However, some respondents to the consultation expressed concern that the proposals could perpetuate the relative attractiveness of investment in unabated gas, discouraging investment in CCS and/or other low-carbon generation. There was also a concern that it could prevent the Government from using the mechanism to require CCS (or other measures) to reduce emissions from existing power stations in the future, once the technology is proven to be technically and commercially viable. Respondents were also unclear on what constituted 'economic life'.

2.4.22 The UK will require new gas plant to enable us to make the transition to a low-carbon electricity system while ensuring security of supply. To provide sufficient certainty for investors to build gas plants, a principle of grandfathering will be implemented. Therefore Government intends to apply this principle from the point of consent, to remove the risk that the EPS applicable to any given plant will be tightened while it is under construction.

2.4.23 Whilst we are going to need new, unabated gas in the next few years, we recognise that, in the longer term, it is likely that emissions from gas plant will need to reduce if we are to largely decarbonise the electricity sector and meet our climate change targets. In doing so, there is likely to be a role for gas plant equipped with CCS, which is why new gas plants are required to be built carbon capture ready.

2.4.24 In introducing the EPS, the Government is seeking to strike the right balance between investor certainty and appropriate support for decarbonisation. While the FiT CfD and CPF will be the primary drivers for decarbonisation and the use of CCS, and it is important to provide sufficient clarity for investors, the Government recognises that it might not be appropriate to limit its ability to tighten the EPS for plant consented under this framework indefinitely. We are, therefore, minded to grandfather on the basis of a clear and pre-determined period (i.e. the duration for which a plant will not be subject to possible changes in the level of EPS).

2.4.25 Government recognises that there are a number of options on how this could be implemented in practice, and will undertake further analysis and engage with stakeholders to clearly define the arrangements,

determine the most appropriate duration for this grandfathering period (with one suggested period being around 20 years), and determine the most practical and least disruptive mechanism to implement it.

2.4.26 While grandfathering will be an important part of the EPS, it may not be appropriate to continue offering it to new plant in the same form indefinitely. Whilst there would be no retrospective changes (i.e. no change to the grandfathering provisions a plant has already secured), as part of reviewing the EPS under the decarbonisation reporting process referred to above, the Government intends to consider whether the form of grandfathering available to new plant remains appropriate in light of the development and understanding of CCS technology and deployment, the status of decarbonisation, and the need to maintain security of supply. Grandfathering provisions (i.e. the ability of new plant to get a grandfathered EPS) will however be available at least until the end of 2015.

Upgrades and life extensions of plant

2.4.27 The Government intends that plant consented before the EPS is legislated for will not be subject to it. However, to prevent lock-in to high-carbon generation, the Government considers it also appropriate that plant which undergo significant life extensions or upgrades fall under the EPS regime. For example, this could include upgrading boilers to supercritical status, which is more efficient than the UK's existing coal-fired power stations and could extend their lifetime by a period similar in length to the lifetime of new coal plants. However, the Government recognises that there are a number of uncertainties regarding what events would constitute such significant upgrades or life extensions. We will therefore work with stakeholders to define what this should mean in practice.

2.4.28 Upgrades to comply with EU law will not trigger the bringing of a plant within the EPS, nor will retrofit of CCS or conversion works undertaken to facilitate the use of biomass. To do so could act as a disincentive to improve environmental performance of existing power stations.

Technologies

Carbon Capture and Storage

2.4.29 The Government has made it clear that the EPS will be set in a way which does not undermine the development of coal and gas CCS technology. The Government will consider the options for how to implement exemptions to the EPS for CCS demonstration plant.

Biomass

2.4.30 The Government intends to zero rate biomass under the EPS. While biomass is not carbon neutral, it is regarded as low-carbon, as the lifecycle emissions of biomass plants are significantly lower than those of fossil fuels. The Government expects sustainably sourced biomass to make a significant contribution towards achieving the UK's renewable

energy targets. Applying the EPS to any level of biomass emissions above zero could reduce the incentive to invest in sustainable biomass generation. While we accept there are issues around biomass and wider sustainability, the Government believes these can be addressed through alternative tools rather than the EPS[42].

2.4.31 Furthermore, installations which use biomass exclusively as the fuel in their combustion activities or any other process are specifically excluded from the EU Emissions Trading System (EU ETS). Consequently, choosing to effectively zero rate biomass under the EPS treats it in a manner consistent with the EU ETS.

Combined Heat and Power

2.4.32 Good Quality fossil fuel Combined Heat and Power (CHP) is a highly efficient process, and plants that use it deliver a significant reduction in carbon emissions compared to the separate methods of generating heat and power via a boiler and a power station. Good Quality CHP will be a key technology in helping to deliver our carbon budgets while the grid decarbonises, and will still play a pivotal role in providing secure and cost-effective energy supplies, particularly for industry. The Government will therefore continue to promote the development of Good Quality CHP in the UK.

2.4.33 An EPS which does not make allowances for the fuel used to generate useful heat when calculating the allowed emissions could penalise CHP facilities and act as a disincentive to investment. Some consultation respondents have argued that to be treated fairly, fuel used to produce useful heat should be subtracted before the calculations are made. For example, if the EPS only considers total fuel into a plant, a gas CHP plant that emits around 380g CO_2/kWh of electricity would have to sacrifice their heat supply and use their fuel predominantly for electricity generation.

2.4.34 The Government will look to avoid structuring the EPS in a way which could act as a disincentive to investment in CHP, as far as is practicable. The Government will look to explore the specific complexities and technicalities with stakeholders before bringing forward detailed regulations on this issue.

Institutional arrangements

2.4.35 When implementing the EPS, the Government will be looking to keep any additional regulatory burden on operators or public bodies to a minimum, and believes that it can be implemented in a manner consistent with the administration of other mechanisms. The Government also intends to apply the EPS only to plant at or over 50 MW declared net capacity.

42 The UK has introduced sustainability criteria for biomass under the Renewables Obligation, including minimum lifecycle greenhouse gas emissions savings of 60 per cent compared to the use of fossil fuel. The Government will continue to apply sustainability standards to biomass and bioliquids under the new support framework.

2.4.36 The Government's initial view, subject to more detailed implementation planning, is that the relevant environmental regulators (e.g. the Environment Agency in England and Wales and Scottish Environment Protection Agency (SEPA) in Scotland) are likely to be best placed to administer the EPS.

Interactions with the other Electricity Market Reform measures

2.4.37 Safeguarding security of supply is a key consideration for the Government, and we are committed to minimising any risks of unforeseen impacts. The Government proposed building in some flexibilities to the EPS to address short-term security of supply issues including exceptions in the event of short-term or longer-term energy supply emergencies.

2.4.38 Respondents expressed mixed views around exceptions to the application of the EPS. Most supported the principle where there are short-term energy shortfalls to protect security of supply and considered that the situations should be set out clearly in advance. Some, however, opposed it and highlighted risks such as investment uncertainties and undermining the mechanism.

2.4.39 Setting the EPS at 450g CO_2/kWh will ensure that there is no material impact on capacity margins. In addition, as an annual limit the EPS will allow for power stations to operate in an unconstrained manner during periods of high demand. However this will have to be matched by those stations running reduced hours at other times to compensate for their emissions during high demand periods. Setting the EPS in this way will enable very flexible power stations, which only operate during the periods of highest demand ('peaking plant'), to run when the system needs them. As peaking plants only run for short periods of time during the year their annual emissions would be negligible. As a result the Government does not consider this will have a material impact on overall emissions from the electricity sector.

2.4.40 The Government intends to build in the additional flexibilities proposed in the consultation, and provide for the Secretary of State for Energy and Climate Change to be able to make limited exceptions to the EPS in order to maintain energy security, for example in circumstances where there are short-term or longer-term energy supply emergencies. In such emergencies it could, for example, allow coal power stations to turn off their CCS equipment without being penalised by the EPS. This would allow those stations to provide additional electricity to the grid. Alternatively those power stations could be allowed to operate at a higher output (or load factor) than would be the case if they were always subject to EPS constraints.

2.4.41 There may be other reasons why exceptions are required, and the Government will explore the extent to which such situations exist and take appropriate steps to deal with them in designing the regime.

2.4.42 The Government will ensure that these flexibilities do not undermine the benefits of the EPS. They will be shaped and controlled carefully and will strike the balance between providing certainty while safeguarding security of supply.

Devolved Administrations

2.4.43 The Government is keen that the framework of the EPS regime should, as far as possible, cover the whole of the UK and is working closely with the Devolved Administrations in Scotland, Wales and Northern Ireland to achieve this in a way which takes appropriate account of their policy preferences, existing market arrangements and respective devolution settlements.

Next Steps

2.4.44 The Government will continue to work with stakeholders to develop the detail of key aspects of the implementation of the proposed EPS regime, including:

- the appropriate arrangements for grandfathering provisions;
- operation of exemptions;
- further definitions for upgrades or life extensions that would bring a plant under the EPS regime; and the best way to account for heat energy; and
- seek to introduce the EPS regime, probably through a mixture of new primary and secondary legislation, in the second session.

Chapter 3 – Securing future electricity supply

3.1 THE CHALLENGE

3.1.1 The UK needs secure, low-carbon and affordable electricity. Households and businesses expect there to be light and power when they need it. It is a core function of Government to ensure that these expectations are met. Historically, the UK has benefited from robust security of supply, largely due to competitive markets underpinned by robust independent regulation.

3.1.2 Over the coming years, the UK electricity market will undergo profound changes. Some of these changes will help make our electricity supplies more secure. For example, decarbonisation will encourage a diverse range of generation capacity and reduce the extent to which we rely on imported fossil fuels, and improved energy efficiency will help to limit the overall amount of electricity supply we need.

3.1.3 However, the changes to the market also raise legitimate concerns over the security of future electricity supply. Over the next decade, we will lose around a quarter of existing capacity as a result of plant closures due to ageing plants and environmental regulation. We will see a significant rise in intermittent and less flexible generation to support our climate change objectives. Our fossil fuel generation will also become increasingly dependent on imports. Reduced energy use has a central role to play in reducing the overall quantity of generation required, and demand side response (DSR) in particular can play a vital role in enabling security of supply at times of system stress, but even with increased energy efficiency we expect overall demand for electricity to increase as a result of the electrification of our transport, industry and heating systems.

3.1.4 There are also a number of market failures in the electricity market which are likely to be exacerbated by the increase in intermittent and less flexible generation[43]. Taken together, these changes and market failures mean that investment in the flexible capacity needed to ensure security of supply, particularly during extended periods of high demand and low wind, may not be forthcoming.

3.1.5 We need to ensure that the system is able to keep the lights on within this new context and put us on a sustainable pathway for the decarbonisation of our electricity system.

43 These market failures are discussed in more detail below and in the accompanying Impact Assessment http://www.decc.gov.uk/en/content/cms/legislation/white_papers/emr_wp_2011/emr_wp_2011.aspx

3.1.6 A strong, competitive market, with increasingly responsive demand and independent regulation, will be central to achieving our security of supply aims at least cost to the consumer. However, given the unprecedented nature of the challenge, business as usual is unlikely to be enough to ensure secure supply. Without action, we face a significantly increased risk of being unable to meet our energy needs, resulting in voltage reductions and blackouts as capacity margins tighten from around the end of this decade. The Government therefore believes that a Capacity Mechanism will be required to ensure security of supply.

Wider context

3.1.7 These reforms sit within a wider security of energy supply agenda aimed at reducing demand and ensuring resilient, diverse supply, in both the domestic and international markets. This includes:

- **reducing our demand for energy**. In particular, the Green Deal will finance household and business energy efficiency improvements at no up-front cost to consumers, while the roll-out of Smart Meters will enable consumers to optimise their electricity and gas demand;
- **maximising the economic recovery of our existing hydrocarbon reserves**, on which a significant proportion of our electricity generation depends. Around 20 billion barrels remain, of which around 3.5 billion are situated in the deepwater areas West of Shetland;
- **ensuring we have a strong, resilient market and infrastructure**. Gas market reform will improve our resilience to low probability/high impact events. The Green Investment Bank (GIB) will help to fund the scaling-up and deployment of green technology and clean energy projects. New import infrastructure will ensure resilient access to global energy markets, particularly for gas, oil and electricity. The development of a smarter, more flexible grid will help in the management of demand peaks. Implementing the conclusions of the Ofgem Review, including the Strategy and Policy Statement[44], will help ensure that the regulatory regime is ready to meet the new challenges that we face; and
- **continuing to play an active role internationally**. This means promoting low-carbon growth, encouraging necessary transitional investment in oil and gas production, and promoting more reliable supply of energy and enhanced price stability. And we continue to pursue the liberalisation of energy markets, in the EU and globally.

3.1.8 Electricity Market Reform is an integral part of our comprehensive approach. It will help ensure that the right long-term signals are in place to enable cost-effective investment in all forms of low-carbon generation, while ensuring security of supply and the best possible deal for consumers.

44 http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/regulation/regulation.aspx

3.2 CAPACITY MECHANISM

Summary

- We face increasing security of supply risks from around the end of this decade. This is due to two main factors: around a quarter of existing generation is closing; and a significant proportion of new generation is likely to be more intermittent and less flexible.
- Our modelling indicates that de-rated capacity margins will fall below 10 per cent around the end of this decade[45], and will significantly increase the risk of costly voltage reductions and blackouts. Market failures mean this risk is even greater.
- New non-generation measures such as demand side response (DSR), storage and new connections to other countries offer significant opportunities to improve security of supply and reduce the overall generating capacity that is needed. Market arrangements need to ensure that these approaches can play their part in enabling secure supplies for consumers.
- There are potential reforms to the current market (e.g. cash out[46]) which can help improve security of supply, but these are unlikely to be sufficient. We believe that a Capacity Mechanism will be needed, and are consulting on the type of Capacity Mechanism to be introduced. We present two options:
  - a targeted mechanism, with a proposed model of a Strategic Reserve; or
  - a market-wide mechanism, in the form of a Capacity Market.
- A consultation paper can be found in Annex C. We will set out our decision around the turn of the year and legislate to introduce the most appropriate mechanism in the second session.

Introduction

3.2.1 Ensuring security of electricity supply is a key Government priority. The Coalition Agreement emphasised our commitment to reforming energy markets to deliver security of supply.

3.2.2 The Electricity Market Reform consultation document[47] discussed the need for a Capacity Mechanism to ensure security of supply, and stated a preference for introducing a particular type of mechanism – a tender for targeted resource. Respondents had mixed views on the proposals. We have therefore carried out further analysis to strengthen our assessment on the need for, and design of, a Capacity Mechanism, and are seeking views on the type of mechanism to be introduced.

45 The de-rated capacity margin is the capacity margin adjusted to take account of the availability of generating capacity, specific to each type of generation technology. It reflects the expected proportion of a source of electricity which is likely to be technically available to generate (even though a company may choose not to utilise this capacity for commercial reasons).

46 Imbalance Settlement or 'cash out' is the process used to settle differences between the financial contracts and the physical metered volumes of market participants.

47 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

3.2.3 This section sets out:

- the problem we are trying to solve with a Capacity Mechanism;
- proposed reforms to the current market and the need to go further;
- how the introduction of a Capacity Mechanism will ensure security of supply;
- options for Capacity Mechanism design; and
- next steps in the policy development and legislative process.

3.2.4 We are consulting on the type of Capacity Mechanism to be introduced. Detailed proposals for mechanism design, and questions for stakeholders, are set out in Annex C.

Context

3.2.5 As set out above, the GB electricity market is about to undergo unprecedented changes. These changes can contribute to improving security of supply – in particular, by delivering a more diverse generation mix and more interconnection. However, these changes also pose challenges to security of supply – in particular, the retirement of existing plants, and the increased proportion of intermittent and less flexible generation on the system[48]. If we provide the right framework, industry can deliver the necessary investment in flexible capacity, including a diverse mix of generation, DSR, storage and interconnection. The Electricity Market Reform package will drive the uptake of cost-effective measures to ensure security of supply – alongside Ofgem-led reforms on cash out and liquidity.

The problem

3.2.6 A number of responses to the consultation emphasised the importance of ensuring we are clear about the nature of the problem we are trying to solve with a Capacity Mechanism, and how it relates to short-term balancing of the system. There are three different, linked challenges under the general banner of 'security of supply':

- **diversification of supply**: how to ensure we are not over-reliant on one energy source or technology and reduce our exposure to high and volatile prices;
- **operational security**: how to ensure that, moment to moment, supply matches demand, given unforeseen changes in both; and
- **resource adequacy**: how to ensure there is sufficient reliable and diverse capacity to meet demand, for example during winter anti-cyclonic conditions where demand is high and wind generation low for a number of days.

48 Our analysis, carried out by Redpoint Energy, suggests that in a scenario including the Feed-in Tariff with Contract for Difference and a Strategic Reserve to provide a 10 per cent de-rated capacity margin, around 35 GW of new capacity will be required to meet demand in 2020 given expected plant closures. Our analysis suggests that 18 GW will be wind generation which is less reliable than fossil fuel generation.

3.2.7 By diversifying our portfolio of generation technologies it is possible to address the first challenge. A higher level of intermittency potentially makes the second and third challenges greater. The second should continue to be addressed by the System Operator (SO), National Grid, through the current approach, including the procurement and operation of Short-Term Operating Reserve (STOR) – see Box 6. We propose that the Capacity Mechanism addresses the third problem, though interactions between a Capacity Mechanism and short-term balancing actions would need to be carefully considered.

3.2.8 We define ‘reliable capacity’ as capacity which is able to address the challenge of delivering resource adequacy.

3.2.9 This includes not just traditional power stations but also non-generation technologies and responses such as DSR, storage, interconnection, and other innovative approaches. These technologies and approaches have the potential to make a significant contribution to security of supply, while reducing the need for large scale infrastructure and making better use of generation assets. We intend that the proposed Capacity Mechanism would incentivise such approaches, and be compatible with a future electricity system in which consumers are engaged in their electricity consumption and demand is responsive.

Box 6: Short-Term Operating Reserve

The System Operator (SO), National Grid, is responsible for maintaining the stability of the electricity system by ensuring that supply and demand are in balance at all times. Although individual market participants will have planned ahead of time for the expected demand in each half hour, there will be times when demand is greater than forecast; and occasionally a generating unit will fail, meaning that additional generation must be brought on line to replace it.

In part, National Grid can balance the system by accepting offers and bids in the Balancing Mechanism. However, it has a responsibility to ensure that, regardless of the availability and commercial decisions of generators, it will always be able to meet its operating needs.

To fulfil this responsibility, National Grid makes an assessment of how much reserve capacity is required to manage these uncertainties in the period about four hours ahead of real time. This requirement is about 4 GW, and is largely met by the Short-Term Operating Reserve (STOR), whereby National Grid contracts reserve capacity to be made available on demand. Demand side response can be contracted through STOR if it meets the technical requirements set by National Grid.

As greater amounts of wind generation are added to the system, National Grid expects that the level of required reserve will increase, due to the need to cope with real time unexpected changes in wind generation in addition to existing challenges; this can be both the wind dropping off or blowing too hard causing generation to drop rapidly.

The proposed options for a Capacity Mechanism are not intended to remove the need for this operating reserve, though interactions between the two will need to be considered.

Rationale for a Capacity Mechanism

3.2.10 In the Electricity Market Reform consultation document we outlined reasons why we cannot be confident that the current electricity market will deliver the appropriate level of reliable capacity to produce adequate security of supply in the medium to long term.

3.2.11 Some respondents to the consultation took the view that capacity margins during this decade mean that a mechanism is likely to be needed. Others were sceptical of the need for a Capacity Mechanism and argued that the case for a significant market intervention had not been made.

Modelling of capacity margins

3.2.12 Our latest modelling of the future electricity system suggests that over the medium to longer term, investment in generation will not be sufficient to avoid potentially difficult levels of energy unserved. Even without market failures, de-rated capacity margins are expected to fall below five per cent in some years, increasing the likelihood of black

outs. Market failures are likely to exacerbate this risk.

3.2.13 If low capacity margins lead to energy unserved, there are resultant costs to consumers. For example, if de-rated capacity margins fall to 3 per cent in the early 2020s, in a year we could expect around 20 GW of energy unserved, with estimated costs to the economy of £200-600 million[49].

3.2.14 Projections are uncertain, but suggest:

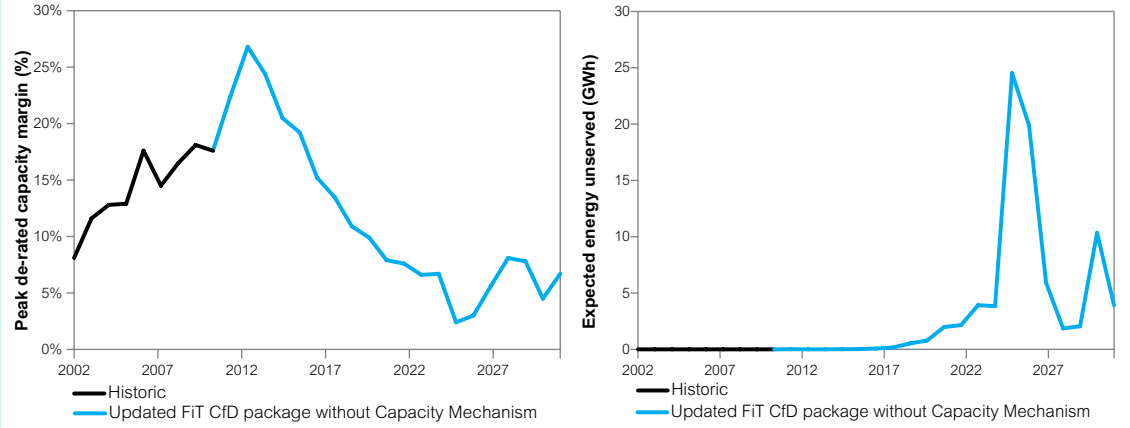
- **From now to 2013:**
  - De-rated capacity margins appear robust (but will need to be closely monitored).
- **Mid 2010s:**
  - Margins likely to become tighter as some plants impacted by the Large Combustion Plant Directive and then the Industrial Emissions Directive retire, and current nuclear plant closes. Some new construction, or de-mothballing, will be required to ensure security of supply.
- **Late 2010s:**
  - Margins tighten, intermittency grows and a Capacity Mechanism is likely to be needed to ensure security of supply; and
  - As can be seen in Figure 10, towards the end of the decade the de-rated capacity margin falls below 10 per cent, and below five per cent in more than one year.

