

**2011 No. 169**

**ELECTRICITY**

**The Renewables Obligation (Amendment) Order (Northern  
Ireland) 2011**

*Laid before the Assembly in draft*

*Made - - - - 23rd March 2011*

*Coming into operation - 1st April 2011*

The Department of Enterprise, Trade and Investment (“the Department”) makes the following Order in exercise of the powers conferred upon it by Articles 52 to 55F of the Energy (Northern Ireland) Order 2033(a) and section 2(2) of the European Communities Act 1972(b) (“the 1972 Act”) (as read with paragraph 1A of Schedule 2 to the 1972 Act(c)).

The Department is a Department designated(d) for the purposes of section 2(2) of the 1972 Act in relation to energy and energy sources.

This Order makes provision for a purpose mentioned in section 2(2) of the 1972 Act and it appears to the Department that it is expedient for the references to Annex 5 to Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources(e) in Schedules A1 and 3A inserted by this Order into the Renewables Obligation Order (Northern Ireland) 2009(f) to be construed as references to Annex 5 to the Directive as amended from time to time.

The Department has consulted the Northern Ireland Authority for Utility Regulation, the General Consumer Council for Northern Ireland, electricity suppliers to whom this Order applies, and such generators of electricity from renewable sources in Northern Ireland and other persons as considered appropriate.

**Citation, commencement, extent and interpretation**

1.—(1) This Order may be cited as the Renewables Obligation (Amendment) Order (Northern Ireland) 2011 and comes into operation on 1st April 2011.

(2) In this Order “the 2009 Order” means the Renewables Obligation Order (Northern Ireland) 2009.

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(a) S.I. 2003/419 (N.I.6) Articles 52 to 55F were substituted by S.R. 2009 No. 35  
(b) 1972 c.68; section 2(2) was amended by section 27(1)(a) of the Legislative and Regulatory Reform Act 2006 (c.51) and Part 1 of the Schedule to the European Union (Amendment) Act 2008 (c.7)  
(c) Paragraph 1A of Schedule 2 was inserted by section 28 of the Legislative and Regulatory Reform Act 2006 and was amended by article 3 of S.I. 2007/1388 and Part 1 of the Schedule to the European Union (Amendment) Act 2008.  
(d) S.I. 2010/761  
(e) OJ L 140, 5.6.2009,p.16  
(f) S.R. 2009 No. 154 was amended by S.R. 2010 No. 134

**Amendments to Article 55(F) of the Energy (Northern Ireland) Order 2003 (interpretation of Articles 52 to 55F)**

2.—(1) Article 55F(1) of the Energy (Northern Ireland) Order 2003 (Interpretation of Articles 52 to 55F) is amended as follows;

(2) After the definition of “banding provision” insert—

““bioliquid” has the meaning given by Article 2(h) of Directive 2009/28/EC of the European Parliament and of the Council of 23rd April 2009 on the promotion of the use of energy from renewable resources;”

(3) In the definition of “fossil fuel”, after “any substance” insert, “other than bioliquid”.

**Amendments to Article 2 of the 2009 Order (interpretation)**

3.—(1) Article 2 of the 2009 Order is amended as follows.

(2) In paragraph (1) at the appropriate place in alphabetical order insert each of the following definitions, that is to say—

““biomaterial” means the biodegradable part of—

(a) products, waste and residues of biological origin from agriculture (including vegetal and animal substances), forestry and related industries (including fisheries and aquaculture); and

(b) industrial, commercial and municipal waste;”;

““fossil derived bioliquid” means bioliquid produced directly or indirectly from—

(a) coal;

(b) lignite;

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

(d) crude liquid petroleum, or;

(e) petroleum products (within the meaning of the Energy Act 1976);”;

““greenhouse gas emission criteria” means the criteria set out in Schedule A1;”;

““land criteria” means the criteria set out in Schedule A2;”;

““MCS” means the Microgeneration Certification Scheme or equivalent schemes accredited under EN45011 which certify microgeneration products and installers in accordance with consistent standards;”;

““Renewables Directive” means Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, and in Schedules A1 and 3A to be construed as references to Annex 5 to the Directive as amended from time to time;”;

““sustainability information” means information submitted to the Authority by the operator of a generating station for the purpose of demonstrating that a bioliquid meets the greenhouse gas emission criteria and the land criteria;”.

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(a) 1976 c.76

- (3) In paragraph (1), for the definition of “total installed capacity”, substitute—
- ““total installed capacity” means—
- (a) in relation to a generating station, the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption);
  - (b) in relation to a wind turbine, the maximum capacity at which the turbine could be operated for a sustained period without causing damage to it (assuming there was no interruption to the wind powering it);”.
- (4) In paragraph (2), after each reference to “waste” insert “, fossil derived bioliquid”.
- (5) For paragraph (4) substitute—
- “(4) The fuels referred to in paragraph (3) are—
- (a) fossil derived bioliquid;
  - (b) bioliquid (not being fossil derived bioliquid);
  - (c) biomass (not being bioliquid);
  - (d) waste which constitutes a renewable source (not being bioliquid or biomass);
  - (e) fossil fuel including waste (other than waste falling within sub-paragraphs (a) to (d)).”.