3.2.15 Figure 10 shows the modelled capacity margin and expected energy unserved under an Electricity Market Reform scenario including FiT CfD but without a Capacity Mechanism. These projections do not include the market failures set out below[50].

49 The cost depends on the average Value of Lost Load (VoLL), which is the theoretical value to the GB economy of preventing blackouts. It is the electricity price at which an average consumer would rather be cut off than continue paying. Estimates of VoLL are very uncertain. Oxera, an economics consultancy, published a range of estimates for VoLL. We have assumed a VoLL of £10,000/MWh for our analysis.

50 These projections assume that the electricity market delivers the economically efficient level of de-rated capacity margin. Prices are allowed to rise to consumers' Value of Lost Load (VoLL) of £10,000/MWh and, in the modelling, investors know this. In reality, if investors do not believe that prices will be allowed to rise to VoLL because of the market and regulatory failures described below, then the security of supply outcomes could be worse than those modelled. For our future modelling, we will examine whether it is possible to reflect the impact of market failures on capacity margin and energy unserved.

Figure 10: Peak de-rated capacity margin and expected energy unserved (GWh) to 2030



Market failures

3.2.16 There are a number of market failures which exist in the electricity market. These include:

- **reliability is a public good** – consumers cannot buy reliability for themselves without providing it for everyone else, so there is not enough demand for generation companies to provide it[51];
- **there are barriers to entry in the wholesale market** – market liquidity is a key issue, but there are related concerns including potentially limited routes to market for some independent generation; and
- **prices in the electricity market may not send the correct signals** to ensure optimal security of supply.

3.2.17 On the latter point, expectation of price caps in energy markets leads to 'missing money'. At times of system tightness, marginal generators[52] should be able to raise their prices to the point where they can cover their long-run marginal costs, and in the limit, raise their prices to very high levels – that is, to the value at which energy consumers are indifferent to being disconnected (the Value of Lost Load (VoLL)). However, there are a number of reasons why generators may not be able to realise the necessary prices and hence not cover their long-run costs. These reasons include actions taken by the SO to balance the system that are not priced correctly, as well as regulatory intervention.

3.2.18 In particular, investors are likely to be concerned that periods of high prices will lead to regulatory intervention in the form of price caps, and this concern will reduce the incentive to invest. There are examples of regulatory intervention following periods of high prices (for example, during and following the California energy shortage of 2001-02) and

51 In future a more flexible demand side, enabled by new technologies including Smart Meters, could mean consumers have more opportunity to choose individual levels of reliability.

52 Capacity that enters the market in times of high demand/system scarcity.

investors may believe that such intervention will be likely in any future prolonged period of high prices. The reforms to the current market discussed below, such as changes to the cash out arrangements, will address some of these issues but are unlikely to fully address investors' worries concerning regulatory intervention leading to this 'missing money'.

3.2.19 We believe that the challenges posed by these market failures are likely to become more acute over the coming decade than they have historically been. At present, GB has a very comfortable margin of generation capacity and periods of scarcity are rare. This surfeit of capacity arose largely from the 'dash for gas' during the 1990s when, following privatisation of the electricity industry, a large amount of gas-fired generation was built in an investment climate conducive to its construction.

3.2.20 Given the drive to build low-carbon generation, the situation now faced by an investor who is considering building a new fossil plant is very different to that faced by an investor in gas generation in the 1990s. Many of the new low-carbon plants that will be built in the coming years will typically have very low running costs and so any new fossil plants will only run when the low-carbon plants are not running. Revenue from fossil plants will be more volatile and uncertain, and the investment decision therefore more risky.

3.2.21 In addition, it may be argued that the costs of under-investing in capacity and resulting cost of blackouts means that consumers may prefer to invest more rather than less, in order to insure themselves against the risk that exceptional conditions result in disruption, loss of service, and periods of high prices. This will mean that consumers pay more than they would without a Capacity Mechanism, but benefit from increased reliability as a result of sufficient capacity being on the system. A fuller discussion of the market failures identified here is included in the accompanying Impact Assessment[53].

Reforms to the current market

3.2.22 Ofgem is undertaking two reform processes to improve the operation of the current market: to sharpen the incentives for market players to balance supply and demand through cash out reform; and to increase the amount of electricity traded in the market through its liquidity project[54]. The Government strongly supports this work. This section sets out the Government's views on these issues in relation to security of supply.

Cash out reform

3.2.23 Electricity is traded in half hour settlement periods. Bilateral trading between generators, suppliers and intermediaries ends one hour before the half hour period in which electricity is generated, supplied

53 http://www.decc.gov.uk/en/content/cms/legislation/white_papers/emr_wp_2011/emr_wp_2011.aspx

54 http://www.ofgem.gov.uk/CustomPages/Pages/Publications.aspx

and consumed. The SO is responsible for ensuring that the electricity system remains balanced within each half hour period. The system can be out of balance when electricity generators or suppliers are also out of balance – that is, when market participants deviate from their declared intention to generate or supply electricity. The SO incurs costs on behalf of the industry for increasing or reducing supply or demand to balance the system.

3.2.24 Imbalance Settlement or 'cash out' is the process used to settle differences between the financial contracts and the physical metered volumes of market participants. Cash out prices are intended to reflect the costs the SO incurred when balancing the system. We believe the current cash out price may not fully reflect the costs of ensuring that demand and supply are in balance and at times may be too low.

3.2.25 In August 2010, Ofgem consulted on whether to undertake a Significant Code Review (SCR) of cash out[55]. We believe that cash out prices should accurately reflect the costs of balancing the system within that settlement period and we support Ofgem's intention to launch a cash out SCR. We would expect this to improve incentives for market investment in new capacity.

3.2.26 Ofgem has identified a number of areas for consideration to improve cash out. The list of issues below is not exhaustive and others may be brought forward before and throughout the process. The options are not mutually exclusive.

3.2.27 In summary the options include:

- changing to a single or fixed spread cash out price – different cash out prices for selling and buying electricity, as exist currently, provide balancing incentives but create more than one price for what is essentially the same product;
- changing to more marginal pricing – a scheme closer to marginal pricing should result in more cost reflective prices if system balancing actions can be accurately removed from the price[56];
- more effective allocation of reserve contract costs – by targeting costs to the period in which the reserve is used this should be more cost reflective[57]; and
- putting a price on the currently non-costed SO actions – customers could be compensated for involuntary voltage reductions and automatic demand disconnection, and these costs included in the cash out price.

55 Ofgem introduced the process of Significant Code Reviews (SCRs) in 2010 as a result of its review of industry code governance. SCRs give Ofgem a leadership, coordination and change initiation role where a number of code changes are necessary in order to address an issue with a significant impact on the achievement of its remit.

56 System balancing actions include balancing locational constraints and second-by-second balancing.

57 Should more accurately reflect the costs incurred by the System Operator when balancing the system to market participants that are out of balance.

3.2.28 It will be for the Gas and Electricity Markets Authority (GEMA) to decide when and whether to launch a SCR[58]. The Government is keen that Ofgem launches the cash out SCR as soon as possible, and takes account of the ongoing work on a Capacity Mechanism, but does not wait for it. We strongly encourage industry to work with Ofgem to make cash out more reflective of actual costs within the settlement period.

3.2.29 A more accurate cash out price should make the spot market price more reliable. A more reliable spot market price will in itself improve security of supply by providing greater incentives to market players to invest in development and/or retention of capacity. In addition, some forms of Capacity Mechanism would need a reliable reference price, which could be provided directly by the cash out price or indirectly by influencing the price in the spot, day ahead and forward markets[59].

3.2.30 There are risks to be managed in implementing cash out reform, including the risk that if cash out prices become more volatile, there will need to be sufficient liquidity to allow market participants (particularly smaller suppliers and generators) to trade out of imbalance positions. We would expect Ofgem to consider this issue and any related negative impacts on non-vertically integrated companies as part of its Impact Assessment.

Liquidity

3.2.31 The interaction between Ofgem's work to improve market liquidity and Electricity Market Reform is discussed in Chapter 5. We note that Ofgem's liquidity project is ongoing, and seeks to ensure that the wholesale power market better meets market participants' needs – including those of independent suppliers and generators.

3.2.32 As outlined in the Electricity Market Reform consultation document, a more liquid market could reduce security of supply risks. Improved liquidity is also important to support effective Capacity Mechanism implementation.

Government view

3.2.33 Based on current projections, we continue to believe that a Capacity Mechanism is needed to guarantee security of supply over the medium to longer term. The challenges of plants shutting as a result of environmental regulation and old age, combined with a shift to a greater proportion of low-carbon and intermittent and less flexible generation, raise credible concerns for the security of supply outlook in the latter part of this decade.

58 Ofgem is governed by the Gas and Electricity Markets Authority, which consists of non-executive and executive members and a non-executive chair.

59 'Spot' trading means trading for delivery on the same day as the trade (within day). 'Day-ahead' trading refers to buying and selling for delivery of electricity on the day after trading takes place. 'Forward' trading refers to buying and selling for delivery of electricity in the month ahead and after, and may include trades for months, seasons and years ahead of delivery.

3.2.34 There are three arguments endorsing this view:

- the Government supports Ofgem's work on liquidity and cash out, but our analysis of the electricity system indicates that even in a GB electricity market without the market failures identified above, capacity margins would fall throughout the next decade. Without a Capacity Mechanism we would expect to see increased levels of energy unserved from around the end of this decade;
- market failures that apply to electricity markets in general mean that the level of investment in reliable capacity is likely to be lower than in a market not subject to these market failures. These market failures are likely to be exacerbated by the changes taking place in the GB market; and
- when faced with uncertainty, consumers may prefer to invest more to insure themselves against the risk of disruption, loss of service and periods of high prices due to under-investment.

Options for a Capacity Mechanism

3.2.35 A well designed Capacity Mechanism will ensure security of supply by:

- providing a regular revenue stream to some or all providers of capacity, which in turn encourages greater investment in the types of capacity required to deliver resource adequacy;
- providing a more secure capacity margin than one that would be determined by the market without intervention; and
- encouraging peaking plants[60] and non-generation approaches such as a DSR and storage.

Overview of December 2010 consultation proposals

3.2.36 In the Electricity Market Reform consultation document, we set out a number of ways to implement a Capacity Mechanism, using either a targeted or market based approach:

- **capacity payment** – reimburses all providers through a payment for available capacity, with the level of payment set by a central organisation;
- **capacity obligation** – an obligation on suppliers to contract with providers for a certain level of capacity or pay a buy-out price;
- **capacity auction** – the capacity is set centrally a number of years in advance, with the price determined by an auction and paid to all resource clearing the auction;
- **reliability option** – a forward auction for a financial instrument, 'a call option', where providers must be available to the SO for distribution above the defined strike price; and

60 Power plants that generally only operate at times of high demand/scarcity.

- **tender for targeted resource** – capacity payments are only given to resource required to make up the shortfall in the market. The level of payment is set through a competitive tendering process.

3.2.37 We expressed a preference for a tender for targeted resource, and sought views on various elements of design for this approach.

Summary of responses

3.2.38 A number of stakeholders expressed strong concerns about the consultation proposal to introduce a targeted mechanism. Most concerns related to the potential impacts of this mechanism on the way the market operates. In particular some felt that a targeted mechanism would lead to a 'slippery slope' where an increasing number of fossil/peaking plants would be included in the mechanism rather than operate in the market[61]; and/or that a targeted mechanism would simply displace generating capacity which would have been available anyway. Some stakeholders suggested that a market-wide approach would avoid some of these problems and could be more viable in the long term. A number of stakeholders highlighted the importance of the role of non-generation forms of reliable capacity such as DSR, storage and interconnection.

Preferred Options

Overview of proposals

3.2.39 We have listened to concerns from stakeholders about the options we put forward in the consultation. In response, we have both refined the detail of the original preferred option to seek to address the concerns raised; and explored an alternative, market-wide model in more detail. We are seeking views in the consultation, set out in Annex C, on the detailed design of our approach for each:

- a **targeted mechanism**, with a proposed model of a **Strategic Reserve**, a development of the lead option from the Electricity Market Reform consultation document which aims to mitigate concerns raised by stakeholders. This comprises centrally-procured capacity which is removed from the electricity market and only utilised in certain circumstances; or

- a **market-wide mechanism** in the form of a **Capacity Market**, in which all providers willing to offer capacity (whether in the form of generation or non-generation technologies and approaches such as storage or DSR) can sell that capacity; and the total volume of capacity required is purchased. There are several forms of Capacity Market, depending on the nature of the 'capacity' and how it is bought and sold. In particular, there are a number of ways to purchase capacity – including through a central auction or a supplier obligation. One form of a Capacity Market is a **Reliability Market**, for which, given its innovative nature, we are keen to gain stakeholder

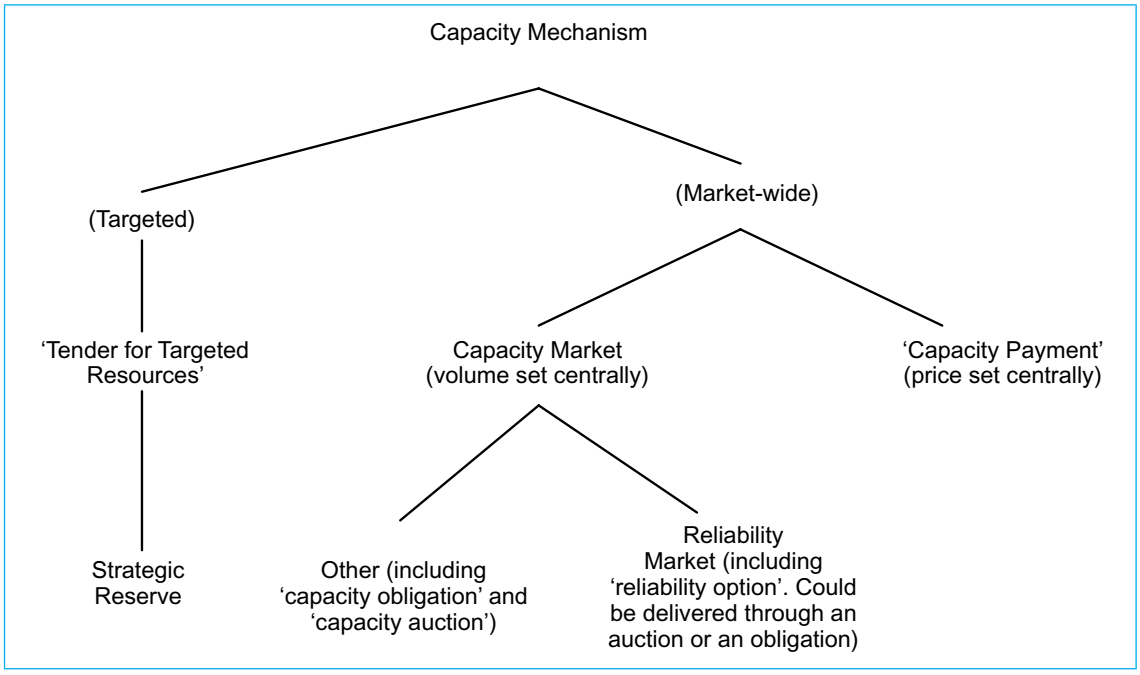
61 If being in the Capacity Mechanism and receiving a Capacity Payment was more attractive than remaining wholly in the market, it could lead to lack of investment outside of the mechanism, meaning that the central organisation would have to procure ever more generating capacity.

feedback. We recognise that there are other forms of market-wide mechanism, such as those which set price in order to incentivise sufficient volume (Capacity Payments), and these remain under consideration.

3.2.40 Figure 11 shows the kinds of Capacity Mechanism that we discuss in this chapter, and the Capacity Payments mechanism discussed in the Electricity Market Reform consultation document.

3.2.41 We will set out our preferred option in a technical update to the White Paper around the turn of the year.

Figure 11: Possible models for a Capacity Mechanism



Notes:

The Capacity Mechanism types in inverted commas are those proposed in the Electricity Market Reform consultation document.

Under a Capacity Market, one distinction is what is bought and sold (i.e. a regulatory definition of capacity or a reliability contract). Another distinction is how the capacity is bought and sold, which could be through a central auction and / or a supplier obligation.

Option: a targeted mechanism

3.2.42 We have refined our proposal for a targeted mechanism to a Strategic Reserve with the aim of addressing stakeholder concerns.

3.2.43 A Strategic Reserve is an amount of reliable capacity which is held outside the electricity market apart from under certain, exceptional conditions. A determination would be made centrally about the level of reliable capacity required as well as an assessment of whether the market would be likely to deliver this, on the basis of independent advice.

3.2.44 If no shortfall is expected then no additional capacity would be procured. When a shortfall in reliable capacity is anticipated, a central organisation would be responsible for competitively procuring the necessary volume and mix of Strategic Reserve to meet demand.

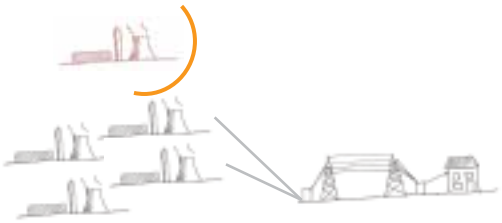
3.2.45 Criteria would be set to enable the appropriate reserve capacity to be procured. These criteria would potentially allow all forms of reliable capacity – including flexible generation, distributed generation, DSR, storage and other suitable approaches.

3.2.46 The price at which the reserve enters the market, and methodology for changing the price, were of particular concern to stakeholders given the potential for this to lead to a 'slippery slope' (see above). We propose that the Strategic Reserve would be withheld from the electricity market and only be released when prices rise above a certain level – the despatch price. A proposal for price setting is set out in Annex C.

3.2.47 The costs of a Strategic Reserve would be met by consumers through revised supplier and generator pricing arrangements. However these costs should be outweighed by the benefits of ensuring security of supply. Figure 12 shows how a Strategic Reserve would operate to ensure a capacity margin.

Figure 12: Operation of a Strategic Reserve

1. Central body procures reserve capacity but withholds it from the market …



2. … unless 'exceptional circumstances' prevail

Option: a market-wide mechanism

3.2.48 We have also considered a market-wide mechanism in the form of a Capacity Market, which would introduce a market for capacity in addition to the existing electricity market. Providers of capacity could operate in both markets.

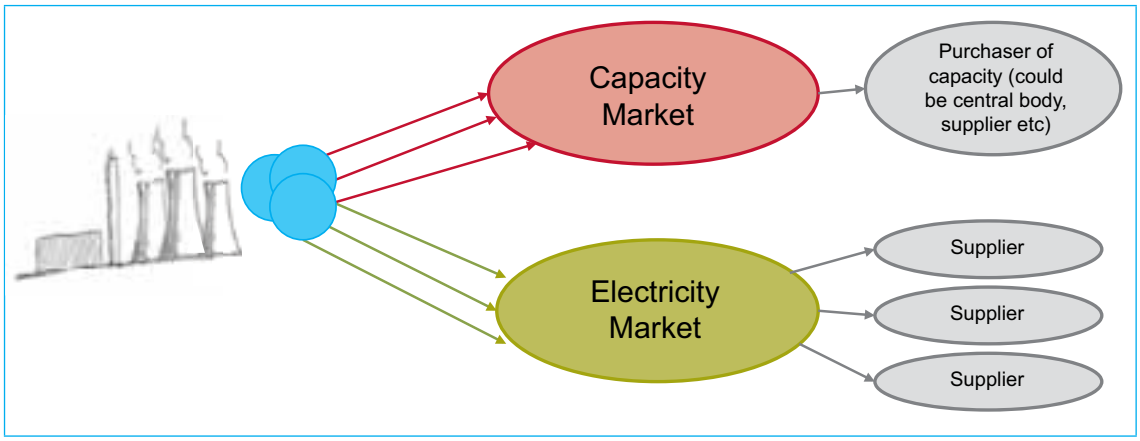
3.2.49 Figure 13 shows how a Capacity Market works. The required volume of reliable capacity would be determined by a central body based on forecasts of the peak demand some years ahead. That total amount of demand for capacity would be purchased from any provider willing to supply it, subject to its ability to be available when required. Providers of capacity could include existing generators, companies that are planning to build a new power plant, and companies offering other forms of capacity such as distributed generation, DSR, storage and other suitable approaches.

3.2.50 In effect, providers of capacity in a Capacity Market substitute uncertain returns in the electricity market for long-term certainty from the Capacity Market. Consumers benefit from certainty of supply and increased price stability.