**Amendments to Article 3 (waste as a renewable source)**

4. In Article 3(2) of the 2009 Order, for sub-paragraph (b) substitute—
- “(b) is—
- (i) for any waste that is a fossil derived bioliquid, the energy content of the fossil fuel from which the fossil derived bioliquid is directly or indirectly produced expressed as a percentage of the energy content of that fossil derived bioliquid as a whole,
  - (ii) for all other waste, the energy content of the fossil fuel from which the waste is in part composed or derived expressed as a percentage of the energy content of that waste as a whole.”.

**Amendment to Article 4 (biomass and fuels which are to be treated as biomass)**

5. In Article 4(4) of the 2009 Order after “not being waste” insert “or fossil derived bioliquid”.

**Fossil derived bioliquid**

6. After Article 4 of the 2009 Order (biomass and fuels which are to be treated as biomass) insert—

**“Fossil derived bioliquid**

**4A.**—(1) For the purpose of this Order, fossil derived bioliquid is to be treated as being in part composed of (or in part derived from) fossil fuel.

(2) Where fossil derived bioliquid (not being waste) is used, whether on its own or not, to fuel a generating station, the proportion of fossil derived bioliquid which is to be treated as being composed of (or derived from) fossil fuel—

- (a) is to be determined by the Authority, and
- (b) is the energy content of the fossil fuel from which the fossil derived bioliquid is directly or indirectly derived expressed as a percentage of the energy content of the fossil derived bioliquid as a whole.

(3) It is for the operator of the generating station to demonstrate to the Authority's satisfaction what proportion of the fossil derived bioliquid is to be treated as being composed of (or derived from) fossil fuel.

(4) When determining that proportion the Authority is entitled to have regard to any material (whether or not produced to it by the operator of the generating station) if, in its opinion, that material indicates what proportion of the fossil derived bioliquid is to be treated as being composed of (or derived from) fossil fuel.”.

**Amendment to Article 18A (generating stations accredited for longer than 20 years)**

7. In Article 18A (5) of the 2009 Order, for “article” substitute “Article”.

**Amendment to Article 22 (circumstances in which no NIROCs are to be issued in respect of electricity generated from renewable sources)**

8. In Article 22(1) of the 2009 Order, after every reference to “biomass” insert “or fossil derived bioliquid”.

**Circumstances in which no NIROCs are to be issued in respect of electricity generated from bioliquid**

9. After Article 22 of the 2009 Order (circumstances in which no NIROCs are to be issued in respect of electricity generated from renewable sources) insert—

**“Circumstances in which no NIROCs are to be issued in respect of electricity generated from bioliquid**

**22A.**—(1) No NIROCs are to be issued in respect of any electricity generated by a generating station from bioliquid unless the bioliquid meets the greenhouse gas emission criteria and the land criteria.

(2) It is for the operator of the generating station to demonstrate to the Authority's satisfaction that the bioliquid meets the greenhouse gas emission criteria and the land criteria.

(3) Where paragraph (4) applies to a consignment of bioliquid, mass balance system must be used for the purpose of demonstrating that bioliquid meets the greenhouse gas emission criteria and the land criteria.

(4) This paragraph applies to a consignment of bioliquid where—

- (a) the consignment of bioliquid was withdrawn from a mixture containing consignments of bioliquid with differing sustainability profiles; or
- (b) consignments of the biomaterial from which the consignment of bioliquid was made were withdrawn from a mixture containing consignments of biomaterial with differing sustainability profiles.

(5) For the purposes of paragraph (3), a mass balance system is a system which—

- (a) provides for the sustainability profiles of the consignments of biomaterial or bioliquid added to a mixture to be attributed to the consignments withdrawn from that mixture; and
- (b) requires the sustainability profiles attributed to the sum of all the consignments withdrawn from a mixture to be the same, and in the same quantities, as the sustainability profile of the sum of all the consignments added to that mixture.

- (6) For the purposes of paragraphs (4) and (5)—
- (a) the sustainability profile of a consignment of biomaterial is—
    - (i) information identifying the material of which the biomaterial is composed; and
    - (ii) information relating to the biomaterial to be used for the purpose of determining whether bioliquid made from the biomaterial meets the greenhouse gas emission criteria and the land criteria;
  - (b) the sustainability profile of a consignment of bioliquid is information identifying—
    - (i) the material of which the bioliquid is composed; and
    - (ii) the proportion that meets the greenhouse gas emission criteria and the land criteria.