Forms of Capacity Market

3.2.51 The term 'Capacity Market' is quite broad and covers a range of models. Any Capacity Market must address at least two questions: the nature of the product e.g. how much capacity can be offered to the market by a given power plant; and what penalties to impose if the promised capacity is not available when required during the contract period.

Figure 13: Operation of a Capacity Market.



Note:

Providers of reliable capacity participate in the Capacity Market and/or the electricity market. In the Capacity Market, they are incentivised to be available (or penalised for not being available).

3.2.52 There are a number of different forms of Capacity Market. Some Capacity Markets incentivise and regulate capacity through administrative means. For example, the PJM system in North America operates a forward capacity market known as the 'Reliability Pricing Model' (RPM)[62]. In this market, the capacity that a provider is able to offer into the market is calculated centrally based on a number of technical parameters such as outage rates. These are estimated based, for example, on historic data or through comparison with similar types of generation. A series of 'resource performance assessments' are carried out to assess whether the resource honoured its commitments during the contract period. If the resource is assessed as having failed to deliver the required level of capacity, then an administratively determined penalty is imposed and the revenue from charges given to resources that exceeded their commitment levels[63].

3.2.53 An alternative form of Capacity Market – a **Reliability Market** – uses a financial instrument to incentivise available capacity. In a Reliability Market, what is purchased from providers is a 'reliability contract' – essentially a call option. The reliability contract provides a hedge for the holder of the contract, enabling the holder to purchase electricity at no more than the strike price (or, if electricity is simply not available, to be compensated)[64]. In return for this hedge, the provider receives a payment (the option premium) which provides a more reliable source of income on which to base an investment decision.

62 PJM is the electricity transmission system serving all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

63 For further detail on the 'Reliability Pricing Model' see, for example, PJM Manual 18, PJM Capacity Market, Revision 12, 2011, http://www.pjm.com/markets-and-operations/~/media/documents/manuals/m18.ashx.

64 The 'strike price' is a price agreed by the parties to the reliability contract and represents the effective maximum price that the electricity buyer will have to pay for the volume agreed in the contract. When the market price is higher than the strike price, the seller of the reliability contract pays the buyer the difference in price for the total volume of electricity agreed.

3.2.54 In a Reliability Market, the provider offers the amount of capacity that they believe they can reliably make available when required, while the 'penalty' for non-availability is simply the payment that is made when the option is called.

3.2.55 Detailed proposals around the design and areas for consultation, for the Strategic Reserve and market-wide Capacity Mechanism, can be found in Annex C. In the case of a market-wide mechanism, we have investigated a Reliability Market in more detail given its innovative nature, but other models of Capacity Market remain under equal consideration.

Comparative analysis

3.2.56 Annex C provides a summary of the key trade-offs and relative assessment of the Strategic Reserve and Capacity Market for comparative purposes against eight criteria[65]. The chosen Capacity Mechanism will need to be developed to best meet all of these criteria.

3.2.57 The key trade-offs are:

- a **Strategic Reserve** has a well understood design, has been implemented in several markets, and could straightforwardly be implemented here. However, this model may be less effective in providing the desired level of security. It may be less effective in encouraging the wider use of non-generation approaches such as demand side participation compared to a market-wide solution; and it is potentially less effective in reining in the exercising of market power[66] in the electricity market.
- a **Capacity Market** is likely to achieve the required security of supply, is potentially more compatible with a longer term move to a more responsive demand side, could mitigate exploitation of market power in the electricity market, and is efficient if well designed. It also has potential to more strongly encourage non-generation responses to system adequacy issues such as DSR. However, some designs of Capacity Market would constitute a more innovative approach in our market, so would present design challenges and need further development and stakeholder input before we can be confident they will work. A Capacity Market would also need to be carefully designed to manage interactions with the FiT CfD, since both provide support for capacity but the two offer different incentives for reliability.

65 Criteria considered are: achieves sufficient security of supply; cost-effective, practical and feasible; durable to changes in the GB market, including to the demand side; robust against the use of market power; supports supply side efficiency; compatible with our market; consistent with decarbonisation and renewables targets; compatible with other Electricity Market Reform measures.

66 For example, by withholding generation in times of scarcity to drive prices up.

The role of non-generation technologies and approaches

3.2.58 The Government is keen for non-generation technologies and approaches, as well as traditional electricity generation, to form a central element of delivering security of supply and play a fair and equivalent role in a Capacity Mechanism. Technologies and approaches such as DSR, storage and interconnection have potential to contribute to security of supply, while reducing the need for large scale infrastructure and making better use of generation assets. The importance of such approaches, particularly DSR, was emphasised by a significant proportion of respondents to the consultation.

Box 7: Definition of technologies and approaches

Demand side response

Demand side response (DSR) is an active, short-term reduction in consumption whereby an energy user or aggregator guarantees to reduce demand at a particular time. It can be used to help balance supply and demand in a context of significant intermittent and inflexible generation. It enables this by shifting demand from periods where demand is greater than supply to periods where supply is more plentiful – for example, by self-supplying using local back-up generation, or by not using the electricity at that time. In the current GB market DSR is principally used to reduce demand in periods of system stress (e.g. sudden loss of generation or transmission failures). DSR actively participates in the Short-Term Operating Reserve (STOR), contributing 445 MW in 2010.

Response to wholesale price is currently limited to large industrial consumers that have half hourly meters and are charged the wholesale electricity price. The introduction of Smart Meters could increase the opportunities for DSR, for example through greater use of time or price-sensitive tariffs. To automatically respond to variable tariffs or wholesale prices, consumers would need equipment (to complement Smart Meters) that will reduce demand automatically by turning off non-essential electrical devices. This, in conjunction with the likely electrification of heat and transport which could significantly increase the amount of discretionary demand, could lead to greater participation of the demand side in the wholesale market.

Box 7: Definition of technologies and approaches (continued)

Storage

Like DSR, electricity storage currently plays a limited but important role. It involves storing electrical energy in another form (such as heat) when supply outstrips demand, and reproducing this as electricity when the system requires it. Currently, installed storage capacity in GB is just under 3 GW and is largely made up of pumped storage. Other storage technologies are currently less mature, but storage has significant potential to grow (particularly with the electrification of heat and transport) as it can capture energy generated by inflexible low-carbon generation and reproduce this in times of scarcity. It also offers significant technical flexibility which can assist in the fine tuning of the network which is carried out by the System Operator (SO), National Grid.

Interconnection

Interconnectors are physical links between GB and other electricity grids, which allow electricity to be imported or exported in response to price signals. GB currently has 3.5 GW of interconnection, which is around five per cent of peak GB demand. Different countries have different peak demand times, so trade across interconnectors can support security of supply without extra investment in power plants. Interconnection can play a role in enabling cost-effective integration of low-carbon energy by allowing for export/import at times of high/low renewable output.

The benefits

3.2.59 The Government believes that technologies and approaches such as DSR, storage and interconnection can contribute to cost-effectively delivering security of supply in a number of ways, such as:

- **trimming the peaks and filling the troughs** – DSR and storage can be used to shift demand from times when there is little or no spare capacity to times of excess capacity, thereby reducing the total capacity required and increasing the proportion of energy produced by low-carbon generation. Similarly, interconnection can be used to shift the excess capacity in one country to meet the demand in another. As periods of peak demand may occur at different times in different countries, interconnection can increase the reliability provided by a given level of total capacity;
- **reducing market power** – a more dynamic demand side and use of storage can reduce the market power of players on the generation side in times of scarcity. Interconnection increases competition and allows market access for a greater number of participants; and
- **reducing the need for spinning reserve** – if non-generation approaches are available to respond at short notice (e.g. 30 minutes) they can replace fossil fuelled plants that the SO has ‘warm’ on

standby (i.e. BM Start Up[67]), thus reducing the generation capacity needed. Similarly greater interconnection can allow for sharing of system services, reducing requirements over a connected area.

Implications for Capacity Mechanism

3.2.60 The different types of Capacity Mechanism proposed have different implications for non-generation approaches. We are seeking views on how different Capacity Mechanism designs might encourage the use of such approaches as part of our approach to delivering security of supply in Annex C. Implications could include:

- **a Strategic Reserve**: DSR and storage which can guarantee reduced energy use in a way that meets resource adequacy needs could bid to act as part or all of the reserve. The role of interconnection is discussed in Annex C.
- **a Capacity Market**: DSR and storage could potentially participate in a Capacity Market alongside other providers of reliable capacity, for example by 'selling' reliability contracts in a Reliability Market. The role of interconnection is discussed in Annex C.

Affordability

3.2.61 The modelled differences in cost between the two Capacity Mechanism proposals is relatively low in absolute terms compared to other Electricity Market Reform proposals. This is not surprising, as the two options are at least theoretically capable of producing exactly the same outcome if designed efficiently. Any differences are likely to be due to the way that either mechanism is designed.

3.2.62 Despite there being relatively little difference in the net cost of either mechanism, a Capacity Market would be likely to lead to a larger flow of funds as potentially large capacity payments lead to lower wholesale electricity costs.

3.2.63 Further detail on the costs and benefits of the two options is set out in Annex C and in the accompanying Impact Assessment published alongside this White Paper.

Interaction with other Electricity Market Reform measures

3.2.64 The FiT CfD, set out in Chapter 2, potentially interacts with the Capacity Mechanism, given that both policy instruments affect the amount of capacity brought forward.

3.2.65 The Strategic Reserve operates outside the electricity market and it is assumed that most recipients of FiT CfD will not be directly affected, however some generating capacity, for example fossil fuel plants with Carbon Capture and Storage (CCS), may be able to operate flexibly enough to offer extra capacity into the market at times of peak demand.

67 BM Start Up is a reserve service contracted on the day by the System Operator to ensure plants with a start-up time of several hours are available in the Balancing Mechanism at peak.

3.2.66 A Capacity Market could create other interactions with low-carbon support. We will continue exploring these interactions as proposals are developed. Further details are set out in Annex C.

Devolved Administrations

3.2.67 Further development of the scheme will include discussions with the Welsh Government and Scottish Government to determine how the Capacity Mechanism should apply in their jurisdictions.This will be partly determined by similar decisions in relation to the FiT CfD and by the design of the Capacity Mechanism. The UK Government and the Northern Ireland Executive have agreed that because the Single Electricity Market for the island of Ireland already uses a Capacity Mechanism, the proposed Capacity Mechanism would apply across GB only.

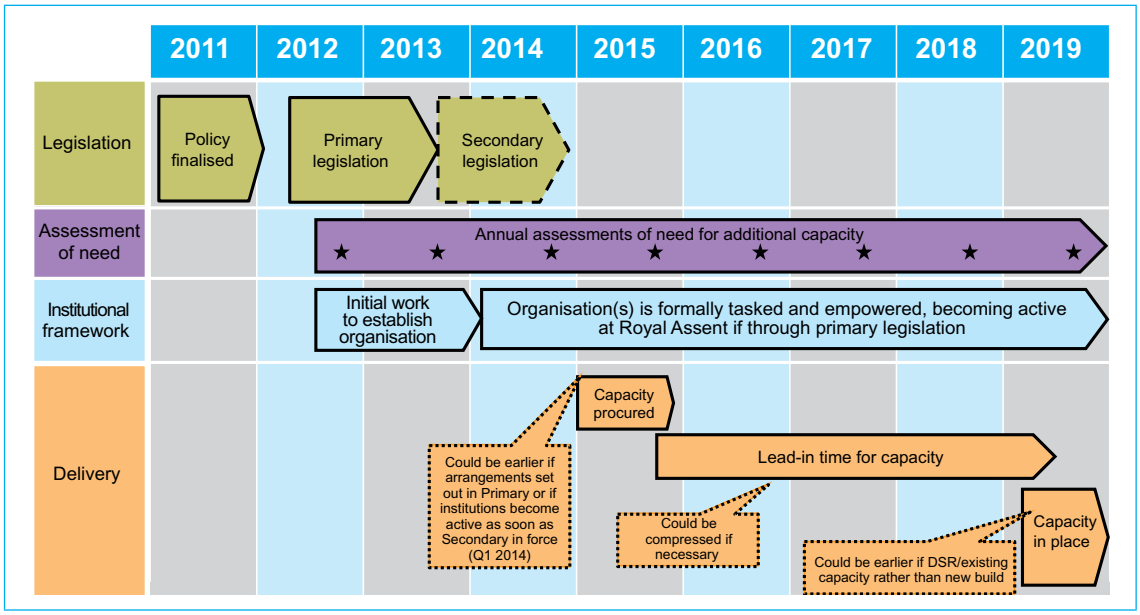
Next steps

3.2.68 The Government will set out its decision on the chosen Capacity Mechanism model around the turn of the year with a view to legislating in the second session.

Timing

3.2.69 We believe that, under existing market arrangements, there is likely to be a shortfall in available capacity from around the end of this decade. The timing for the setting up and entry into operation of a Capacity Mechanism would need to be such as to provide certainty that any shortfall arising on such a timescale would be dealt with. Figure 14 sets out our initial view of when a Capacity Mechanism could be introduced and possible milestones.

Figure 14: An indicative timetable for the implementation of a Capacity Mechanism



Chapter 4 – A new institutional framework

Summary

- The Government recognises that putting in place a transparent, enduring, robust and credible institutional framework to deliver the Electricity Market Reform package is critical to ensuring investor confidence.
- Key considerations raised in the consultation responses include: accountability and governance; independence; the need for the contract counterparty to be credit worthy; securing the right skills and resources; and value for money for the consumer. The consultation responses have informed the criteria the Government will use to design the institutional framework.
- Several options for the delivery organisation are being considered including a new public body, an existing public body or an existing private body. The delivery organisation would be likely to work at 'arms length' from the Government to administer the contracts.
- The new institutional framework will enable the following key functions to be performed in delivering the Feed-in Tariff with Contract for Difference (FiT CfD) and Capacity Mechanism:
  - setting the overall policy approach and objectives;
  - translating policy objectives into technical requirements;
  - delivery of the contracts;
  - data reconciliation and managing payments; and
  - monitoring compliance and enforcement.
- A decision on which organisation will be responsible for delivery of the contracts will be published around the turn of the year once the Capacity Mechanism design has been decided. We will continue to engage with stakeholders as appropriate as we take this work forward.

Introduction

4.1 Under the current market arrangements, the Government makes policy and a range of delivery bodies (e.g. Ofgem E-Serve) deliver this policy. National Grid[68] operates the GB transmission network, private generators produce the electricity which is sold to consumers by suppliers, and Ofgem performs an important role as the economic regulator. Competition between both generators and suppliers helps encourage innovation and minimise costs.

68 National Grid is the GB System Operator and transmission owner for England and Wales. In Scotland the transmission system is owned by SP Transmission Limited and Scottish Hydro Electric Transmission Limited.

4.2 Electricity Market Reform builds on this existing competitive market structure. The major new policies being introduced as part of the package will require specific delivery arrangements. This section considers the delivery requirements for the FiT CfD and Capacity Mechanism policies. The Emissions Performance Standard (EPS) is considered separately in Chapter 2.

Consultation responses

4.3 Regarding the delivery of a Feed-in Tariff, respondents flagged the need for a credible and durable counterparty to the contracts. Views differed on who should deliver this function and whether it should be a new or existing organisation. Respondents also stressed that the organisation with liabilities under the FiT CfD should be highly credit worthy to ensure that payments can be met over the long term.

4.4 Several responses highlighted the need for the delivery organisation to have the appropriate expertise and skills to deal with these long-term mechanisms and the technologies involved. Other points made were: the need for significant resource given the magnitude and commercial complexity involved; the importance of a complaints resolution process and enforcement; a requirement for suitable performance incentives and service agreements; equitable treatment of demand side resources; and the need for the fundamental workings of the market to continue.

4.5 Most respondents suggested that a central organisation should deliver the proposed targeted Capacity Mechanism. Many suggested that the System Operator's (SO) role could be extended to cover this and there were a few comments that this should be independent of other commercial activities and political influence. Some respondents suggested that a central agency should be established to manage the capacity contracts as this would allow for greater transparency.

Vision for the institutional design of the electricity market

4.6 The aim of the Electricity Market Reform package is to ensure a secure, diverse and low-carbon technology mix at least cost to the consumer. Key to this is ensuring that the right arrangements are in place to deliver the policies on the ground. It is crucial that investors have confidence that decisions are taken fairly and that there exists a stable, predictable environment within which to make the necessary investment decisions.

4.7 The options could include a delivery organisation performing the contract counterparty role or overseeing contracting between suppliers and generators, with the government continuing to make decisions on policy issues, providing a legislative framework and setting the delivery organisation's objectives. The range of options for the delivery of the Capacity Mechanism depend on the policy approach taken following further consultation (see Chapter 3 and Annex C).

4.8 Based on the consultation responses, the Government believes it is important that the institutional framework established for delivering the FiT CfD and Capacity Mechanism satisfies the following requirements:

- **accountability:** ensuring that policy is designed and delivered with the appropriate accountability and thorough and transparent processes that allow public scrutiny;
- **independence:** operating at 'arm's length' from the Government, as appropriate, and within the required governance arrangements, to create the reliable market framework investors need in order to have the confidence to make important investment decisions. Putting arrangements in place which do not give rise to potential conflicts of interest, which may damage investor confidence, is equally important;
- **credit worthiness:** providing reassurance to investors that payment commitments will be met. Key to this is establishing appropriate mechanisms that give investors this confidence. This may involve:
  - legislation to ensure that payments can be met through the collection of the necessary funds e.g. a consumer levy;
  - some other means to recover costs and meet the liabilities under FiT CfD contracts;
  - a mechanism to insure against counterparty insolvency which could be, if this was a central organisation, similar to the special administration regime for network companies, or in the case of suppliers, similar to the mutualisation fund for the Renewables Obligation (RO); and
  - a mechanism to insure against generator default risk e.g. the posting of credit for the Balancing Mechanism.
- **technical expertise:** knowledge of how the energy market works, to enable effective forecasting of future demand and supply and the costs and benefits of different low-carbon generation and reliability levels will be key, as will understanding the Government's objectives, the role of different technologies in achieving these objectives, the short and long-term investment opportunities and the interactions between different policy interventions and the impact on the electricity market;
- **commercial and financial skills:** specialist financial and commercial expertise in order to establish effective contracting and tariff-setting arrangements as appropriate for these policies; and
- **value for money:** ensuring that the Government's policy objectives can be delivered in the most cost-effective manner for consumers.

Delivery model

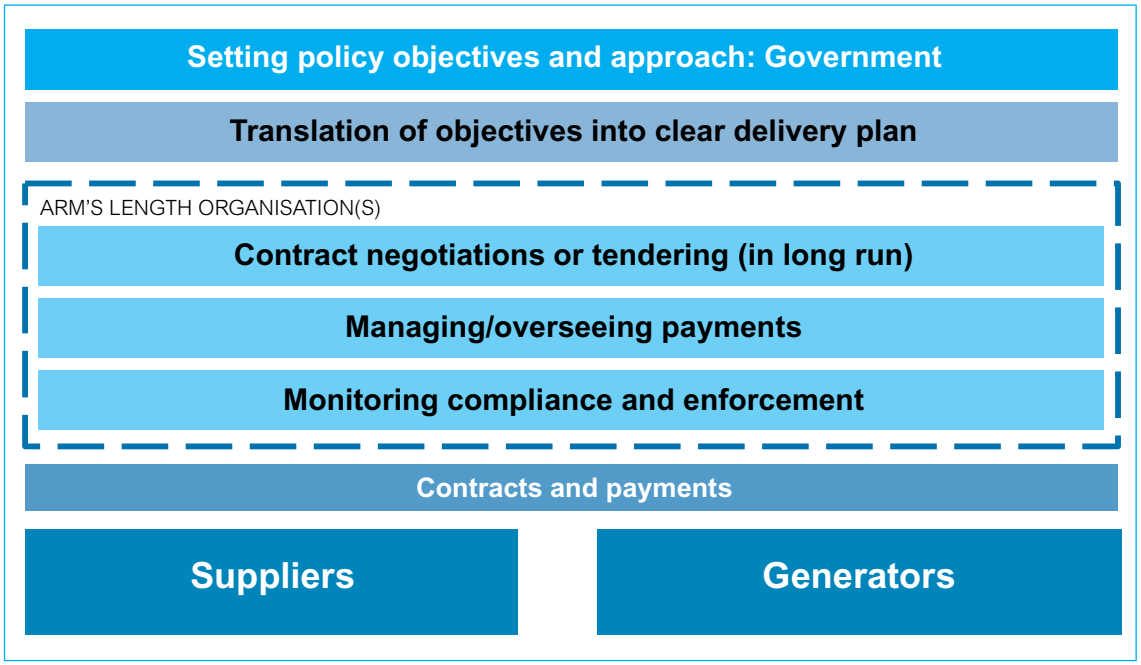
4.9 In order to deliver the policies successfully, there are a number of core functions that will need to be carried out by the government and a delivery organisation or organisations. The precise split of functions may differ for different policies and will depend on the approach taken on the Capacity Mechanism following consultation.