### **Common agricultural policy requirements**

**22B.** No NIROCs are to be issued in respect of any electricity generated by a generating station from bioliquid if—

- (a) the bioliquid is derived from biomaterial which—
  - (i) is of agricultural origin;
  - (ii) was cultivated in the EU; and
  - (iii) is not waste; and
- (b) the Authority is satisfied that the biomaterial referred to in sub-paragraph (a) was—
  - (i) cultivated in a manner that breached a statutory management requirement identified in entries 1 to 5 and 9 of the list in Annex 2 to Council Regulation (EC) No 73/2009(a) (“the 2009 Regulation”); or
  - (ii) obtained from land which does not meet the minimum requirements for good agricultural and environmental condition defined pursuant to Article 6(1) of the 2009 Regulation(b).”.

### **Amendments to Article 27 (microgenerators and qualifying small scale generators)**

**10.** For Article 27, 27A and 27B substitute—

#### **“Microgenerators and qualifying new small scale generators**

**27.—(1)** This Article applies to a generating station which—

- (a) is an accredited microgenerator,
- (b) has not had a total declared net capacity in excess of 50 kilowatts at any time after 31st March 2009, and
- (c) is not a qualifying new onshore wind station or a qualifying new hydro station or a qualifying new solar photovoltaic station or a qualifying new anaerobic digestion station.”.

“(2) The amount of electricity to be stated in each NIROC which is issued in respect of the electricity generated by a generating station to which this Article applies is ½ megawatt hour.”.

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(a) OJ L e0, 31.1.2009, p.16 Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003.

(b) Article 6(1) requires Member States to define, at national or regional level, minimum requirements for good agricultural and environmental condition on the basis of the framework established in Annex 3 to the 2009 Regulation.

“(3) In this Article and in Article 27A to 27C—

“qualifying new hydro station” means a hydro generating station which—

- (a) was first accredited after 31st March 2010, and
- (b) has not had a total declared net capacity in excess of 1 megawatt at any time after 31st March 2010;”;

““qualifying new onshore wind station” means a generating station which—

- (a) generates electricity from onshore wind,
- (b) was first accredited after 31st March 2010, and
- (c) has not had a declared net capacity in excess of 250 kilowatts at any time after 31st March 2010;”;

“qualifying new solar photovoltaic station”, means a generating station which—

- (a) generates electricity from the direct conversion of sunlight into electricity,
- (b) was first accredited after 31st March 2010, and
- (c) has not had a declared net capacity in excess of 50 kilowatts at any time after 31st March 2010.”.

““qualifying new anaerobic digestion”, means a generating station which—

- (a) generates electricity from gas formed by the anaerobic digestion of material which is neither sewage nor material in a landfill.
- (b) was first accredited on or after 1st April 2011, and
- (c) has not had a declared net capacity in excess of 5 megawatts at any time on or after 1st April 2011.

#### **Qualifying new onshore wind stations and qualifying new solar photovoltaic stations**

**27A.**—(1) This Article applies to a generating station which is—

- (a) a qualifying new onshore wind station; or
- (b) a qualifying new solar photovoltaic station.

(2) The amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a generating station to which this Article applies is  $\frac{1}{4}$  megawatt hour.

#### **Qualifying new hydro stations**

**27B.**—(1) This Article applies to a generating station which is a qualifying new hydro station.

(2) The amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a generating station to which this Article applies is—

- (a) in relation to a qualifying new hydro station which has not had a declared net capacity in excess of 20 kilowatts at any time after 31st March 2010,  $\frac{1}{4}$  megawatt hour;
- (b) in relation to a qualifying new hydro station which has had a declared net capacity in excess of 20 kilowatts but not in excess 250 kilowatts at any time after 31st March 2010,  $\frac{1}{3}$  megawatt hour;
- (c) in relation to a qualifying new hydro station which has had a declared net capacity in excess of 250 kilowatts at any time after 31st March 2010,  $\frac{1}{2}$  megawatt hour.

### **Qualifying new anaerobic digestion stations**

**27C.**—(1) This Article applies to a generating station which is a qualifying new anaerobic digestion station.

(2) The amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a generating station to which this Article applies is—

- (a) in relation to a qualifying new anaerobic digestion station which has not had a declared net capacity in excess of 500 kilowatts at any time on or after 26th April 2010,  $\frac{1}{4}$  megawatt hour;
- (b) in relation to a qualifying new anaerobic digestion station which has had a declared net capacity in excess of 500 kilowatts at any time on or after 26th April 2010,  $\frac{1}{3}$  megawatt hour.

### **Microgeneration Certification Scheme**

**27D.**—(1) This Article applies to a generating station which—

- (a) is a microgenerator;
- (b) was first accredited after 31<sup>st</sup> March 2011; and is
- (c) an onshore wind station; or a solar photovoltaic station.

(2) Accreditation of a generating station to which this Article and either Article 27 or 27A applies is conditional upon the operator of the generating station providing to the Authority an MCS certificate which confirms that the plant or apparatus have been installed in compliance with MCS criteria.”.

### **Amendments to Article 29 (qualifying existing onshore wind stations, qualifying existing solar photovoltaic stations and qualifying existing hydro stations)**

11. After Article 29 insert—

#### **“Qualifying existing onshore wind stations and qualifying existing solar photovoltaic stations**

**29A.**—(1) This Article applies to a qualifying existing onshore wind station or a qualifying existing solar photovoltaic station.

(2) For the purposes of paragraph (1)

- (a) “qualifying existing onshore wind station” means a generating station which—
  - (i) generates electricity from onshore wind,
  - (ii) was accredited on or before 31st March 2010, and
  - (iii) has not had a declared net capacity in excess of 250 kilowatts at any time after 31st March 2010;
- (b) “qualifying existing solar photovoltaic station” means a generating station which—
  - (i) generates electricity from the direct conversion of sunlight into electricity,
  - (ii) was accredited on or before 31st March 2010, and
  - (iii) has not had a declared net capacity in excess of 50 kilowatts at any time after 31st March 2010;

(3) Subject to paragraph (4) Articles 25(4) and (5), 27 and 28 (as appropriate) shall apply for the purposes of determining the amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a generating station to which this Article applies.

(4) Where, at the time it generates electricity, to which a NIROC relates, the total installed capacity of a generating station to which this Article applies is greater than it was on 31st March 2010—

- (a) the provisions referred to in paragraph (3) apply only in relation to NIROCs which are to be issued in respect of electricity generated using the station's original capacity; and
- (b) the amount of electricity to be stated in each NIROC which is issued in respect of electricity generated using the station's additional capacity is  $\frac{1}{4}$  megawatt hour.

(5) In this Article and Article 29B—

“additional capacity” means capacity which does not form part of the capacity of the station as at 31<sup>st</sup> March 2010

“original capacity” means, in the case of an existing generating station, the capacity of the station as accredited and any additional capacity which (in the Authority's view) formed part of the station as at 31<sup>st</sup> March 2010.

(6) Where electricity generated by a generating station using additional capacity is not measured separately from electricity generated by it using its original capacity, the electricity generated by it which is to be treated (for the purposes of paragraphs (3) and (4)) as having been generated using the relevant additional capacity is the relevant percentage (the appropriate percentage for these purposes being the additional capacity of the station expressed as a percentage of the total installed capacity of the station as at the date of the generation of the electricity).

### **Qualifying existing hydro stations**

**29B.**—(1) This Article applies to a generating station which is a qualifying existing hydro station, that is to say; a hydro generating station which was accredited on or before 31st March 2010 and has not had a declared net capacity in excess of 1 megawatt at any time after 31st March 2010;

(2) Subject to paragraph (3) Articles 25(4) and (5), 27 and 28 (as appropriate) shall apply for the purposes of determining the amount of electricity to be stated in each NIROC which is issued in respect of electricity generated by a generating station to which this Article applies..

(3) Where, at the time it generates the electricity, the generating station's total installed capacity is greater than it was on 31st March 2010—

- (a) the provisions referred to in paragraph (2) apply only in relation to NIROCs which are to be issued in respect of electricity generated using the station's original capacity; and
- (b) the amount of electricity to be stated in each NIROC which is issued in respect of electricity generated using the station's additional capacity is—
  - (i) in relation to additional capacity which, taken together with the original capacity, does not exceed 20 kilowatts,  $\frac{1}{4}$  megawatt hour;
  - (ii) in relation to additional capacity which, taken together with the original capacity, exceeds 20 kilowatts but does not exceed 250 kilowatts,  $\frac{1}{3}$  megawatt hour;
  - (iii) in relation to additional capacity which, taken together with the original capacity, exceeds 250 kilowatts,  $\frac{1}{2}$  megawatt hour.

(4) Where electricity generated by a generating station using additional capacity is not measured separately from electricity generated by it using its original capacity, the electricity generated by it which is to be treated (for the purposes of paragraphs (2) and (3)) as having been generated using the relevant additional capacity is the relevant percentage (the appropriate percentage for these purposes being the additional capacity of the station expressed as a percentage of the total installed capacity of the station as at the date of the generation of the electricity.”.

**Amendments to Article 46 (information to be provided to the Authority where electricity is generated from biomass)**

**12.**—(1) Article 46 of the 2009 Order(a) is amended as follows.

(2) In the heading after “biomass” insert “or fossil derived bioliquid”.

(3) In paragraph (1)(a) after “other than” insert “waste, biomass wholly derived from waste,”.

(4) Omit paragraph (3)(f).

(5) At the end of paragraph (3)(j) omit “and”.

(6) At the end of paragraph (3)(k) for the full stop substitute “and”.