4.10 In summary, the core functions are:

- **setting the overall policy approach and objectives:** defining the overall approach and strategic outcomes for the policy, to ensure that the government's objectives, such as security of supply, decarbonising the electricity sector and cost-effectiveness, are secured. This role will remain with the government;
- **translating the policy objectives into technical requirements:** setting out how the policy should be delivered, for example, by establishing detailed technical requirements in a transparent delivery plan that is understandable to all market participants. This role will likely remain with the government although this could potentially be given to an arm's length organisation or organisations;
- **delivering the contracts:** negotiating where appropriate and delivering contracts with market participants. This could involve negotiating contracts directly with generators or it could mean overseeing contracts between third parties such as suppliers and generators. This role will likely be given to an arm's length organisation or organisations;
- **data reconciliation and managing payments:** collecting large amounts of data, managing complex calculations and potentially large payments in a timely and efficient manner; and
- **monitoring compliance and enforcement:** ensuring compliance with the required technical standards and the monitoring and governance obligations.

4.11 Figure 15 provides an illustrative model for the institutional arrangements for the FiT CfD.

Figure 15: An indicative delivery model for Feed-in Tariff with Contracts for Difference



4.12 An integral part of this illustrative delivery model will be the planning and review process that enables the policy objectives and approach set by the government to be translated into policy delivery so as to assure investors that both the delivery organisation and the government are committed to delivering these objectives.

4.13 A regular and pre-determined planning cycle could take place on, for example, a five-yearly basis and should be timed to be consistent with other processes such as the setting of carbon budgets under the Climate Change Act (in 2011, 2016, 2021 etc) and Spending Reviews. There could also be a framework document setting out the government's policy objectives and other standard governance tools such as annual reports.

4.14 The Government and the delivery organisation(s), working jointly, will periodically evaluate, according to a planning cycle clearly laid out in advance, their future strategy in the light of possible changes in costs, technological developments and new challenges to the energy system. The first of these assessments will be in 2016 and will also consider whether the new contract structure for low carbon is delivering all the benefits, especially for consumers, and improvements over the existing Renewables Obligation, that we expect, and on this basis consider any amendments to the future approach that may be required. As now, any changes would be made in the light of our continued commitment to grandfathering and no retrospective change.

Options for delivery organisation(s)

4.15 The institutional framework may require one or more delivery organisation depending e.g. on the chosen Capacity Mechanism. There may be synergies between delivering the FiT CfD and elements of delivery of a Capacity Mechanism. Potential synergies include: similarities in information technology systems; contract management; generator and supplier relationships and the need to manage interactions between the two mechanisms. In this case a single organisation for both mechanisms may be appropriate. However, there are also several elements of the policies which are different and could justify different organisations.

4.16 Specific delivery functions (such as data reconciliation, payment management and enforcement) could be performed by a separate entity or the same delivery organisation.

4.17 The delivery organisation(s) could be:

- a new Executive Agency or Non-Departmental Public Body (NDPB);
- an existing public body;
- a new public corporation; and/or
- a private sector body.

Wider considerations

4.18 An important wider consideration is the Government's recent Delivery Review which considered the delivery undertaken by a number of DECC's arm's length bodies. This Review underlined the importance of ensuring that DECC is able to respond effectively to any future delivery challenges. The Review's conclusions are summarised in Box 8.

Box 8: DECC Delivery Review

The conclusions of the DECC Delivery Review[69] were published on 19 May 2011. The Review considered the delivery undertaken for DECC by a number of arm's length bodies including the Energy Saving Trust, the Carbon Trust, Ofgem E-Serve, the Environment Agency, the Coal Authority and the Energy Development Unit (within DECC).

The Review outlined a number of measures to help ensure DECC is able to respond to the future delivery challenge. This will mean:

- improved governance for the delivery of existing DECC programmes, to ensure maximum value for money and improved oversight by DECC Ministers;
- focussing delivery of our energy efficiency objectives through the Green Deal, competitively tendering where possible the services that will underpin it;
- for new programmes, unless there is a clear case for placing delivery with a third party, delivery will be led by DECC to ensure accountability to Ministers, but with aspects of delivery contracted out, where possible and appropriate, to provide maximum value for money; and
- DECC will set up a new Office which will provide a wider energy efficiency strategy and strong programme management, and develop a joined-up view of the customer offer.

4.19 It is also important to consider the wider landscape of bodies already acting on behalf of the government in the energy sector. As set out above, Ofgem plays a critical role as the energy market regulator. The Government has recently reviewed the role of Ofgem and published the full findings alongside this White Paper, summarised in Box 9.

69 DECC Delivery Review, May 2011: http//www.decc.gov.uk/en/content/cms/about/partners/review/review.aspx

Box 9: Conclusions of the Ofgem Review

The Government published the high-level conclusions of the Ofgem Review on 19 May 2011. A full report is published alongside this White Paper[70]. The report emphasises the Government's continuing commitment to a framework of independent economic regulation for the energy sector and to Ofgem as the independent regulator.

The Ofgem Review concluded that Ofgem's statutory duties are appropriate and reflect the issues that the regulator should consider in making their decisions. However, the current framework of broadly-scoped duties and weak guidance is very unlikely to be able to support a predictable regulatory environment that is coherent with Government strategy, as the energy sector goes through a period of substantial change over the coming decades.

A new statutory 'Strategy and Policy Statement' will be established. This document will:

- set out the Government's policy goals for the gas and electricity markets;
- describe the roles and responsibilities of Government, Ofgem, and other relevant bodies; and
- define policy outcomes that Government considers Ofgem to have a particularly important role in delivering.

Ofgem will continue to operate independently in deciding how to regulate the energy markets, but will be required to demonstrate how its decisions support delivery of the policy outcomes defined by Government.

4.20 Other important considerations in determining the institutional framework for Electricity Market Reform include ensuring value for money, minimising the administration time and the costs of setting up any new organisation or amending an existing one, and compatibility with Government policy on the establishment and governance of arm's length bodies.

Next Steps

4.21 The Government will continue to develop the institutional design in line with the key criteria and considerations set out in this chapter and through engaging with stakeholders as appropriate. The full details on which organisation(s) will be responsible for administering contracts, the precise remit it will be given by the government, the appropriate governance and accountability arrangements and more details on the contracting and planning cycle will be published around the turn of the year.

70 DECC Ofgem Review, May 2011: http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/regulation/regulation.aspx

Chapter 5 – Paving the way for new entrants

Summary

- There are a number of barriers to entry and growth in the UK's electricity generation markets.
- Significant improvements in wholesale market liquidity are essential, not only to ensure a competitive market and promote long-term security of supply, but also to enable Electricity Market Reform to deliver efficient and cost-effective reforms. The Government welcomes Ofgem's work in addressing liquidity issues through its Retail Market Review.
- Independent generators, including new entrants, need viable routes to market that meet their commercial needs and allow them to achieve the relevant reference prices to enable them to benefit from the Feed-in Tariff with Contract for Difference (FiT CfD) and some Capacity Mechanism options.
- The Government will work closely with Ofgem to ensure that, taken together, Electricity Market Reform and the liquidity reforms reduce barriers to entry and deliver the necessary improvements in wholesale market liquidity. The Government will act where necessary to introduce reforms where the structural barriers to market entry are not addressed through the actions taken by Ofgem.

Introduction

5.1 There are barriers to entry in the electricity generation and supply markets including the costs and complexity of participation, limited routes to market for some independent generators, including new entrants, and overall low levels of liquidity. We focus on the issues facing independent generators. The Government also recognises that independent suppliers face barriers to entry that need to be addressed.

5.2 This section sets out:

- the current market arrangements;
- the impact of low liquidity and Ofgem's liquidity proposals;
- the need for viable routes to market;
- the importance of reference prices; and
- the Government's view on liquidity and barriers to entry.

Context

5.3 The Electricity Market Reform package is designed to support a wide range of investors and attract new entrants to the generation market. The Government wants to see reduced barriers to entry and a market that provides:

- sufficient overall liquidity to ensure that all market participants can readily buy and sell energy and efficiently manage their risks;
- viable routes to market; and
- robust and reliable reference prices accessible to all generators.

Current market arrangements

5.4 All generators need to manage a range of risks in order to operate effectively in the wholesale market. These risks include:

- **offtake risks**[71] – it is important that generators have a viable route to market;
- **balancing risks** – including the need to buy and sell power in the intra-day market and avoid exposure to the cash out price (discussed in Chapter 3);
- **credit** – collateral and financing risks related to wholesale market trading. Credit terms are a commercial matter for the parties, but it is important that the market participants are able to efficiently manage their exposure across all their trading activities;
- **price risks** – the FiT CfD proposals address the price risk for low-carbon generation (subject to achieving the reference price). For other generators, including gas generation, the hedging of fuel purchases, carbon price and power sales are likely to be an important part of managing price risks; and
- **basis risk** – which is the risk of deviation between the market price achieved by the generator and the reference price in, for example, FiT CfD contracts.

5.5 The current market climate is not as conducive as it could be to the participation of new entrants, small and independent generators. Independent market players have identified a range of concerns including large trade sizes, a limited range of products that do not meet their needs and a difficulty in meeting their hedging requirements[72]. Risk management can be more challenging for independent generators and suppliers than for the large vertically-integrated power companies which have, for example, a natural hedge between generation and supply activities. Market liquidity is a key issue, but there are related concerns that in part may be a consequence of poor liquidity, including potentially limited routes to market for some independent generators including new entrants.

71 Offtake refers to the sale of power from generation projects.

72 http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf

Liquidity in electricity wholesale markets

5.6 Ofgem has identified particular concerns around the low levels of liquidity in the forward markets[73], while evidence suggests that the day-ahead markets[74] tend to offer reasonably liquid trading (and are improving)[75]. A lack of liquidity in the electricity wholesale market makes it difficult for independent suppliers and generators to buy and sell energy at the volume and in the timescales they need to operate effectively in the energy market and undermines investment signals. Ofgem identified a number of possible reasons for low liquidity, including the role of vertically-integrated[76] generators who may have less need to trade and are able to hedge[77] between their supply and generation activities.

5.7 Liquid markets offer a range of important benefits, including:

- allowing parties to better manage long-term risk and providing long-term price signals about future market development, which inform investment decisions and promote long-term security of supply;
- increasing confidence in traded prices (a large number of gas and electricity supply contracts between buyers and sellers are referenced to market prices), which also inform investment decisions; and
- facilitating new entry in generation and supply by allowing new entrants to buy and sell electricity to match their output and customer base with confidence.

Stakeholder views on Electricity Market Reform

Overview of December 2010 consultation responses

5.8 Many stakeholders considered that improved liquidity would be essential to the success of Electricity Market Reform and highlighted the importance of aligning Ofgem's liquidity project and Electricity Market Reform. Some stakeholders argued that improved liquidity would provide a FiT CfD with reliable reference prices and could reduce the need for a Capacity Mechanism. There was a range of views on the measures needed to improve liquidity, including some form of trading obligation and centralisation of electricity trading arrangements.

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73 'Forward' trading refers to buying and selling for delivery of electricity in the month ahead and after, and may include trades in months, seasons and years ahead of delivery.

74 'Day-ahead' trading refers to buying and selling for delivery of electricity on the day after trading takes place.

75 http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/RMR_Appendices.pdf. The most recent assessment can be found at: http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/summer%202011%20assessment.pdf.

76 Where one supply group owns two or more parts of the energy supply chain. For example, where the same supply group owns generation capacity and also supplies energy to the retail market.

77 'Hedging' refers to making some kind of investment, with the objective of reducing exposure to (short-term) price movements in an asset already held. Normally, a hedge consists of taking an offsetting position in a related asset. Hedges can be either financial or physical. For example, a generator might hedge the risk of electricity price movements:

- financially by selling electricity in the forward markets or entering into long-term contracts; or
- physically by integrating with an electricity supply business, such that any downward movement in prices resulting in a loss in revenues for the generation business is offset by an increase in revenues for the supply business.

5.9 Many independent players, including wind developers, and some financial players, argued that current levels of liquidity were low, and would need to be improved. Others felt that current levels of liquidity would not pose significant barriers to investment or to reliable reference prices.

5.10 Some stakeholders felt that, by retaining exposure to market prices and providing incentives to trade, both a FiT CfD and a Premium Feed-in Tariff (PFiT) could help prevent any deterioration in short-term liquidity, especially when compared to a Fixed Feed-in Tariff. There was also a recognition from many stakeholders that a FiT CfD could concentrate liquidity in markets linked to reference prices.

Ofgem's liquidity project

5.11 Ofgem announced a programme of work in June 2009[78] to improve liquidity in the wholesale electricity market. Ofgem's March 2011 Retail Markets Review (RMR)[79] showed that liquidity fell overall in the GB power market over the course of 2010 from an already low base.

5.12 Ofgem concluded that the market was failing to develop and that action was required. It put forward two proposals for intervention (the Mandatory Auction[80] and Mandatory Market Maker[81]) to provide the electricity market liquidity that market participants, in particular independent market players, require to compete against existing firms and to encourage competition between vertically-integrated players. Ofgem considered that its proposals would improve competition and contestability in the energy retail markets to the benefit of consumers. Ofgem's final decision regarding intervention will be reached following the publication of an Impact Assessment by the end of 2011.

5.13 In the context of Electricity Market Reform, the Government feels it is essential that there is sufficient liquidity in relevant products across the whole market to offer a robust reference price and the means for independent generators of all sizes to manage their balancing and offtake risks.

78 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=58&refer=Markets/WhlMkts/CompandEff

79 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=RMR_FINAL.pdf&refer=Markets/RetMkts/rmr

80 A new licence condition that would require large vertically-integrated generators to make available between 10 per cent and 20 per cent of their power generation into the market.

81 A new licence condition that would require large vertically-integrated players to offer buy and sell prices for specified products and volumes on a continuous basis.

Routes to market

5.14 All generators need to be able to sell their electricity in a way that meets their commercial needs. At a high level there are two routes to market:

- sell power through a Power Purchase Agreement (PPA) with a supplier or aggregator who will manage key risks including offtake and balancing risks on behalf of the generator; or
- sell power directly in the index market(s), e.g. through brokered Over the Counter (OTC) contracts or on power exchanges.

5.15 The FiT CfD, by providing long-term price certainty, will help to mitigate some of the risks that can prevent generators from trading directly in the market. Some independent renewable generators, however, have raised concerns that poor levels of liquidity could leave them with no choice but to enter into PPAs to secure finance for investment and that, in the absence of a supplier obligation, PPAs would only be available at a steep discount. Regardless of the depth of market liquidity, some smaller generators may still prefer to pass the risk of managing trading and balancing risks on to bigger companies through PPAs, not least because direct market participation can be complex and may require an in-house trading capacity.

5.16 A more liquid market could play an important role in allowing independent generators, including new entrants, to trade directly and may encourage aggregation services from market participants who act on behalf of generators to sell power and manage risks across a portfolio.

5.17 The Government's view is that those firms that are able to manage balancing risks associated with intermittent renewables will still find opportunities in offering PPAs. As with the current Renewables Obligation (RO), market economics and competition will determine the discount that generators are exposed to. There may be new opportunities for those other than suppliers to offer aggregation services and enter the PPA market. There may, however, be transitional issues arising from the shift from the RO to the FiT CfD system that may create offtake uncertainty and/or lead to less favourable PPA terms than might currently exist. The Government anticipates that these uncertainties will stabilise over time and any price discrepancies should be eroded through competition.

5.18 The Government will keep the evidence under review. While Ofgem's current liquidity reforms may support both direct trading and the role of aggregators to some extent, they may not in themselves address all the issues that might make it difficult for some independent generators and a wider range of new entrants to secure a viable route to market. The Government will, therefore, take action to improve routes to market, should that prove to be necessary.

5.19 For some small distributed generation there may be opportunities to supply directly to consumers, but they may be deterred by the costs and complexity of acting as an energy supplier. Ofgem published its final proposals for a 'Licence Lite' regime in February 2009[82]. This will allow small electricity generators to become licensed suppliers under a regime which is proportionate to their size and impact, while protecting consumers' rights to switch energy supplier. The Government is closely monitoring progress made by the industry in using these proposals to gain better access to the market.

5.20 Cooperative fund structures and not-for-profit business models, including with the involvement of the third sector, have proven to be successful options for supporting development of distributed generation projects that can increase diversity of supply at the same time as meeting the needs of local people, including supporting local fuel poverty objectives. Joint action on such projects can spread risk across a number of players and help to leverage investment. The Government is interested in the opportunities provided by community finance initiatives and is equally keen to ensure there is appropriate support for new investors.

Reference Prices

5.21 Improved liquidity is essential to ensure credible reference prices, which are a key element in investment decisions and in the operation of the FiT CfD (see Chapter 2) and some types of Capacity Mechanism (see Chapter 3 and Annex C). The costs of providing support through the FiT CfD are likely to be lower where the reference prices against which the level of support is assessed properly reflect the fair market price.

5.22 Reference prices can be drawn from a number of market indices reflecting bilateral trading including OTC deals arranged through a broker and activity on power exchange platforms. Relatively small volumes are traded on these power exchanges. These relatively low volumes of traded energy and the small number of participants may make it harder for generators to secure the reference price and may lead to potential for manipulation of the indices[83].

5.23 Current day ahead market indices are likely to provide a sufficiently robust reference price. The current volumes traded on the day ahead market are enough to absorb initially relatively small quantities of FiT CfD supported power from 2014. Moreover, the participation of FiT CfD backed generation in the market is likely to further strengthen liquidity in the day ahead market. However, it is extremely important that liquidity in this market does not deteriorate and that volumes in the market are not displaced.

82 http://www.ofgem.gov.uk/sustainability/environment/Policy/SmallrGens/DistEng/Documents1/DE_Final_Proposals.pdf

83 Ofgem estimate four per cent in the day ahead and nine per cent in the forward market. http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/Documents1/GB%20wholesale%20electricity%20market%20liquidity%20-%20summer%202010%20assessment.pdf

5.24 Some stakeholders raised concerns about the fragmentation of day ahead market liquidity between a number of trading platforms. This may pose a basis risk if platforms used by FiT CfD supported generation are out of line with the indices that make up the reference price. The Government's view is that the market indices, including reporting of brokered trades and activity on power exchanges, are currently closely aligned. The Government will keep this evidence under review.

5.25 Forward market reference prices are not reliable, due to low levels of liquidity. We anticipate that Ofgem's work will strengthen liquidity in the forward market and help to provide credible reference prices. Should Ofgem decide to bring forward a Mandatory Auction as is currently proposed, it is possible that such an auction could provide a transparent and robust reference price for the baseload FiT CfD.

5.26 There are also possible interactions between Ofgem's proposed interventions to improve liquidity and a Capacity Mechanism. For a Capacity Market, in the form of a Reliability Market, to function properly, it would need a reference price for wholesale electricity to determine the payback required from generators. In particular the market that provides this reference price could see increased liquidity, but this may mean trading has been displaced from other markets.

The Government's view

5.27 The Electricity Market Reform package seeks to address the Government's objectives in relation to low-carbon generation, security of supply and affordability. We can minimise costs by removing barriers to entry and increasing competition in the market, in particular by improving market liquidity and providing more reliable reference prices and ensuring that all independent generators, including new entrants, have a viable route to market.

5.28 A more liquid market also supports security of supply through better price formation and stronger investment signals. A more liquid spot market also reduces offtake risk and means that closing out positions in a long-term contract could be easier[84].

5.29 The Government sees Ofgem's work on improving liquidity as complementary to the Electricity Market Reform package and welcomes the clear direction of travel set by Ofgem in its recent proposals. The Government will act where necessary to introduce reforms where the structural barriers to market entry are not addressed through the actions taken by Ofgem.

84 Why we need to fix our broken electricity market, special report, Poyry, 2008.

Next steps

5.30 Ofgem published an updated assessment and set out their next steps in June 2011[85]. Ofgem is minded, based on its latest full assessment and preliminary review of consultation responses, to introduce a Mandatory Auction and Mandatory Market Maker obligation. Ofgem expect to publish an Impact Assessment and its decision towards the end of 2011.

5.31 The Government will continue to work closely with Ofgem to ensure that the Electricity Market Reform package and Ofgem's work on liquidity are effectively aligned. This includes consideration of whether in combination the measures lead to sufficiently robust reference prices and to all market participants having routes to market.

5.32 To the extent that there are continued barriers to entry that are not addressed through Ofgem's actions, the Government will work with all relevant stakeholders to identify appropriate solutions.

85 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=59&refer=Markets/RetMkts/rmr

Chapter 6 – Future networks and system flexibility

Summary

- The changes driven by Electricity Market Reform will have a significant impact on future networks and the way supply and demand is balanced. The future electricity network will need to be able to support the new low-carbon generation promoted by the Electricity Market Reform package.
- Changes to the network and growth in demand side response (DSR), storage and interconnection will need to accompany the transformation of electricity generation that is at the core of the reforms.
- The Government recognises the need for strong leadership on networks and ensuring effective balancing of supply and demand going forward.
- We are setting out future work to address network issues that will be taken forward through the Smart Grids Forum. We will also be setting out our electricity systems policy, focusing on challenges around balancing and system flexibility, in summer 2012.

Introduction

6.1 Electricity Market Reform introduces incentives to the market to drive investment in generation. The reforms will change the generation mix, leading to increased levels of inflexible and intermittent generation, much of which will need to be built in new locations. At the same time, changes to the energy system associated with decarbonisation will lead to increasing and new forms of demand. These changes will impact on the regulated parts of the electricity sector, presenting a challenge as well as an opportunity for networks and the way we balance supply and demand.

6.2 The Government and the energy regulator, Ofgem, have already made strong progress on the delivery of transmission networks in the context of decarbonisation. While this important work will continue, the development of the distribution network, and the use of smarter approaches and technologies, will be an increasing priority going forward. We also need to ensure the market can deliver the right amount of flexibility, enabling the best use of generation assets, through the use of DSR, storage and interconnection.