(7) After paragraph (3)(k) insert—

“(1) where the biomass was not a bioliquid—

(i) the greenhouse gas emissions from the use of the biomass to generate one mega joule of electricity;

(ii) whether the biomass meets the land criteria;

(iii) where the greenhouse gas emissions from the use of the biomass to generate one mega joule of electricity are greater than 79.2 grams, the main reasons why biomass with lower greenhouse gas emissions was not used;

(iv) where the biomass does not meet the land criteria, the main reasons why biomass meeting the land criteria was not used; and

(v) where any of the information specified in paragraphs (i) and (ii) is not known—

(aa) the main reasons why that information is not known; and

(bb) the main reasons why biomass for which that information is known was not used.”.

(8) After paragraph (3) insert—

“(3A) For the purposes of paragraph (3)(1), the operator of the generating station must calculate the greenhouse gas emissions using one of the following methods—

(a) the actual value method; or

(b) the default value method.

(3B) The default value method must not be used to calculate the greenhouse gas emissions from the use of biomass unless—

(a) the biomass is described in the first column of Part 2 of Schedule 3B; and

(b) in relation to the biomass, the result of the calculation in paragraph 7 of Part C of Annex 5 to the Renewables Directive is equal to, or less than, zero.

(3C) For the purposes of paragraph (3B)(b), paragraph 7 of Part C of Annex 5 to the Renewables Directive is to be read as if—

(a) for each reference to “biofuel” there was substituted “biomass”; and

(b) the words “or bioliquid” were omitted in each place in which those words occur.”

(9) For paragraph (6) substitute—

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(a) Article 46 was amended by Article 14 of S.R. 2010/134.

“(6) In this Article—

“actual value method” means the calculation method provided for in Schedule 3A;

“default value method” means the calculation method provided for in Part 1 of Schedule 3B; and

“environmental quality assurance scheme” means a voluntary scheme which establishes environmental or social standards in relation to the production of biomass or matter from which a biomass fuel is derived.

(7) References in this Article to biomass, other than in or for the purposes of paragraph (3)(1), include fossil derived bioliquid.”

### **Bioliquid sustainability audit report**

13. After Article 46 of the 2009 Order, insert—

#### **“Bioliquid sustainability audit report**

**46A.**—(1) This Article applies to a generating station which generates electricity (wholly or partly) from bioliquid in respect of which the operator of the generating station has submitted sustainability information.

(2) In relation to each consignment of bioliquid used in a generating station to which this Article applies, the operator of the station must, by the 31st May immediately following the obligation period during which the bioliquid referred to in paragraph (1) is used (“the relevant date”), provide the Authority with a sustainability audit report meeting the requirements specified in paragraph (3).

(3) The requirements specified in this paragraph are that the sustainability audit report must—

- (a) be prepared by a person who is not—
  - (i) the owner or operator of the generating station; or
  - (ii) a connected person, in relation to the owner or operator of the generating station;
- (b) identify the systems used by the operator of the generating station to produce the relevant sustainability information and confirm that measures have been taken—
  - (i) to protect those systems against fraud; and
  - (ii) to ensure the information produced by those systems is accurate and reliable;
- (c) evaluate the adequacy of the frequency and methodology of any sampling carried out for the purpose of obtaining or checking the data on which the operator relied in preparing the relevant sustainability information;
- (d) evaluate the robustness of the data on which the operator relied in preparing the relevant sustainability information; and
- (e) be prepared to an adequate standard.

(4) Subject to paragraph (5), it is for the operator of the generating station to demonstrate to the Authority’s satisfaction that the sustainability audit report was prepared to an adequate standard.

(5) A sustainability audit report shall be deemed to have been prepared to an adequate standard if it complies with the International Standard on Assurance Engagements 3000(2010 edition)(a) or equivalent.

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(a) The International Standard on Assurance Engagements 3000 is set out from page 292 of Part II of the publication entitled “Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements” (2010 edition) (ISBN 978-1-60815-052-6) published by the International Federation of Accountants. Copies can be obtained from [www.ifac.org](http://www.ifac.org).

(6) Where, in relation to bioliquid used in a generating station to which this Article applies, the operator of the station fails to provide the Authority with a sustainability audit report meeting the requirements specified in paragraph (3) by the relevant date, the Authority must, in relation to any NIROCs to which the operator would otherwise be entitled, postpone the issue of those NIROCs (up to the specified number) until such time as the sustainability audit report is provided.

(7) For the purposes of paragraph (6), the specified number is the number of NIROCs which the Authority has or estimates that it has or, but for this Article, would have issued in respect of the electricity generated by the bioliquid in relation to which a sustainability audit report meeting the requirements specified in paragraph (3) should have been provided.

(8) In this Article “relevant sustainability information” in relation to a consignment of bioliquid means the sustainability information submitted by the operator of the generating station in respect of the consignment.”.

#### **Amendment to Article 49 (functions of the Authority)**

**14.** In Article 49 of the 2009 Order, after paragraph (1) insert—

“(1A) The Authority must, as soon as reasonably practicable after each obligation period, forward to the Department a summary of the sustainability information submitted to it during that period.”.

#### **Greenhouse gas emission saving criteria and land criteria**

**15.** Before Schedule 1 to the 2009 Order, insert the Schedules set out on Schedule 1 to this Order.

#### **The 2009 Order: Schedule 2**

**16.** In Schedule 2 (electricity to be stated in NIROCs) after the title “PART 4” for “39” substitute “29”.

#### **Methods for calculating emissions from the use of biomass**

**17.** After Schedule 3 to the 2009 Order insert the Schedules set out in Schedule 2 to the Order.

#### **Transitionals**

**18.** Nothing in this Order is to affect—

- (a) the issue and revocation of a renewables obligation certificate in respect of electricity generated before 1st April 2011, and anything which falls to be done or determined (whether by the Authority or some other person) in relation to such issue or revocation, under the 2009 Order;
- (b) any obligations or requirements imposed on an operator of a generating station or some other person in respect of the obligation period ending on 31st March 2011, and anything which falls to be done or determined (whether by the generator or some other person) in relation to any such obligations and requirements, under the 2009 Order;

- (c) any obligations and functions of the Authority in respect of that obligation period, and anything which falls to be done or determined (whether by the Authority or some other person) in relation to it, under the 2009 Order.

Sealed with the Official Seal of the Department of Enterprise, Trade and Investment on 23rd March 2011.



*A F Hepper*  
A senior officer of the  
Department of Enterprise, Trade and Investment

## “SCHEDULE A1

Articles 2(1) and 22A

## GREENHOUSE GAS EMISSION CRITERIA FOR BIOLIQUID

**Interpretation****1. In this Schedule—**

“actual value method” means the calculation method for greenhouse gas emissions from the production and use of bioliquids provided for in paragraphs 1, 2 and 5 to 18 of Part C of Annex 5 to the Renewables Directive;

“default percentage” means—

(a) in relation to bioliquid described in the first column of Part A or Part B of Annex 5 to the Renewables Directive—

(i) the percentage (if any) which corresponds to that description in the third column of Part A or Part B of that Annex; or

(ii) where a percentage corresponding to that description is not set out in the third column of Part A or Part B of that Annex, the percentage which complies with the provision corresponding to that description in the second column of Part A or Part B of that Annex;

(b) in all other cases, zero %;

“disaggregated default values” means, in relation to a bioliquid described in the first column of a table in Part D or Part E of Annex 5 to the Renewables Directive, the value which corresponds to that description in the third column of that table in Part D or Part E of Annex 5 to the Renewables Directive;

“disaggregated default values for cultivation” means the figures in the third column of the table entitled “Disaggregated default values for cultivation: ‘ $e_{ec}$ ’ as defined in part C of this Annex” in Part D of Annex 5 to the Renewables Directive;

“greenhouse gas emissions from the use of fossil fuel” means the value given in paragraph 19 of Part C of Annex 5 to the Renewables Directive as the fossil fuel comparator for bioliquids used for electricity production;

“mixed value method” means the calculation method for greenhouse gas emissions from the production and use of bioliquids provided for in paragraphs 1, 2 and 5 to 18 of Part C of Annex 5 to the Renewables Directive, but using one or more disaggregated default values for the bioliquid when carrying out the calculation set out in paragraph 1 of Part C of that Annex; and

“relevant percentage” means—

(a) in relation to bioliquid used to generate electricity before 1st January 2017, 35%;

(b) in relation to bioliquid used to generate electricity during 2017, 50%;

(c) in relation to bioliquid produced by an installation that started producing bioliquid before 1st January 2017 and used to generate electricity on or after 1st January 2018, 50%;

(d) in all other cases, 60%.

### **The greenhouse gas emission criteria**

**2.** Where bioliquid is used to generate electricity, it meets the greenhouse gas emission criteria if—

- (a) the greenhouse gas emissions from its use are lower, by at least the relevant percentage, than the greenhouse gas emissions from the use of fossil fuel; or
- (b) the bioliquid was—
  - (i) produced by an installation that was producing bioliquid on 23rd January 2008; and
  - (ii) used to generate electricity before 1st April 2013.

### **Calculating the percentage difference**

**3.** For the purposes of paragraph 2, the percentage difference between the greenhouse gas emissions from the use of the bioliquid and the greenhouse gas emissions from the use of fossil fuel is—

- (a) to be calculated using one of the following methods—
  - (i) the actual value method; or
  - (ii) the mixed value method; or
- (b) the default percentage.

**4.** The mixed value method must not be used for the purposes of paragraph 2 unless the bioliquid is described in the first column of a table in Part D or Part E of Annex 5 to the Renewables Directive.