6.3 The Government has a responsibility to ensure this transition, in order to meet wider objectives around decarbonisation, security of supply and affordability. In future, this responsibility, and any related policy trade-offs, will be reflected in the Strategy and Policy Statement (see

Chapter 5) that will be introduced through the implementation of the Ofgem Review conclusions[86].

6.4 This section sets out:

- progress to date in addressing network challenges;
- the implications of the changes driven by the Electricity Market Reform package for networks and balancing; and
- the Government's future work programme to address future challenges in this area.

Context

Evolution of networks policy

6.5 The GB electricity network has developed to facilitate power flows, in the main, from large-scale centralised generation, to consumers across the country. The transmission network (the 'motorways' of the electricity system) has evolved to be relatively smart and actively managed, while the distribution network (the local network that delivers to consumers) has developed as a more passive system.

6.6 Networks have delivered secure energy from generation which is responsive to the daily fluctuations in demand, at relatively low cost to consumers. This has been achieved through Government setting a framework of independent regulation to deliver both the networks and system operation needed; and the protection of consumers' interests in these monopoly sectors.

Recent policy and progress on transmission networks

6.7 There has been significant activity within Government over the past two years to develop networks policy and manage the challenges to meet our 2020 renewable targets.

6.8 This work has focused on the transmission network, primarily to ensure that new generation in new locations is able to connect to the system promptly and efficiently, and that the system is able to deliver the necessary electricity to consumers. See Box 10 for further details.

86 http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/markets/regulation/regulation.aspx

Box 10: Government projects on networks

a) **Transmission Access Review**[87]: in order to improve access to the network, the Government implemented the 'Connect and Manage' regime on an enduring basis in August 2010. This built on successful interim arrangements introduced by Ofgem. 'Connect and Manage' has to date reduced connection times for 69 large generation projects by an average of six years and has also benefitted 74 small-scale generation projects, helping to facilitate the achievement of our 2020 targets.

b) **Offshore Transmission**[88]: the Government has worked with the regulator to implement an innovative regime for offshore transmission. The Government and Ofgem are also undertaking the Offshore Transmission Coordination Project with industry to maximise opportunities for coordination of transmission infrastructure.

c) **Electricity Networks Strategy Group (ENSG)**[89]: the Government has worked with Ofgem and industry through this group to produce analysis on the transmission upgrades that might be necessary to meet the UK's 2020 renewables target. We plan to refresh this analysis and extend the scope to 2030.

Progress by the regulator on the investment framework

6.9 Ofgem began to increase incentives on network companies to innovate with their Low Carbon Networks Fund[90], which finances projects to show how the distribution network could work in a low-carbon context. Ofgem has also developed a new regulatory regime for investment in the electricity and gas networks through its 'Revenue = Incentives + Innovation + Outputs' (RIIO) framework. RIIO[91] sets a framework to encourage network companies to take a more strategic and longer term approach to network investment. It will also make funding available to ensure more investment is directed towards network innovation. Network companies will be encouraged to play a greater role in facilitating decarbonisation.

6.10 Ofgem has also initiated Project TransmiT[92], which will consider whether the current transmission charging arrangements are suitable to deliver low-carbon generation while maintaining secure and affordable supply. Both of these projects are owned and led by the regulator. The Government will continue to work closely with Ofgem to ensure that its objectives are taken into account. The Government is also keen to see the positive activity being taken at the transmission level fed into future thinking in the context of distribution networks.

87 http://www.decc.gov.uk/en/content/cms/meeting_energy/network/deliv_access/deliv_access.aspx

88 http://www.decc.gov.uk/en/content/cms/meeting_energy/network/offshore_dev/offshore_dev.aspx

89 http://www.decc.gov.uk/en/content/cms/meeting_energy/network/ensg/ensg.aspx

90 The Low Carbon Networks Fund made up to £500 million available to distribution network operators over five years, from April 2010: http://www.ofgem.gov.uk/networks/elecdist/lcnf/pages/lcnf.aspx.

91 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=120&refer=Media/FactSheets

92 http://www.ofgem.gov.uk/Networks/Trans/PT/Pages/ProjectTransmiT.aspx

Network development in the long term

6.11 The Government has also begun work to establish how the network may need to adapt to future challenges. DECC set out its initial view of future networks in 'Smarter Grids: the Opportunity'[93] in December 2009. Since then the Government has undertaken further work to develop our understanding of the transition that the whole system connecting generation to demand will need to undergo. This has included analysis of the future balancing challenge and the role of DSR, storage and interconnection.

Box 11: A vision for future networks and system flexibility

By 2030 electricity networks will be delivering to consumers in the context of a significantly decarbonised economy both on the generation and demand side.

Distribution network operators will be playing a more active role, directly contributing to managing challenges on the network, such as widespread charging of electric vehicles and use of heat pumps, in innovative ways, and making the best use of available distributed energy resources. Information and communications technology will provide greater visibility of the flows on their networks, allowing operators to make the most efficient use of available network capacity. At the same time networks will also be bigger to cope with increasing electrification and to connect up generation in new areas, both onshore and offshore.

Consumers will be engaged in how they consume electricity and will have access to a range of tariffs and offers, which will enable them to match their consumption to times when there is more generation available, and therefore cheaper, reducing their overall energy bills in the process. As a result, demand will be more responsive to changes in the electricity price, shifting from times when prices are high to those times when prices are lower.

Distributed energy, and distributed energy storage, will also interact with the network, helping to manage local network constraints and balance supply and demand, reducing the pressure on centralised generation. At the transmission level, we will be much more integrated with other markets, with diversity in generation and demand across Europe and potentially even beyond, helping us make the most efficient use of energy resources across countries.

93 http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/network/strategy/strategy.aspx

The challenge ahead

6.12 Looking ahead, the pressures on the network are increasing; in particular, the period up to 2030 is likely to see significant new challenges. The reforms set out in this White Paper will drive increased levels of intermittent renewable generation, and higher levels of inflexible generation, such as nuclear. These changes mean that there will need to be more flexibility in other parts of the electricity system. In the medium term this flexibility could come from fossil fuel based plant. In the longer term, as we go through the 2020s, we will derive the flexibility we need from other sources, such as DSR, interconnection and electricity storage.

6.13 Increased demand with different load patterns, due to the electrification of heat, transport and industrial processes, as well as an expected increase in population, will pose significant challenges to local networks and the balancing of the system. There could also be increased levels of localised and community-based energy, which would make managing the local network more complex than it is today. Ofgem's Low Carbon Networks Fund is beginning to trial how some of these technologies could interact with the network, but the challenges will grow looking forward.

6.14 Potential changes to the demand side are shown in Figures 16 and 17. Not only is overall demand likely to increase by 2030, but daily fluctuations in demand could be much larger. At the same time, new low-carbon technologies will present an opportunity for networks and balancing, as they will enable significantly more demand shifting.

Figure 16: Illustrative example of a seven-day demand profile in 2010

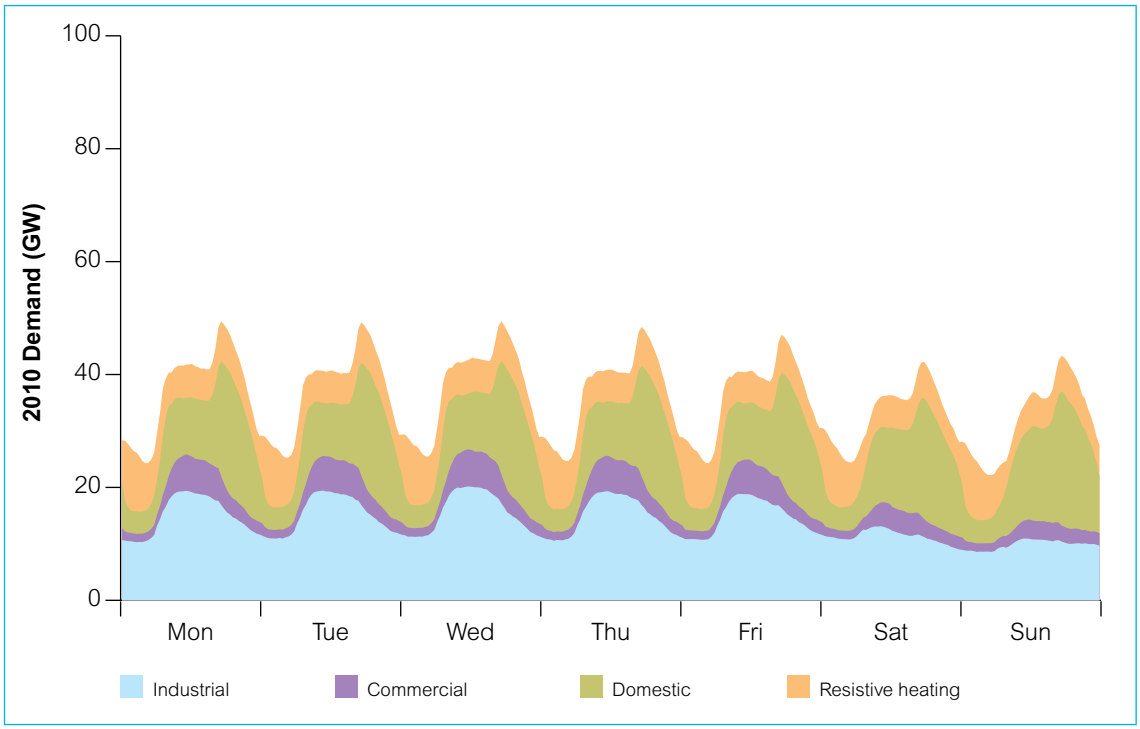
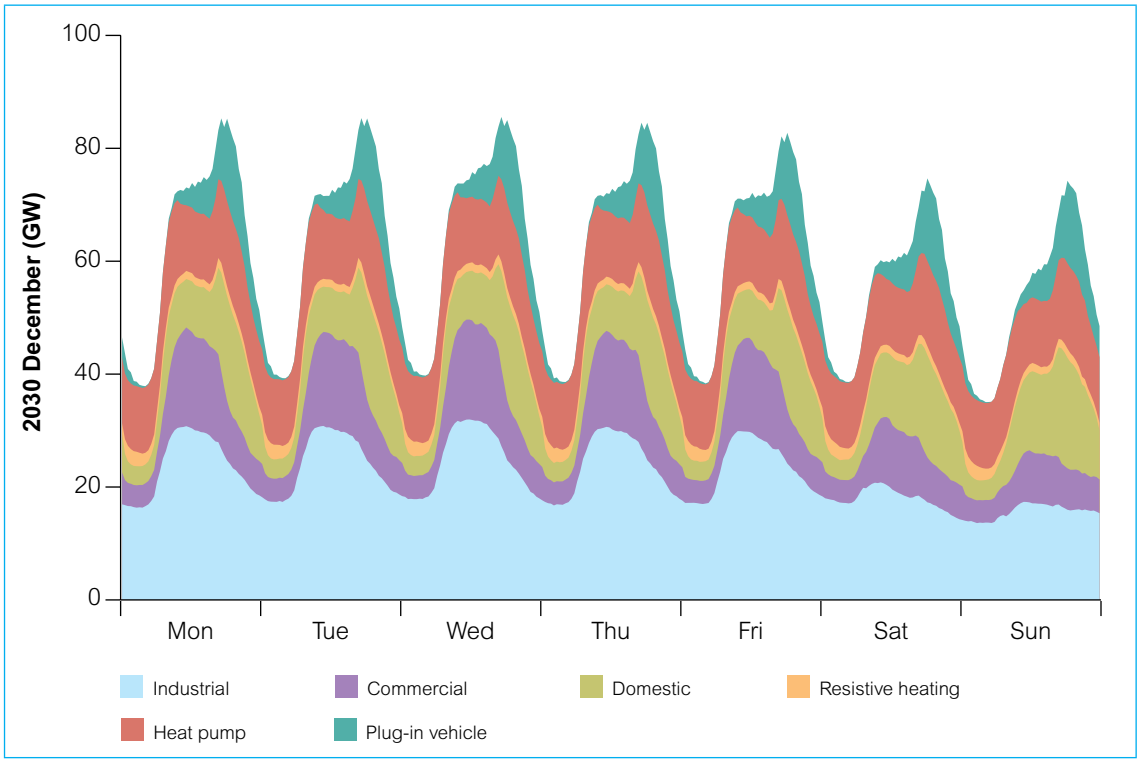


Figure 17: Illustrative example of a seven-day demand profile in 2030



Source: Based on DECC's 2050 pathways analysis 'spread effort' pathway which shares ambitious efforts on decarbonisation over all sectors including demand and generation[94].

Note: Figure 16 shows the shape of current national demand. Figure 17 shows an illustrative scenario of how this could look on an average week in November 2030, before any demand side response is taken into account.

94 http://www.decc.gov.uk/en/content/cms/tackling/2050/2050.aspx

6.15 Uncertainty over the rate of electrification of heat, transport and other sectors is a key challenge. Current thinking suggests that a gradual increase to 2020 will need to give way to a significant ramp-up in deployment in the period to 2030. However, significant uncertainty over the rate of electrification means it is difficult for distribution network investment to anticipate and prepare for changes elsewhere in the system.

6.16 The Government believes that all these challenges may require a fundamental transformation in the way the network links generation and demand and in how the system operates to keep demand and supply in balance.

Future Work Programme

6.17 Core to meeting these challenges will be the development of a smarter distribution network. In addition, the Government will need to consider the overall framework through which supply and demand is balanced. We will need to understand what changes might be required to the system framework and the incentives within it to ensure secure system balancing. This will include the role we expect different sources of flexibility to play in the future, in particular DSR, storage and interconnection. We will set out our electricity systems policy next year.

6.18 The Government has begun work through the Smart Grids Forum, a cross-industry group that it leads with Ofgem, to consider how future network challenges can be addressed. This will complement the ongoing Low Carbon Networks Fund trials. In the future, the Strategy and Policy Statement, as detailed in the conclusions of the Ofgem Review[95], will provide an important mechanism for Government to set out any strategic policy trade-offs that it considers need to be made to develop the future network and deliver the flexibility we need.

Smarter distribution network development

6.19 A bigger, smarter distribution network will need to be developed. The Government can help by providing some clarity about what might be expected from networks in the future.

6.20 There is uncertainty over the speed, scale and nature of developments in networks that will be required, particularly in response to greater electrification of heat and transport and increasing distributed generation. Without guidance from the Government, there is a risk that uncertainty over the rate of change could lead to insufficient or inappropriate investment, resulting in the network being unable to deal with future challenges. Therefore, the Government will lead work through the Smart Grids Forum, along with Ofgem, to develop a set of shared scenarios and assumptions to act as a guideline for network companies and the regulator in making decisions about future network investment. This will focus on trajectories for the take-up of electrified transport and heating as well as distributed generation, and is planned for publication in early 2012.

95 http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/regulation/regulation.aspx

6.21 In addition Ofgem will be leading work, with the Government's help, to develop a framework for understanding and evaluating the value drivers for smart grid solutions. This will also aim to identify the factors that influence these drivers and how these change over time. The framework should facilitate discussion between Ofgem and network companies in the business planning process. A final report is planned in spring 2012.

Box 12: Distributed Energy

Alongside the Electricity Market Reform, there is a parallel challenge to unlock the potential of distributed energy.

Distributed generation is electricity generation that is directly connected to a local distribution network, rather than to the high-voltage electricity transmission system. Because distributed generation often involves the simultaneous generation of useable heat, it is often referred to as distributed energy.

At the domestic scale, distributed energy commonly takes the form of individual building-scale installations such as micro wind and solar photovoltaics[96], which can generate electricity for local consumption. In some cases such technologies are also able to export any excess electricity to the distribution network, potentially creating revenue for the owner. Domestic-scale distributed energy technologies that generate heat include heat pumps and micro-Combined Heat and Power (CHP). These options currently require electricity and gas respectively to operate, but are more efficient than traditional electricity and gas heating, thus helping to reduce demand.

Domestic properties can also benefit from community or direct-scale distributed energy, where properties are connected to local electricity networks or district heating schemes. The viability of such district systems, particularly in the case of heat, is often dependent on the density of demand and the proximity of low-level demand to 'anchor loads' like hospitals or commercial/industrial users.

The economies of scale and efficiencies of the larger installations in commercial and industrial sectors means they can provide additional benefits over domestic installations. This is particularly true of combined heat and power schemes, which generate useable heat consumed locally, either through district heating schemes or for industrial use. This greater scale can also open up a range of additional options, such as waste to energy plants. While these options can have high upfront capital costs, particularly where heat distribution infrastructure is required, larger organisations are usually better placed to take a longer term view of their energy needs, allowing them to consider pay-back periods in excess of those that may be acceptable to individual consumers.

96 For further information see the DECC Microgeneration Strategy: http://www.decc.gov.uk/en/content/cms/consultations/microgen_strat/microgen_strat.aspx.

Box 12: Distributed Energy *(continued)*

Used in the right ways and as part of an evidence-based approach to energy planning, distributed energy technologies have the potential to complement both each other and the wider centralised energy system. They can also be an important tool in engaging consumers in their energy use. In particular, we recognise that integrated, local-level distributed energy systems could be an important step towards a more coordinated approach that includes, for example, transport and waste.

Distributed energy and local generation could have a much greater role to play in the future energy system and the Government recognises the need to put in place the conditions to unlock its potential. In the context of this White Paper, distributed energy provides a number of potential benefits:

- distributed energy can harness a wide range of smaller-scale renewable and low-carbon energy sources, so contributing to the decarbonisation of electricity and security of supply;
- as it is local, it lends itself to community involvement and investment, and it can also reduce the need for transmission network reinforcement, since the electricity produced by distributed electricity generation is normally consumed locally; and
- distributed energy can act, especially when combined with community-scale heat storage, as an alternative to heat being generated from electricity, and therefore help manage demand on the electricity system. There is also potential for this heat storage to be charged by excess electricity generation resulting in further opportunities for demand side response (DSR).

To ensure proposals in this document and changes taking place across the sector deliver in practice on our ambition, we will convene a Government Industry Contact Group on Distributed Energy. The group will be chaired by Ministers, and will involve a small number of key industry representatives.

How does distributed energy fit within the context of the Electricity Market Reform?

The Government recognises the need to facilitate action at the distributed scale and, following feedback from the Electricity Market Reform consultation, our proposals have been developed with consideration of all scales of generation. These include the following:

- both types of Feed-in Tariff (FiT) and the Capacity Mechanism will encourage distributed generation in different ways (see Chapter 2 and 3); and
- Ofgem is taking action to improve market liquidity, which should help smaller players access the market. As described in Chapter 5, the Government will act where necessary to introduce reforms where the structural barriers to market entry are not addressed through the actions taken by Ofgem.

System flexibility

6.22 As well as ensuring appropriate network investment, there will be a need for increased flexibility. Increasing the flexibility of the electricity system will be important both to deal with increasing amounts of intermittent and inflexible generation and to manage constraints on the network. Changes to the way the network is operated, and growth in solutions such as DSR, storage and interconnection will be needed. These flexible solutions will be vital in ensuring we have an electricity system that maximises the use of our low-carbon generation and network assets.

6.23 The Capacity Mechanism will play an important role in ensuring resource adequacy and will be designed to enable flexible solutions, in particular DSR. Chapter 3 and Annex C explore how the Capacity Mechanism could encourage demand side solutions.

6.24 There are also technology-specific barriers which potentially require Government intervention. We will consider the issues and set out our conclusions as part of the development of our electricity systems policy next year. The following sections look at the issues and potential for action on DSR, storage and interconnection.

Demand side response

6.25 DSR helps balance supply and demand in the context of significant amounts of intermittent and inflexible generation, in particular by shifting demand from periods where supply is limited to periods where it is more plentiful. As outlined in the Electricity Market Reform consultation document[97], the Government acknowledges the potential for more responsive demand as one of the most cost-effective ways to manage future balancing challenges. Up to 2020, it appears that most potential for DSR comes from the commercial and industrial sectors. However, beyond 2020, increasing electrification of heat and transport means the domestic sector could also play more of a role.

6.26 Smart Meters will engage consumers in their electricity use by allowing them to better control their electricity consumption, ultimately leading to demand reductions. The mass roll-out of smart and advanced meters, which we expect to complete in 2019, is an important first step for DSR in the domestic and commercial sectors. As well as stimulating energy efficiency, smart meters will facilitate innovation in the supply of electricity, including the introduction of new Time of Use Tariffs, and potential for more dynamic shifting of demand. For example, this could involve charging a plug-in vehicle or switching on a washing machine when electricity prices drop below a certain level.

6.27 As well as rolling out Smart Meters, we will need to ensure that energy suppliers and other providers of services are more broadly enabled and encouraged to engage consumers in DSR. This is likely to be important in the short term for larger consumers in the industrial and commercial

97 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

sectors, but will be increasingly important in the domestic sector as electrification occurs. In particular, it will be important that the settlement system[98] rewards suppliers that shift demand. The regulator and industry have already commenced work to drive forward some of the necessary changes so that the system is ready to enable DSR. Over the coming months the Government will need to consider whether it has a role in this process.

6.28 It is currently not clear how consumers will respond to greater incentives to shift demand. Positive engagement of consumers at all scales, from individuals and district heating schemes to heavy industry, will be necessary to maximise DSR potential. The Government will need to make sure that the broader policy framework supports the development of appropriate consumer offers and incentives to participate in demand response, while also ensuring consumer protection.