**5.** Where the mixed value method is used for the purposes of paragraph 2, the disaggregated default values for cultivation must not be used in carrying out the calculation in paragraph 1 of Part C of Annex 5 to the Renewables Directive unless the biomaterial from which the bioliquid is made—

- (a) was cultivated outside the EU;
- (b) was cultivated in an area included in a list submitted under Article 19(2) of the Renewables Directive;
- (c) is waste; or
- (d) is residue (other than residue from agriculture, aquaculture or fisheries).

**6.** The default percentage must not be used for the purposes of paragraph 2 unless—

- (a) in relation to the bioliquid, the result of the calculation in paragraph 7 of Part C of Annex 5 to the Renewables Directive is equal to, or less than, zero; and
- (b) in the case of a bioliquid described in the first column of Part A of Annex 5 to the Renewables Directive, the biomaterial from which the bioliquid is made—
  - (i) was cultivated outside the EU;
  - (ii) was cultivated in an area included in a list submitted under Article 19(2) of the Renewables Directive;
  - (iii) is waste; or
  - (iv) is residue (other than residue from agriculture, aquaculture or fisheries).

## LAND CRITERIA

**Interpretation****1. In this Schedule—**

“continuously forested area” means land of an area of more than one hectare which includes—

- (a) trees more than five metres tall providing a tree canopy cover of more than 30%;  
or
- (b) trees collectively having the capacity to provide a tree canopy cover of more than 30% which—
  - (i) are more than five metres tall; or
  - (ii) have the capacity to grow to a height of more than five metres;

“designated for nature protection purposes” means designated pursuant to the law of the United Kingdom or of any part of the United Kingdom or pursuant to the law of any country or territory outside the United Kingdom, for the purpose of protecting the natural environment;

“lightly forested area” means land of an area of more than one hectare which includes—

- (a) trees more than five metres tall providing a tree canopy cover of between 10% and 30%, or
- (b) trees collectively having the capacity to provide a tree canopy cover of between 10% and 30% which—
  - (i) are more than five metres tall; or
  - (ii) have the capacity to grow to a height of more than five metres;

“primary forest” means woodland of native species, where there is no clearly visible indication of human activity and ecological processes are not significantly disturbed; and

“wetland area” means land that is covered with or saturated by water—

- (a) permanently; or
- (b) for a significant part of the year.

**2. For the purposes of this Schedule—**

- (a) biomaterial was obtained from a former continuously forested area if the land—
  - (i) was a continuously forested area at any time during January 2008; and
  - (ii) was not a continuously forested area when the biomaterial was obtained from it;
- (b) biomaterial was obtained from a former lightly forested area if the land—
  - (i) was a lightly forested area at any time during January 2008; and
  - (ii) was not a lightly forested area or a continuously forested area when the biomaterial was obtained from it; and
- (c) biomaterial was obtained from a former wetland area if the land—
  - (i) was a wetland area at any time during January 2008; and
  - (ii) was not a wetland area when the biomaterial was obtained from it.

## Land criteria

3.—(1) Fuel meets the land criteria if the biomaterial from which it was made—

- (a) was waste;
- (b) was residue (other than residue from agriculture, aquaculture, fisheries or forestry); or
- (c) was obtained from a permitted source.

(2) Biomaterial is obtained from a permitted source unless it is obtained from—

- (a) land which at any time during or after January 2008 was primary forest;
- (b) except where sub-paragraph (3) applies to the biomaterial, land which at any time during or after January 2008 was designated for nature protection purposes;
- (c) except where sub-paragraph (4) applies to the biomaterial, land which at any time during January 2008 was peatland;
- (d) a former continuously forested area;
- (e) except where sub-paragraph (5) or (7) applies to the biomaterial, a former lightly forested area; or
- (f) a former wetland area.

(3) This sub-paragraph applies to biomaterial obtained from land which at any time during or after January 2008 was designated for nature protection purposes if the production of that biomaterial did not interfere with the nature protection purposes for which the land was designated.

(4) This sub-paragraph applies to biomaterial obtained from land which at any time during January 2008 was peatland if the cultivation and harvesting of that biomaterial did not involve the drainage of previously undrained soil.

(5) This sub-paragraph applies to biomaterial obtained from a former lightly forested area where—

- (a) the fuel made from the biomaterial was not a bioliquid; and
- (b) the greenhouse gas emissions from the use of the fuel to generate one mega joule of electricity did not exceed 79.2 grams.

(6) For the purposes of sub-paragraph (5)(b), the greenhouse gas emissions must be calculated using the method set out in Schedule 3A.

(7) This sub-paragraph applies to biomaterial obtained from a former lightly forested area where—

- (a) the fuel made from the biomaterial was a bioliquid; and
- (b) the greenhouse gas emissions from the use of the bioliquid to generate electricity were lower, by at least the relevant percentage, than the greenhouse gas emissions from the use of fossil fuel.

(8) For the purposes of sub-paragraph (7)(b), the percentage difference between the greenhouse gas emissions from the use of the bioliquid and the greenhouse gas emissions from the use of fossil fuel must be calculated using the actual value method.