6.29 Data from Smart Meters will be important to managing the network in an efficient way. The Government is working with stakeholders to examine the level of data required for these purposes. We also need to ensure that there is a mechanism through which network operators are able to influence demand to manage constraints on the network and maintain security of supply.

Storage

6.30 Storage can provide benefits to the electricity system by storing electricity in a different form when it is in surplus, and providing additional resource when there is a shortage. Storage also has strong potential in system and network operation. However, high capital costs, combined with uncertainty over future revenues and inexperience in the market, mean that commercial deployment of electricity storage may be limited in the short term.

6.31 There is a considerable global research and development effort into storage technology, which may lead to reduction in costs over time. It will also be important for the Government, alongside industry, to develop understanding of the role storage should play in the future electricity system, particularly with regard to network and system operation. Further, the Government will need to ensure that the broader framework is appropriate to realise the full benefits of storage as part of a low-carbon electricity system. At the same time, we will continue to support research and development in storage technology.

98 'Settlement' is the process which ensures that suppliers pay for the electricity used by their customers, and that generators are paid for what they produced.

Box 13: Government activity on research and development into storage

- The Government funded two electricity storage projects through the **Low Carbon Investment Fund** to trial and demonstrate the contribution storage can make in managing distribution networks in the context of decarbonisation.
- The **Energy Technologies Institute**[99] has launched a competition for the design, build and demonstration of a large-scale electrical energy storage technology. The winner will be announced before the end of this year.
- The Government **has over £200 million**[100] **of innovation funding** for low-carbon technologies over four years from April 2011. Electricity storage is being considered as part of our planning for innovation support.
- There are also opportunities to demonstrate and trial energy storage technologies through **Ofgem's £500 million Low Carbon Networks Fund**[101]. For instance CE Electric is trialling energy storage in its Customer-led Network Revolution project.

Interconnection, Offshore Transmission, and Supergrid

6.32 Interconnection provides a link between two different electricity markets. Diversity in demand and generation results in differences in price between different markets. For example, when the wind blows heavily on the continent, prices may drop. Interconnectors would then deliver cheaper electricity into the GB market. The benefit of interconnection in allowing efficient use of available generation will increase with greater levels of inflexible and intermittent generation. As well as offering potential for cost-effective integration of renewables, interconnection also contributes to security of supply and provides greater competition, reducing costs to consumers.

6.33 Interconnection in the GB market has traditionally been built on a merchant basis under which investors, rather than consumers, take on the risk of investment, but are able to capture the financial rewards. This is in contrast to many other EU countries where interconnection is part of the regulated asset base. This difference in regulatory regimes has created challenges in the development of some projects. In addition, those developing interconnectors under the merchant approach have had to apply for an exemption from the relevant requirements of European legislation, introducing a level of uncertainty in the regulatory process. In light of this, several investors have signalled that they are unwilling to build interconnection under the merchant approach.

6.34 In response to these challenges, Ofgem is consulting, along with CREG (the Belgian regulator), on a proposed regulated interconnector investment regime based on a cap and collar approach, using project NEMO (proposed interconnection between GB and Belgium) as a pilot

99 http://www.energytechnologies.co.uk/Home/Technology-Programmes/EnergyStorageandDistribution.aspx

100 http://www.decc.gov.uk/en/content/cms/funding/funding_ops/innovation/innov_fund/innov_fund.aspx

101 http://www.ofgem.gov.uk/networks/elecdist/lcnf/pages/lcnf.aspx

project. Under the cap and collar approach, returns above the 'cap' would be redistributed to users of the electricity network. Conversely interconnection owners will be refunded by the system if returns are below the 'collar' and a project fails to deliver expected benefits.

6.35 Ofgem's cap and collar regime appears to have broad support from industry, and there has been a significant upsurge in proposals for new interconnectors since plans have been announced. Currently GB has 3.5 GW of interconnection, but if most current proposals were realised we could have 8-10 GW by the 2020s. Though interconnection is not a direct substitute for domestic capacity, 8-10 GW would be equivalent to around 10 per cent of installed capacity. As well as the regulatory regime for interconnection, there are broader questions around how to coordinate the development of interconnection with the offshore transmission network to:

- ensure effective trading with other countries;
- ensure effective exploitation of the renewable resources we have; and
- maximise the benefits of offshore transmission and interconnection.

6.36 The Government and the regulator are engaged in a number of initiatives with domestic stakeholders and neighbouring countries to consider these issues.

Box 14: Government and regulator initiatives

a) **The Offshore Transmission Coordination Project (OTCP)**[102], led by Ofgem and the Government, is considering the need for further measures to allow the potential for coordination within and between different generation zones and with interconnectors.

b) **The North Seas Countries' Offshore Grid Initiative** will consider different configurations for interconnection and offshore transmission, associated regulatory, technical and planning barriers, and the need for better coordination with EU partners. The work done under the OTCP will be an important input to the Government's approach in this initiative.

c) **The All Islands Approach**[103] will develop an approach to energy resources across the British Islands and Ireland. This will facilitate the cost-effective exploitation of the renewable energy resources available, and increase integration of our markets and improve security of supply.

d) **The French-UK-Ireland (FUI) Region regulators forum**[104], is investigating options for cost-effective market integration, taking account of the different market designs in each Member State, how the maximum benefits of greater market integration can be captured in each case, and how compliance with relevant EU legislation might best be achieved.

102 http://www.decc.gov.uk/en/content/cms/meeting_energy/network/offshore_dev/offshore_dev.aspx

103 http://www.decc.gov.uk/en/content/cms/news/pn11_050/pn11_050.aspx

104 http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/France-UK-Ireland

6.37 Our analysis, which includes the contribution of current and expected interconnection, indicates that de-rated capacity margins fall below 10 per cent towards the end of the decade, and potentially below five per cent in more than one year, meaning that a Capacity Mechanism is needed. We expect that interconnection will continue to make an important contribution to security of supply, alongside domestic capacity. See Chapter 3 and Annex C for further details of how a Capacity Mechanism could integrate with interconnection.

6.38 In the longer term, further integration of electricity markets, for example via a European Supergrid (a grid which operates across countries and links low-carbon generation with centres of demand), is likely to require a much deeper level of coordination between countries. The processes outlined above are a first step in considering how we might approach the development of a European Supergrid in an objective, evidence-based manner.

Electricity systems policy

6.39 The Government will develop its electricity systems policy next year, focusing on challenges around balancing and system flexibility. We will look at the future management of the electricity system and will set out different options for responding to the changing demands that will be made of the electricity network as a whole. The policy will also address the role that flexible solutions such as DSR, storage and interconnection will need to play, as part of the development of a smarter grid, to maximise the efficiency of generation and network assets while ensuring security of supply.

Next Steps

6.40 The shared scenarios and assumptions developed through the Smart Grid Forum and set out early next year will act as a guideline for networks companies and Ofgem in planning the next round of distribution network investment.

6.41 The development of a framework for understanding and evaluating the value drivers for smart grid solutions, also through the Smart Grids Forum, will be led by Ofgem and published in spring 2012. This will facilitate discussion between Ofgem and the network companies as part of the business-planning process.

6.42 We will set out our electricity systems policy in summer 2012, including discussion of the future system framework and how it will need to adapt to deal with future challenges.

Chapter 7 – Costs and benefits

Summary

- The Electricity Market Reform package will help ensure that we meet renewable energy and environmental targets, while ensuring security of supply, at least cost to the consumer.
- The Electricity Market Reform packages under a Feed-in Tariff with Contract for Difference (FiT CfD) offer the greatest benefits to society, around £9 billion for the period to 2030, compared to continuing with current policy.
- Electricity prices and bills could rise slightly in the short term but over the long term, costs to business and to the consumer will be lower than without reform. Average consumer bills are estimated to rise by around £200 from 2010 to 2030 without reform. Electricity Market Reform will limit this increase in bills to around £160, a saving of £40 per customer on the average bill.

Introduction

7.1 The proposals presented in this White Paper will help to meet the UK's decarbonisation targets and reduce the risks of a future security of supply problem for the GB electricity market. It is essential that the changes to the current electricity market arrangements are cost-effective. The preferred option for reform should therefore be the one which results in the least cost to the economy and in particular minimises any cost to consumers.

7.2 To achieve this affordably markets need to function efficiently. The Government can enable an efficient market by removing barriers to entry – intervening only to resolve identified market failures where necessary, according to the principles of better regulation. These reforms will also facilitate a green economy, with long-term economic and sustainable growth, and are complementary to policies such as Green Deal.

7.3 This section sets out:

- the alternative reform packages;
- an assessment of the packages against each of the Government's energy market objectives;
- sensitivity analysis of the Electricity Market Reform policy proposals, to ensure the packages are robust against different scenarios; and
- a discussion of the impact of the policies on the wholesale market.

7.4 In the Impact Assessment published alongside this White Paper, we have assessed in detail the Electricity Market Reform measures under four different packages[105].

7.5 The four packages considered in detail in the accompanying Impact Assessment and summarised in this White Paper are[106]:

- option 1 – FiT CfD, Strategic Reserve, EPS;
- option 2 – FiT CfD, a Reliability Market, EPS;
- option 3 – PFiT, Strategic Reserve, EPS; and
- option 4 – PFiT, a Reliability Market, EPS.

7.6 We have compared the FiT CfD with the Premium Feed-in Tariff (PFiT), the fall-back option from the Electricity Market Reform consultation document[107], in terms of their relative costs and benefits.

7.7 The FiT CfD and PFiT are both assessed with each of the two options for the Capacity Mechanism, set out in Chapter 3 and Annex C for views. For the purposes of this analysis we assess a Capacity Market in the form of a Reliability Market.

7.8 The Emissions Performance Standard (EPS), as discussed in Chapter 2, is also included in the package analysis described below. The impacts of the packages are considered against a 'do nothing' baseline[108]. This includes, among other policies, the Carbon Price Floor (CPF), following its announcement in Budget 2011, and the Renewables Obligation (RO).

7.9 The Government intends to implement one of the FiT CfD packages. We are consulting on the type of Capacity Mechanism, including a targeted mechanism or a market-wide mechanism as set out in Chapter 3.

Overall impacts of Electricity Market Reform on our energy market objectives

Decarbonisation

7.10 Our analysis, carried out by Redpoint Energy[109], suggests that all four of the packages set out above are capable of delivering the targets for power sector decarbonisation by 2030 if the incentives are set at the right levels.

105 These four packages are distinct to those packages presented in the Electricity Market Reform consultation document.

106 The figures presented in this White Paper are based on the 'central assumption' compared to the baseline. High and low analytical scenarios are set out in the accompanying Impact Assessment.

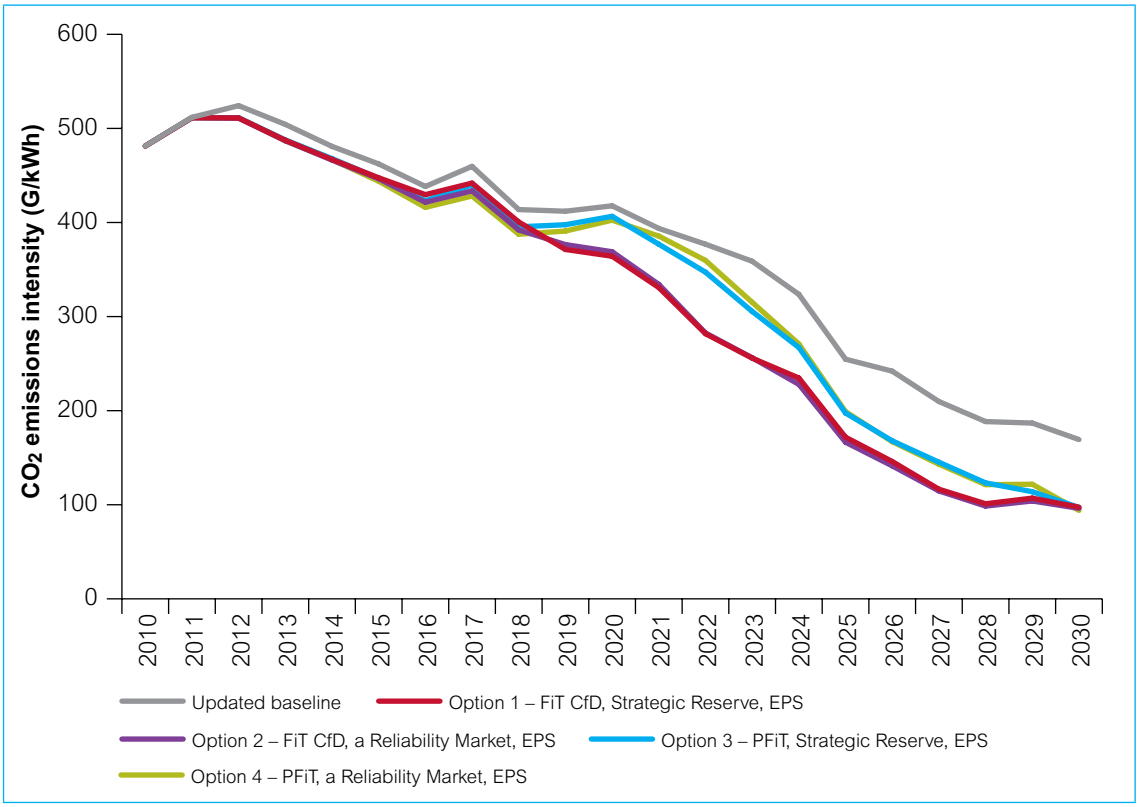
107 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

108 The baseline in this instance refers to the current market arrangements.

109 We commissioned Redpoint Energy to update the electricity system analysis carried out for the Electricity Market Reform consultation document published in December 2010.

7.11 Figure 18 shows that the FiT CfD options are likely to lead to a more rapid decarbonisation trajectory than the PFiT options. This is because the FiT CfD provides increased revenue certainty for low-carbon technologies, and therefore brings on low-carbon generation plant sooner.

Figure 18: Decarbonisation trajectory to 2030 – central price assumption



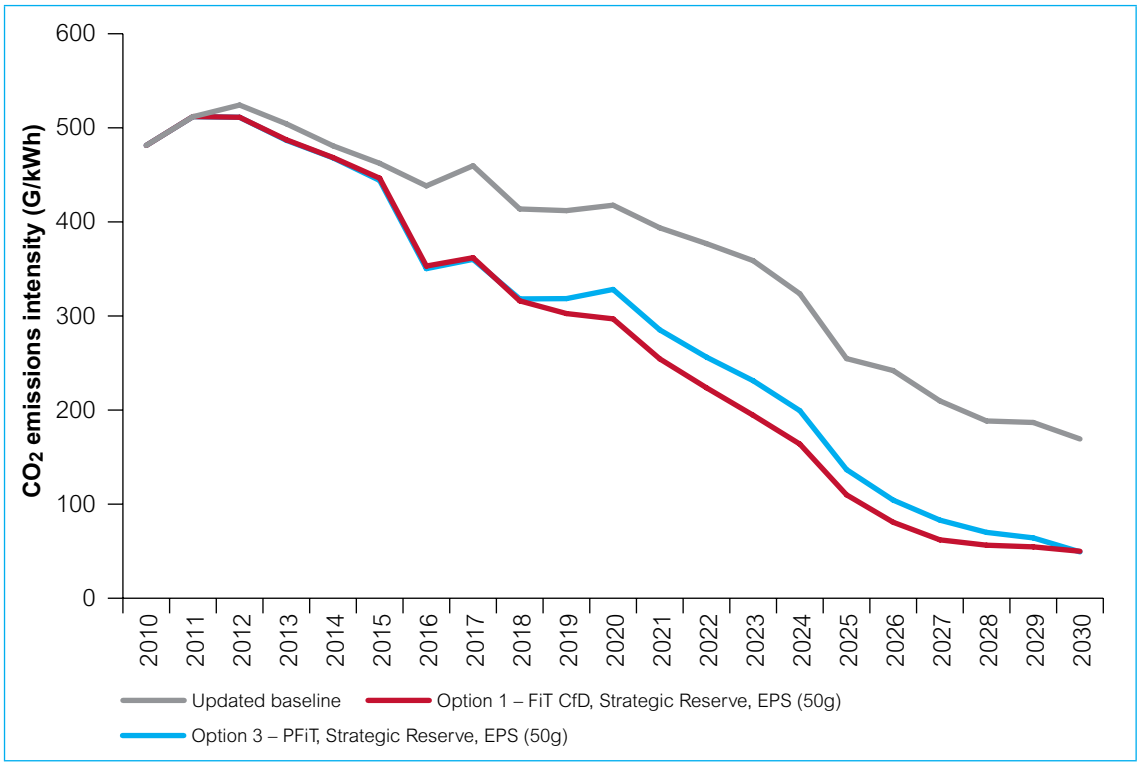
7.12 The Committee on Climate Change (CCC) in its Fourth Carbon Budget Report[110] of December 2010 recommended a more challenging decarbonisation target for the UK electricity sector than their previous recommendation of 100gCO_2/kWh by 2030.

7.13 Figure 18 presents the profile of decarbonisation for the packages[111], based on meeting the more ambitious decarbonisation target of 50gCO_2/kWh in 2030. The difference between the two packages, in terms of decarbonisation trajectories, is smaller under this scenario. However, the FiT CfD package still shows faster decarbonisation in the medium term compared to the PFiT package.

110 http://www.theccc.org.uk/reports/fourth-carbon-budget.

111 The comparison is made between the Feed-in Tariff with Contract for Difference and Premium Feed-in Tariff proposals (both these packages include the targeted capacity tender and EPS).

Figure 19: Rapid decarbonisation path to 2030 – central price assumptions

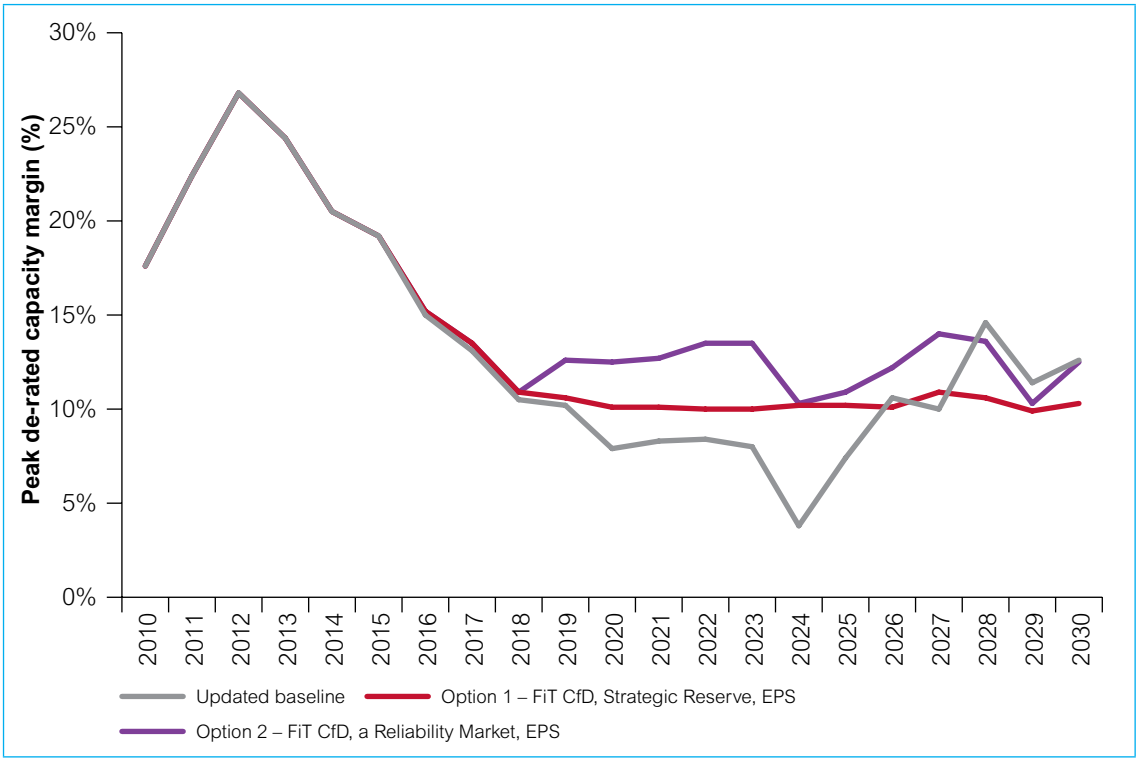


Security of supply

7.14 The analysis undertaken for this White Paper suggests that both the Reliability Market and the Strategic Reserve options for a Capacity Mechanism will have a significant impact on the capacity margin (see Figure 20). Both packages were modelled to ensure a minimum de-rated capacity margin of at least 10 per cent[112].

112 De-rated capacity margins in the Reliability Market package are marginally higher than 10 per cent in the modelling. This is a result of a very small amount of capacity remaining outside of the Reliability Market and therefore raising the de-rated margin just above the desired 10 per cent level.

Figure 20: De-rated capacity margin



Net Present Value of packages

7.15 This analysis was carried out by Redpoint Energy using a dynamic economic model of the GB electricity market, which simulates investment and generation behaviour. This model is a simplification of how investment decisions are made in reality. Detailed results, including policy developments since consultation, key assumptions and limitations of the model are presented in the accompanying Impact Assessment. The baseline for the assessment of policies includes the current Renewables Obligation (RO) and has been updated to include the Carbon Price Floor (CPF) announcement at Budget 2011. All analysis is presented relative to this updated baseline.[113]

Net benefits

7.16 Our analysis shows that all the Electricity Market Reform packages should lead to a large gain in net benefit compared to the updated baseline (based on current policies including the Renewables Obligation), as shown in Figure 21. There is an overall positive net benefit from the introduction of both FiT CfD packages. This is also true, to a lesser extent, for PFiT packages. Our analysis shows that **the highest gain in net benefits is under the CfD package with a Strategic Reserve Capacity Mechanism**, at £9.1 billion Net Present Value (NPV)[114].

113 For clarity, the baseline is not a 'do nothing' option of no decarbonisation policies.

114 'Net Present Value' (NPV) is a way of accounting for the sum of a project's future cash flows in today's terms – showing the difference between a future stream of benefits and costs. NPV recognises that society would prefer £1 today to £1 in the future – this is known as 'time preference'. Therefore due to time preference, future cash flows are 'discounted' (using a discount rate) when calculating NPV.

Figure 21: Net benefits of the packages

Central fossil fuel and carbon prices, 100gCO_2/kWh carbon intensity in 2030				
NPV, £ billion, real 2009 (2010-2030)	**FiT CfD (Strategic Reserve)**	**FiT CfD (Reliability Markets)**	**PfiT (Strategic Reserve)**	**PFiT (Reliability Markets)**
Net benefit	9.1	8.9	7.2	7.9

Note: A positive number represents a gain in net benefit to the economy, relative to current policies.

7.17 The estimated change in net benefit as a result of the proposals is primarily driven by the impacts on construction costs, generation costs and carbon costs. Electricity Market Reform proposals encourage investment in low-carbon plant which typically have higher capital costs in comparison to fossil fuel plant. However, a low-carbon generation mix is also associated with relatively lower generation costs and there are savings in carbon costs (as measured by the cost of EU Emissions Trading System (EU ETS) Allowances). These savings mean that overall, the Electricity Market Reform packages lead to a net benefit, compared to the baseline scenario which has a higher share of conventional fossil fuel plant and higher costs associated with the current Renewables Obligation.

7.18 There are also important differences between the packages in terms of economic rents[115] to new generation plants. Rents are expected to be significantly lower for generators under the Government's preferred choice of FiT CfD compared to the PFiT, because the level of support to generators under FiT CfD automatically adjusts to the level of the wholesale electricity price. Rents for new plant under central assumptions could have an NPV of £17 billion in a PFiT package, compared to £9.5 billion under FiT CfD. If fossil fuel prices rise higher than our central projections, this would increase rents to over £27 billion – potentially more than three times the level under a FiT CfD package.

Sensitivity Analysis

7.19 Future fossil fuel prices are inherently uncertain and any change in fossil fuel prices has a significant impact on the costs and benefits of the packages[116]. Therefore, it is important to test the reform packages against different fossil fuel price scenarios and carbon price scenarios to ensure that our policy is robust under different future scenarios.

7.20 In a high fossil fuel price scenario, where oil prices could reach around $120/barrel in 2020, there is an overall positive net impact of both the FiT CfD (£11.3 billion) and PFiT packages (£5.8 billion), compared to the baseline. In the FiT CfD package in particular, there are significant savings in carbon costs as decarbonisation is much more rapid.

115 'Economic rent' can be simply explained as excess profitability. In this case we have defined economic rent as the additional revenues earned by investors above the level required to cover long-run marginal costs of their plant.

116 This is because under current market arrangements, fossil fuel plant set the wholesale prices.

7.21 In a world with low fossil fuel prices where oil prices are assumed to stabilise at approximately $60/bbl in 2020, the net benefits of the packages are reduced. In this scenario, both packages become more expensive to fund as more support needs to be provided to low-carbon plant to compensate for relatively lower electricity prices, compared to that required under central fossil fuel price assumptions.

7.22 In this scenario, the change in net benefit in the FiT CfD package is slightly negative in NPV terms at -£0.7 billion and the PFiT package is slightly positive at £1.2 billion. However, the difference between the packages and indeed the baseline in the low fossil fuel price world is comparatively small compared to the high fossil fuel price scenario.

Impact on bills

Wholesale prices

7.23 Electricity Market Reform measures have an impact on consumer electricity bills both through their effect on wholesale electricity prices, and through the low-carbon (and Capacity Mechanism) support costs passed on to consumers by suppliers. The support cost is greater under the PFiT packages than under the FiT CfD packages. For the period to 2030, our analysis suggests that on average the impact on the wholesale electricity price is broadly similar between the packages. In the longer term, as the introduction of Electricity Market Reform increases the amount of low-carbon generation, wholesale electricity prices should demonstrate a downward trend. However, year on year volatility remains driven by market dynamics and changes in capacity margins that are not directly a result of the choice of Feed-in Tariff mechanism.

Consumer and business prices and bills

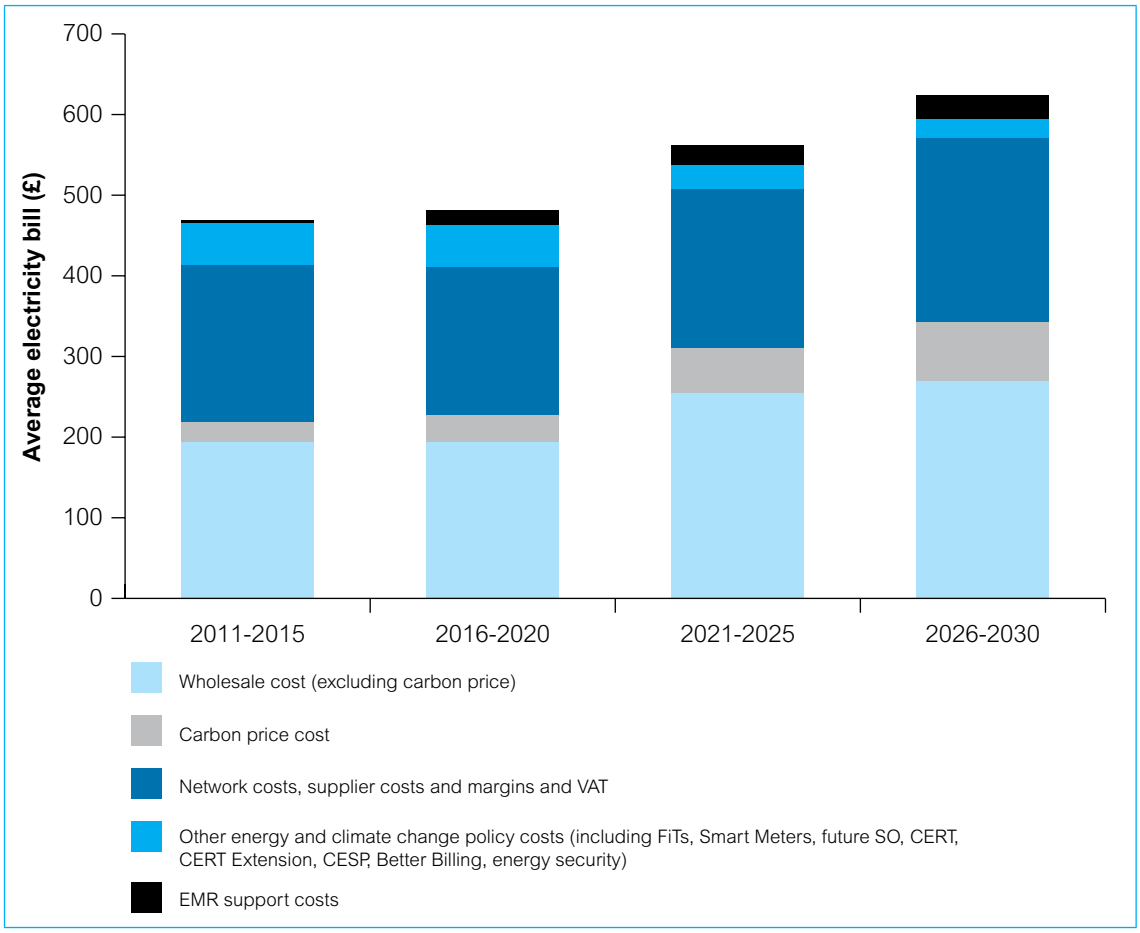
7.24 As Figure 22 shows, electricity bills are likely to rise relative to today with or without reform. This is due to increases in wholesale costs, the carbon price, network costs and environmental policies. Electricity Market Reform support costs are around five per cent of consumer bills in 2030.

7.25 With an illustrative decarbonisation target of 100gCO_2/kWh in 2030, the FiT CfD packages (including either Capacity Mechanism option as well as the EPS) will result in a period of higher investment in low-carbon plant in the 2020s and as a result could lead to slightly increased bills in the short term, compared to the increase in bills in the absence of the Electricity Market Reform package.

7.26 In estimating the impact of Electricity Market Reform packages on bills, we have assumed that the low-carbon support costs will be paid for by consumers via a levy on their electricity bills. Due to the cost-effectiveness of the CfD instrument, we expect this cost to be lower under a FiT CfD than a PFiT[117].

117 This is based on a central fossil fuel price scenario.

Figure 22: Illustrative breakdown of bills for option 1



7.27 Average consumer bills are estimated to rise by around £200 from 2010 to 2030 without reform. Electricity Market Reform will limit this increase in bills to around £160, a saving of £40 per customer on the average bill.

Figure 23: Snap-shot of average annual domestic consumer electricity bills

Consumer bills – domestic	Baseline bill	FiT CfD (Strategic Reserve)	FiT CfD (Reliability Markets)	PFiT (Strategic Reserve)	PFiT (Reliability Markets)
2010	£485	£485	£485	£485	£485
2030	£682	£643	£642	£647	£674
Average 2010-30	£538	£532	£527	£538	£544

7.28 As shown in Figure 24, average household bills under the FiT CfD packages could be approximately four per cent, around £25 per year, lower in the five-year period up to 2030 than they would be under current policies. For the period to 2030 as a whole, average bills could be around one to two per cent (or £6 to £10) lower under the FiT CfD packages.

Figure 24: Impact of Electricity Market Reform packages on average annual electricity bills for domestic consumers (real 2009 £), relative to an estimated baseline bill

Consumer bills – domestic	Baseline bill	FiT CfD (Strategic Reserve)	FiT CfD (Reliability Markets)	PFiT (Strategic Reserve)	PFiT (Reliability Markets)
2011-2015	£468	–	–	0% (£1)	0% (£1)
2016-2020	£486	–1% (–£4)	0% (–£1)	1% (£4)	2% (£11)
2021-2025	£560	0% (£2)	–3% (–£16)	0% (£2)	1% (£3)
2026-30	£648	–4% (–£24)	–4% (–£27)	–1% (–£4)	2% (£10)
Average 2010-30	£538	–1% (–£6)	–2% (–£10)	0% (1)	1% (£6)

Note: negative figures show a reduction in bills, while positive figures show an increase in bills, relative to the baseline.

7.29 Overall, consumers could benefit from relatively lower bills by the late 2020s and beyond. Individual bill impacts in any given year are less insightful because they are affected by other issues such as the capacity margin which also affects wholesale prices.

7.30 As our analysis does not model an impact on electricity consumption[118], the price impact of policies are the same in percentage terms as the impact on bills. Electricity prices for domestic and business users, relative to baseline prices for the period to 2030 as a whole, could be £2/MWh lower under the FiT CfD with a Strategic Reserve and £3/MWh lower under the Reliability Market package. A detailed breakdown of the price impacts is presented in the accompanying Impact Assessment.

7.31 On average business prices and bills are one to two per cent lower, compared to what they would be without the package, for the period to 2030. Electricity prices and bills go up slightly (less than one per cent) in the shorter term. In the longer term, business bills[119] could be four to five per cent lower in the five-year period to 2030 in the two FiT CfD packages compared to baseline bills, while also delivering a higher level of decarbonisation.

Impact on energy intensive industry

7.32 Changes to average annual electricity bills are similar in percentage terms between non-domestic consumers and energy intensive industries (EIIs). However, the impact on EIIs could be greater than on less energy intensive sectors as their energy costs are a more significant share of their operating costs. The impact on prices for EIIs is also the same in percentage terms as the impact on bills. For the period to 2030 as a whole, electricity prices for an EII user could be £2/MWh lower under the FiT CfD with Strategic Reserve and £3/MWh lower under the Reliability Market package.

7.33 Under the FiT CfD packages for reform, average EII bills[120] could be around two to three per cent lower on average for the period to 2030, compared to the baseline. As with the other consumers, EIIs will benefit from relatively lower bills in the late 2020s and beyond. Further details on the impact on EIIs bills are presented in the accompanying Impact Assessment.

7.34 The combined impacts of all Government climate change and energy policies on electricity prices and bills, including bills of EIIs, will be published alongside DECC's Annual Energy Statement later this year.

Distributional analysis of impact on bills

7.35 In general, increases in average domestic electricity bills can have disproportionate impacts on consumers on low incomes. This is because they spend a larger proportion of their income on electricity than the average household.

118 We anticipate that demand side response will participate through the Capacity Mechanism. However, this impact on energy consumption has not been included in the estimates of energy bills.

119 Non-domestic users are assumed to have an annual baseline electricity consumption before energy efficiency policies of 11,000 MWh.

120 Energy intensive industries are assumed to have an annual baseline electricity consumption before energy efficiency policies of 100,000 MWh.

7.36 In each of the scenarios within our analysis, the highest impact – either positive or negative – is on households in the lowest income deciles, although the impact compared to the updated baseline is very small (less than one per cent increase in expenditure on electricity). However, in the Government's chosen Electricity Market Reform package (under FiT CfD) consumers could save money on bills relative to the baseline, and therefore the saving in terms of expenditure as a proportion of income on electricity, although only marginal, would be greatest for the lowest income group. As such, the FiT CfD package will mean that the number of households in fuel poverty could be between 175,000-300,000 lower in 2030 compared to what could otherwise be without Electricity Market Reform. Impacts in the initial years of reform are expected to be negligible.

7.37 The Government is also taking steps to help mitigate the impacts of energy costs on the low income and vulnerable households through initiatives such as the Energy Company Obligation (ECO)[121] and the Warm Home Discount[122]. Under the latter scheme, the six largest energy suppliers are required to provide support with energy costs to eligible households worth up to £1.1 billion over the next four years; and we expect that around 2 million households will be supported annually. The Government is also taking action to ensure low income and vulnerable households are able to heat their homes affordably and access energy efficiency measures through the ECO, which will run alongside the Green Deal.

Implications for the wholesale market

7.38 The Electricity Market Reform packages do not seek to directly change wholesale market rules. However, they do have implications for and interactions with the wholesale market, with the potential to influence activity across investment, trading and operational timescales.

7.39 The packages influence generation investment decisions. To varying degrees and differing extents across technologies, the packages provide reduced exposure to wholesale price volatility and/or improved price certainty for non-energy products (such as capacity). This reduction in uncertainty should, if coupled with adequate revenue expectations, trigger increased investment in low-carbon generation technologies, altering the generation mix that currently operates within the wholesale market.

7.40 Trading strategies and operational incentives within the market will also be affected by the packages. For instance, patterns of trading activity are expected to be affected by the choice of reference prices within the individual policy instruments, potentially diverting trades into these markets. Similarly, operational behaviour will be affected by the nature of the low-carbon support mechanisms and the incentives they create.

121 http://www.decc.gov.uk/en/content/cms/legislation/energy_bill/energy_bill.aspx

122 http://www.decc.gov.uk/en/content/cms/consultations/warmhome/warmhome.aspx

7.41 While there are multiple interactions, the arrangements contained within the packages can, in principle, be developed to work effectively alongside the wholesale market. This will require careful development of the detailed design features during the next phase to ensure that the packages and the wholesale market, as well as related initiatives such as cash out and liquidity (see Chapter 3 and Chapter 5), are complementary to the Electricity Market Reform package.

Chapter 8 – Managing the transition

Summary

- Electricity Market Reform will mean significant changes to the electricity system. Maintaining stable market conditions and industry confidence throughout this period of change is a key objective.
- To secure this objective, we support the principle of no retrospective changes for all low-carbon investments.
- We have developed detailed proposals to provide new renewable generators with a period of choice between the existing Renewables Obligation (RO) and the new Feed-in Tariff with Contract for Difference (FiT CfD).
- To ensure the continuity of all low-carbon development, we will work actively with relevant parties to enable early investment decisions to progress to timetable wherever possible, including those required ahead of implementation of the FiT CfD.
- Annex D sets out the detailed conclusions on the RO transition.

Introduction

8.1 The Government is keen to ensure that the period of transition between the current and new market arrangements set out in this White Paper runs smoothly and allows investment to continue.

8.2 This section covers the transitional arrangements for:

- transitioning renewables funding from the RO to FiT CfD;
- projects requiring final investment decisions ahead of implementation of the FiT CfD; and
- an indicative timetable for implementation and transition.

Context

Transition arrangements for renewable investments

8.3 Renewable electricity is key to our low-carbon energy future and is a vital component of the UK's diverse energy mix. We recognise the importance of maintaining industry confidence and creating stable conditions for investment, in order to deploy renewable electricity to the levels needed to meet our 2020 targets and beyond.

8.4 The Electricity Market Reform consultation document[123] set out proposals for a transitional framework from the current RO system to FiT CfD. The aim of our proposals was to protect existing investments under the RO, and provide investors with confidence that projects currently under development would not be delayed and that investment would be able to continue in the transition period.

8.5 Most respondents to the consultation agreed that these were the key issues and therefore supported 'grandfathering' existing investments under the RO. They also called for RO 'vintaging'[124] arrangements to be clarified as early as possible. Given the size and scale of many projects under development, there was however some concern that a 2017 cut-off date proposed for the RO may not allow a long enough lead-in time for such projects, and a number of stakeholders supported a choice between the RO and FiT CfD.

8.6 The Government has listened to these concerns and Annex D gives more detail about our proposed arrangements for renewable generation. The desirability of avoiding triggering change in law clauses or other default provisions was one of our considerations when designing these transition arrangements.

8.7 In summary these arrangements are:

- to ensure ongoing RO stability, existing accredited generation will continue to be supported under the RO and will not be permitted to transfer to the new scheme;
- once the FiT CfD is introduced and until 31 March 2017, new renewable generation will have a choice between the RO and FiT CfD. This choice will extend to any FiT CfD eligible additional capacity commissioned at RO-accredited generating stations in the period from the introduction of the new scheme to 1 April 2017. The original capacity however will continue to be supported by the RO;
- the RO will close to new accreditations (and additional capacity commissioned at existing stations) on 31 March 2017. No generation will be able to accredit under the RO from that date; and
- we do not intend to extend the lifetime of the RO beyond the current 2037 end date. Generation for which a FiT CfD is in place will not be eligible to accredit under the RO.

8.8 The proposed arrangements for the operation of the RO during the transition include:

- **Calculating the obligation:** during the transition period to 2017, the level of obligation under the RO will continue to be calculated annually on the present basis;

123 http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx

124 'Vintaging' the Renewables Obligation (RO) system means that it will no longer be open to accreditation for new stations. The closure of the RO to new stations will create a closed pool of capacity which will decrease over time as we approach the end date for the RO of 31 March 2037.

- **Grandfathering:** all technologies currently grandfathered will remain grandfathered in the vintaged RO. Support for any technology that is not covered by our grandfathering policy, will be grandfathered at the support level applicable on 31 March 2017. This will remove the need for further banding reviews, reducing the costly administration burden, and is intended to provide industry with revenue certainty. We are still considering whether any uplifts not covered by our grandfathering policy as at 31 March 2017 should be grandfathered in a similar way;
- **Offshore wind phasing:** consistent with our intention to close the RO to new accreditation from 31 March 2017, no new offshore wind turbines will be able to register under the RO after 31 March 2017. Operators of accredited generating stations will be able to register some or all of their remaining unregistered turbines that constitute the consented capacity of the generating station under the RO by 31 March 2017, in order to receive support under the RO mechanism for those turbines. The 20-year support period will begin from the point of registration. Offshore wind generators accredited under the RO will be able to sign a FiT CfD for any turbines that on 1 April 2017 are not registered;
- **Additional capacity added after 2017:** we want to continue to provide support to stations that add new capacity after 31 March 2017. Once the RO has closed to new accreditations, generators who add additional capacity that is greater than 5 MW will be eligible to participate in the FiT CfD mechanism. Additional capacity of less than 5 MW which is, at the same time, eligible for the small-scale Feed-in Tariff (FiT) will not be eligible for a FiT CfD. The Government is minded to ensure that any generation which is ineligible for small-scale FiT, will be eligible to access the FiT CfD on the same terms as other technologies. This is consistent with our intention to close the RO to new generation after 31 March 2017; and
- **Grace periods:** some respondents to the consultation suggested grace periods should apply, under certain conditions, to projects wanting to accredit under the RO before 1 April 2017. We intend to offer some limited grace periods to generation which was due to accredit on or before 31 March 2017, but which was delayed through no fault of their own, by either a change in grid connection date instigated by the transmission or distribution operator, or a delay in the agreed installation of radar. Developers would be required to demonstrate that they have met a number of criteria if these grace periods are to be exercised. We intend that these generators may accredit under the RO and will remain subject to the 2037 end date for the RO. Further details, including the evidence requirements for exercise of the grace period, are still being considered.

Devolved Administrations

8.9 The Northern Ireland RO is a devolved matter in Northern Ireland. In addition, Scottish Ministers have executively devolved functions in respect of the RO in Scotland. The proposals for RO transition have been discussed by a Steering Group comprising policy advisors and technology experts from the UK Government and the Devolved Administrations. We will continue to work closely with the Devolved Administrations to ensure that the transition arrangements are simple and transparent across all three RO schemes. We have also discussed the proposals with a wide range of industry stakeholders, including utility companies, independent generators, supply chain manufacturers and existing and potential investors. The proposals have been broadly welcomed.

Arrangements for early projects: enabling investment to continue

8.10 A large number of consultees raised concerns around uncertainty for large capital projects that require final investment decisions ahead of implementation of the FiT CfD, such as some new nuclear, some Round 3 offshore and Scottish Territorial Waters (STW) wind farms and Carbon Capture and Storage (CCS) demonstration projects.

8.11 We recognise these concerns and our transition plans and timetable are aimed at providing stability for investors and building confidence in the new regime quickly. We support the principle of no retrospective changes to low-carbon investments.

8.12 An indicative timeline for transition and implementation of Electricity Market Reform is presented in Figure 25. The timeline may need to change to reflect future work on the legislative timetable, State Aid, institutional framework and other factors. This White Paper aims to:

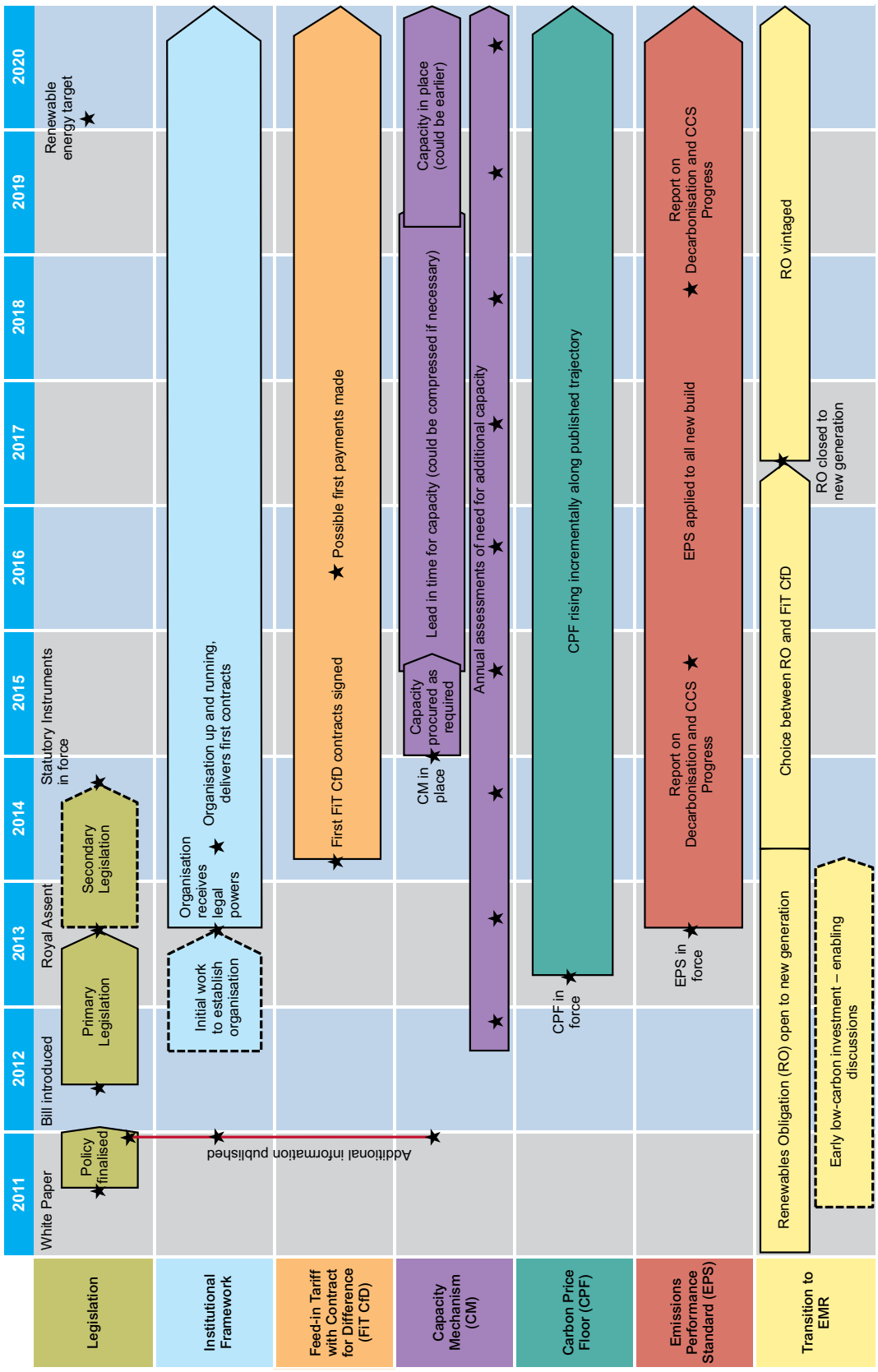
- provide reassurance for current renewables projects through the detailed transitional arrangements for the RO set out above and in Annex D;
- give as much certainty as possible on how the FiT CfD will operate; and
- provide a high-level implementation timetable to full implementation of FiT CfD and other Electricity Market Reform measures.

Next Steps

8.13 We will work closely with relevant parties to explore the means by which we can provide early certainty to low-carbon projects that are intended to benefit from the FiT CfD scheme, but that require a final investment decision before the scheme is implemented. This work will include assessing the feasibility of supporting CCS demonstration projects, potentially through a FiT CfD in combination with other funding approaches.

8.14 Any arrangements reached as a result of this work will be subject to the Government's obligations under EU law, including the terms of any necessary state aid approvals. In addition, any options proposed will clearly need to be compliant with existing domestic law.

Figure 25: An indicative timetable for implementation and transition



Chapter 9 – Devolved Administrations and the European Union

9.1 Devolved Administrations

Summary

- Electricity Market Reform is important for all parts of the UK. Recognising this, we have been working closely and collaboratively with the Devolved Administrations in developing this policy.
- Together, the UK Government, Scottish and Welsh Governments and Northern Ireland Executive are committed to continue to work closely to ensure that Electricity Market Reform is consistent with devolution arrangements. In particular, devolution issues will be respected in the legislation needed to implement Electricity Market Reform.
- Whether or not aspects of the Electricity Market Reform package are devolved or reserved will only become clear once the details of implementation have been decided. Where aspects are devolved they will be legislated either through Legislative Consent Motions or through Parallel Legislation across the four legislatures in the UK.

Introduction

9.1.1 Electricity Market Reform is vital for helping the UK increase low-carbon generation, ensure security of supply, which is in the interest of all four nations of the UK, and protect UK consumers, as well as ensure the continued successful functioning of the GB electricity market. The Government recognises the importance of devolution in the UK and is concerned to ensure the proper functioning of devolved arrangements. We are therefore strongly committed to working closely with the Devolved Administrations as we develop our proposals for Electricity Market Reform with the shared aim of delivering a coherent package of reforms across the whole of the UK. As part of this commitment, Northern Ireland Executive, Scottish and Welsh Government officials will continue to sit on the Electricity Market Reform steering group.

9.1.2 These proposals have been developed following detailed discussion with the Northern Ireland Executive, and Scottish and Welsh Governments. We will continue to work closely on developing the details of implementation to ensure that the proposals will operate across the different parts of GB to deliver effective and enduring reforms to the GB electricity market.

9.1.3 We are also working closely with the Northern Ireland Executive to consider the best approach for increasing low-carbon generation and improving security of supply in Northern Ireland, which takes account of existing market arrangements and is at least cost to the consumer.

9.1.4 Significant parts of the UK's generation capacity are located in Northern Ireland, Scotland and Wales. They also have significant potential onshore and offshore renewable resources, and the finance and development communities are committed to developing future low-carbon generation in each of these nations of the UK. It is only by harnessing natural resources and technical expertise from across the UK that we will be able to deliver the required new generation of secure low-carbon power sources.

9.1.5 By working together, the four nations of the UK aim to deliver the required new generation of secure low-carbon power sources. Successful delivery of the Electricity Market Reform package will come through the different governments working towards a set of shared goals. We will therefore continue to work together to design and deliver relevant elements of the Electricity Market Reform package.

9.1.6 This section sets out:

- interaction between Electricity Market Reform and the Devolved Administrations; and
- next steps.

Northern Ireland

9.1.7 Electricity is essentially a devolved matter in Northern Ireland, and we are therefore working closely with the Northern Ireland Executive to consider the best approach for increasing low-carbon generation and improving security of supply at least cost to the Northern Ireland consumer.

9.1.8 Our preference remains a UK-wide Feed-in Tariff with Contract for Difference (FiT CfD). However we recognise that this will require working in partnership with the Northern Ireland Executive. The Northern Ireland Executive is conducting further analysis of options, and we will engage constructively with the Executive on its preferred solution, and ensure that where appropriate, any Northern Ireland solution can work alongside the FiT CfD in a UK-wide context. We also undertake to have further discussions on how any Northern Ireland mechanism will work alongside the Electricity Market Reform institutions.

9.1.9 As part of this discussion, Northern Ireland will also give consideration to how any mechanism can operate within the island of Ireland Single Electricity Market (SEM), how it can best meet its aspiration that 40 per cent of electricity consumed will come from renewable sources by 2020, and balance these considerations against wider fuel poverty goals.

9.1.10 The UK Government and the Northern Ireland Executive have also agreed that because the SEM already uses a capacity mechanism, the Capacity Mechanism proposed in this White Paper would apply across GB only.

9.1.11 The Government is keen that the framework of the Emissions Performance Standard (EPS) should, as far as possible, cover the whole of the UK. The Northern Ireland Executive has said that it would, in principle, consider participating in a UK-wide EPS regime. We will continue working closely with the Northern Ireland Executive alongside the other Devolved Administrations to achieve this in a way which takes account of their policy preferences and the devolution settlements as appropriate.

Scotland

9.1.12 The interface between reserved and devolved areas of competence for Scotland is not straightforward. Detailed consideration of the Scottish Government's devolved competence will be needed as details of the mechanisms are developed. While the Scottish Government is supportive of the need for reform of the GB electricity market, discussion of these considerations will be important in regard to how we finalise details of the operation of the mechanism and the associated institutional arrangements.

9.1.13 While energy policy is reserved in Scotland, environment policy is broadly devolved, and a number of aspects of energy policy are executively devolved (for example certain aspects relating to consents of electricity generation and transmission infrastructure under Section 36 and Section 37 of the Electricity Act 1989). Similarly, certain aspects of Carbon Capture and Storage (CCS) policy are also devolved, in so far as they relate to the environment.

9.1.14 Scottish Ministers have also been given executively devolved powers in respect of the Renewables Obligation (RO) in Scotland and we have been working closely with the Scottish Government regarding how transitional arrangements for the RO in Scotland would apply. Further details are set out in Chapter 8 and Annex D.

9.1.15 The Scottish Government is committed to working in partnership to deliver a coherent and seamless package of reforms across the UK. The UK Government will continue to involve the Scottish Government in further work on Electricity Market Reform, in particular on our work on institutions, in the design and operation of the FiT CfD and in managing a smooth transition from the RO to the FiT CfD.

9.1.16 As part of our future work on options for a Capacity Mechanism, we will involve the Scottish Government in further discussions on how the mechanism should apply in Scotland. We will also continue to discuss with the Scottish Government the application of the EPS in Scotland.

Wales

9.1.17 The Welsh Government is supportive in principle of the Electricity Market Reform proposals. It would like to see significant amounts of new low-carbon generation developed within Wales, and sees that the Electricity Market Reform package has the potential to support this expansion.

9.1.18 We will continue to work closely with the Welsh Government to drive a successful low-carbon economy transition which delivers secure and affordable energy for all.

9.1.19 As part of our further work on options for a Capacity Mechanism, we will involve the Welsh Government in discussions on how the mechanism should apply in Wales. We will also continue to discuss with the Welsh Government the application of the EPS in Wales.

Next steps

9.1.20 Following publication of this White Paper, we will continue to work closely with the Devolved Administrations as we develop more detailed design of the proposals. In particular this will mean:

- Coordinating further work with the Northern Ireland Executive and Scottish Government on transition arrangements for the RO;
- Supporting the Northern Ireland Executive as it considers options for how a FiT CfD could be successfully integrated within a UK-wide FiT CfD; and
- Involving the Devolved Administrations in further discussions on Electricity Market Reform, including institutions, the design of the FiT CfD, the Capacity Mechanism and the EPS.

9.2 European Union

Summary

- The EU and the UK share common energy policy objectives. We consider that the approach being adopted under the GB Electricity Market Reform is broadly in line with the EU vision for decarbonisation and security of supply.
- We support full integration of the UK energy market with the broader EU electricity market and consider that, in principle, the challenges the UK energy market faces are best addressed through European efforts.
- We are working with the European Commission and other EU stakeholders to ensure that the Electricity Market Reform package is consistent with, and complementary to, developing EU energy policy.

Introduction

9.2.1 The EU and the UK share common energy policy objectives around delivering sustainable electricity generation, while seeking to minimise costs to consumers and ensuring security of supply. In seeking to radically reduce emissions in the electricity sector by 2050, the EU considers that an approach based on innovative solutions to mobilise investment is appropriate[125]. In line with this, the Electricity Market Reform package is providing incentives to industry to deliver an appropriate generation mix, using competition to ensure least cost to consumers. As recognised in the Electricity Market Reform consultation document, the Government fully supports further integration of the EU electricity market and believes that, in principle, the challenges the UK energy market faces are best addressed through European efforts.

9.2.2 Indeed, EU efforts to promote liberalisation and sustainability in Europe's energy markets are proving successful. The internal energy packages[126] have led to more open, transparent and competitive European markets, resulting in the potential for lower prices and greater choice. Similarly, policies such as the EU Emissions Trading System (EU ETS) and the EU's Climate Action and Renewable Energy package (the Green Package) have provided a framework for investment in sustainable forms of energy. Interconnection between Member States has also integrated our markets further, and will do so even further in the future, bringing potential for increased liquidity and lower prices.

125 See, for example, Communication from the Commission entitled "A Roadmap for moving to a competitive low carbon economy in 2050", March 2011: http://ec.europa.eu/clima/policies/roadmap/index_en.htm

126 The 1998 First Package Directive 96/92/EC (concerning common rules for the internal market in electricity) and Directive 98/30/EC (concerning common rules for the internal market in natural gas). The 2003 Second Package Directive 2003/54/EC (concerning common rules for the internal market in electricity and repealing Directive 96/92/EC) and Regulation 1228/2003 and the Directive on Gas 2003/55/EC and the Gas Regulation 1775/2005.

9.2.3 We welcome the fact that further efforts towards an integrated EU electricity market are continuing. The EU Third Internal Energy Package[127], and the new European network codes[128], will provide a new and deeper framework for cross-border interactions.

9.2.4 Further interconnection with other markets, which we expect to be facilitated by Ofgem's new investment regime for interconnection (see Chapter 6), and market coupling (which links separate wholesale markets to determine efficient cross-border power flows), will lead to more competition and liquidity in GB markets. We will ensure that the Electricity Market Reform package supports these developments, and will be working closely with the European Commission and other European stakeholders to help ensure this.

9.2.5 This section sets out:

- an overview of Electricity Market Reform consultation responses on EU issues;
- the role of non-GB electricity generation;
- how the EU ETS and the Carbon Price Floor (CPF) will help us deliver our decarbonisation goals; and
- the relationship between EU law and the Electricity Market Reform package.

Consultation Responses

9.2.6 In responding to the consultation, many stakeholders recognised that consideration of the interaction between European developments and the Electricity Market Reform package is increasingly necessary as implementation issues are considered.

9.2.7 A number of respondents stressed that it will be important that the package in general, and the design of the Feed-in Tariff with Contract for Difference (FiT CfD) in particular, provides reliable market signals in choosing between different generation types and/or interconnection.

9.2.8 Some respondents argued that a Capacity Mechanism could weaken the stimulus for interconnector investment and distort cross-border flows, while another respondent suggested that the proposals are, overall, likely to promote interconnection.

127 The 2009 Third Package comprises two Directives (Directive 2009/72/EC concerning common rules for the internal market in electricity ('the Electricity Directive') and Directive 2009/73/EC concerning common rules for the internal market in gas (the 'Gas Directive')) and three Regulations (Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity (the 'Electricity Regulation'), Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks (the 'Gas Regulation') and Regulation (EC) No 713/2009 establishing an Agency for the Co-operation of Energy Regulators (the 'ACER Regulation')).

128 The Third Package provides for new European network codes which will set minimum rules for cross-border arrangements for gas and electricity. These are intended to cover issues such balancing, capacity allocation for interconnectors and transparency.

9.2.9 Respondents expressed some concerns over the CPF, arguing that it could incentivise electricity to be imported into GB or that it could increase the risk of carbon leakage due to higher electricity prices.

9.2.10 A few respondents highlighted state aid rules as a potential risk.

Impact on interconnectors and cross-border flows

9.2.11 We consider that current and future interconnection will continue to play a key role in providing secure and sustainable sources of electricity.

Decarbonisation

9.2.12 We are considering the role low-carbon generation from outside the UK can play in delivering our carbon emission reduction targets. As set out in our Renewables Roadmap published alongside this document[129], we intend to provide for two-way trade in renewable energy with other Member States, where appropriate, and possible, for the purposes of the renewable energy targets set out in the Renewables Directive. Similarly we will need to consider whether there may be circumstances in which it is appropriate to allow other forms of low-carbon generation, developed outside the UK, to be supported by our package of reforms.

9.2.13 As set out in Chapter 2, the trading of renewable effort presents opportunities for the UK. We recognise the value that generation based outside the UK could have in meeting domestic UK needs. We also have an abundant offshore wind resource and should explore the possibility of exporting energy generated in UK waters direct to neighbouring Member States.

9.2.14 It may be possible to have offshore wind projects connected to both the UK and other Member States, increasing our security of supply. Exploiting our North Seas resources together, we could provide new manufacturing and jobs in the UK. We will look to ensure that we have powers that will enable the UK to potentially export renewable energy for the purposes of the renewable energy targets set under the Renewables Directive.

Security of Supply

9.2.15 In Chapter 3 we describe two potential Capacity Mechanisms designed to ensure security of supply. Within this context, we recognise that GB is becoming increasingly interconnected, which can play an important role in contributing towards our energy security. We would expect that cross-border flows – under market coupling arrangements – would continue to be determined by the price difference between the two energy markets. This should allow interconnectors to be used fully and efficiently.

129 http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/renewable_ener.aspx

9.2.16 Furthermore, we envisage that a Capacity Mechanism could allow non-GB generation (for example, a generator based in France) to participate and could potentially encourage interconnection, but we recognise that there may be potential technical constraints with this. Further detail can be found in Annex C.

European Union Emissions Trading System

9.2.17 We remain fully committed to the EU ETS, and consider it the primary vehicle through which to deliver our carbon emission reduction targets.

9.2.18 However, as set out in Chapter 2, the current level of the EU ETS cap (and associated carbon price) is not consistent with the low-carbon investment required for the UK to meet its 2050 targets. The Government supports an increase in the EU carbon emission reduction target to 30 per cent by 2020. If we are to meet our long-term carbon and security of supply objectives, which we also share with the EU, we need to reform the market now, and make investment in low-carbon generation in the UK more attractive. This is no different to measures put in place by other EU Member States to encourage investment in line with their domestic priorities.

9.2.19 As set out in Chapter 2, the CPF complements the EU ETS by strengthening the carbon price signal in the UK electricity generation sector, enabling higher levels of investment in low-carbon infrastructure and therefore a faster rate of decarbonisation.

9.2.20 Going forward, we would support an EU-wide tightening of the EU ETS in order to meet ambitious carbon emission reduction targets in the EU, and to meet the long-term EU objective of reducing emissions by 80-95 per cent by 2050.

9.2.21 Furthermore, there are no plans to impose a surcharge on imported electricity. We will continue to ensure consistency with EU excise and energy tax Directives.

State Aid

9.2.22 We are considering how the Electricity Market Reform package interacts with State Aid rules, and will engage closely with the European Commission to ensure the policy is consistent with the appropriate rules. All mechanisms will need to be compliant with State Aid rules, where relevant.

Financial regulations

9.2.23 As wholesale energy markets become increasingly integrated, there will be more cross-border trading and a corresponding need for strong cross-border market monitoring. As such, we await new rules[130] on

130 The new rules relate to REMIT (The Commission Proposal for a Regulation of the European Parliament and of the Council on Energy Market Integrity and Transparency, COM (2010) 726), which was recently agreed by the European Parliament and European Council Representatives, and Markets in Financial Instruments Directive (MIFID), 2004/29/EC, which we expect to be amended to next year.

wholesale energy market integrity and transparency, and on financial markets, which will be designed to make the European energy wholesale markets less vulnerable to market abuse. We are considering closely what impact these rules may have on the Electricity Market Reform proposals.

Environmental law

9.2.24 The Electricity Market Reform package will need to be consistent with relevant EU environmental law and we will ensure that all of the implications of this are fully worked through.

9.2.25 In the Government's view, the provisions of EU law do not impose any bar in principle to the implementation of an EPS of the kind outlined in this White Paper, provided that it does not, for example, undermine the EU ETS (which in our view it will not). We will continue to engage with the European Commission over the coming months to help ensure that the EPS is implemented in a way that fully complies with EU law.

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