(9) In this paragraph, “actual value method”, greenhouse gas emissions from the use of fossil fuel” and “relevant percentage” have the same meaning as in Schedule A2.”

## “SCHEDULE 3A

ACTUAL VALUE METHOD FOR CALCULATING EMISSIONS  
FROM THE USE OF BIOMASS

1. The greenhouse gas emissions from the use of biomass are equal to—

(a) where the biomass is used by a combined heat and power generating station,

$$\frac{E}{\eta_{el}} \left( \frac{\eta_{el}}{\eta_{el} + C_h \times \eta_h} \right);$$

(b) in any other case,  $\frac{E}{\eta_{el}}$ .

2. In this Schedule—

(a)  $\eta_{el}$  is equal to  $\frac{A}{F}$  where—

(i) A is the total amount of electricity generated by the generating station during the obligation period; and

(ii) F is the energy content of all of the fuels used in generating that electricity during the obligation period;

(b)  $\eta_h$  is equal to  $\frac{H}{F}$  where—

(i) F has the same meaning as in sub-paragraph (a)(ii); and

(ii) H is the energy content of all of the heat supplied to any premises by the generating station during the obligation period;

(c)  $C_h$  is equal to—

(i) where T is less than 423 kelvin, 0.3546;

(ii) in any other case,  $\frac{T - 273}{T}$ ;

(d) E is the greenhouse gas emissions from the production of the biomass and is to be calculated in accordance with Part C of Annex 5 of the Renewables Directive but as if the following modifications were made to Part C of that Annex—

(i) in paragraph 1—

(aa) for “and use of transport fuels, biofuels and bioliquids” there was substituted “of biomass”;

(bb) for “E = total emissions from the use of the fuel” there was substituted “E = greenhouse gas emissions from the production of the biomass”;

(cc) for “ $e_u$  = emissions from the fuel in use” there was substituted “ $e_u$  = zero”;

(ii) in paragraph 2, for the references to “fuels” and “fuel” there was substituted in each case “biomass”;

- (iii) paragraphs 3 and 4 were omitted
- (iv) in paragraph 7—
  - (aa) for each reference to “biofuel” there was substituted “biomass”;
  - (bb) the words “or bioliquid” were omitted in each place in which those words occur;
- (v) in paragraph 11, for “fuel” there was substituted “biomass”;
- (vi) paragraph 13 was omitted;
- (vii) paragraph 14, for “fuel” there was substituted “biomass”;
- (viii) for paragraphs 16 there was substituted—

“**16.** Emission saving from excess electricity from cogeneration shall be taken to be zero.”.
- (ix) in paragraph 17, for each reference to “fuel” there was substituted “biomass”;
- (x) in paragraph 18—
  - (aa) for “fuel” there was substituted “biomass”;
  - (bb) the words “In the case of biofuels and bioliquids” were omitted;
  - (cc) for “fuels” there was substituted “biomass”; and
- (xi) paragraph 19 was omitted; and
- (e) T is the maximum temperature in degrees kelvin of heat or steam which is (or may be) supplied by the generating station to any premises.”

DEFAULT VALUE METHOD FOR CALCULATING  
EMISSIONS FROM THE USE OF BIOMASS

PART 1

METHOD FOR CALCULATING EMISSIONS

1. The greenhouse gas emissions from the use of biomass are equal to—
  - (a) where the biomass is used by a combined heat and power generating station,
 
$$\frac{E}{\eta_{el}} \left( \frac{\eta_{el}}{\eta_{el} + C_h \times \eta_h} \right);$$
  - (b) in any other case,  $\frac{E}{\eta_{el}}$ .
  
2. In this Schedule—
  - (a)  $\eta_{el}$ ,  $\eta_h$ ,  $C_h$  and T have the same meaning as in Schedule 3A; and
  - (b) E, in relation to a type of biomass described in the first column of the table in Part 2, is the number of grams which corresponds to that description in the second column of that table.

PART 2

DEFAULT GREENHOUSE GAS EMISSIONS FROM THE PRODUCTION  
OF BIOMASS

<i>Biomass</i>	<i>Default greenhouse gas emissions from the production of biomass (in grams)</i>
Wood chips made from residue from forestry carried out in European temperate continental forest.	1
Wood chips made from residue from forestry carried out in tropical or subtropical forest.	25
Wood chips from short rotation forestry carried out in European temperate continental forest.	4
Wood chips from short rotation forestry carried out in tropical or sub-tropical forest.	28
Wood briquettes or wood pellets— (a) which are made from residue from forestry carried out in European temperate continental forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by wood.	2
Wood briquettes or wood pellets— (a) which are made from residue from forestry carried out in tropical or subtropical forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by natural gas.	20

Wood briquettes or wood pellets— (a) which are made from residue from forestry carried out in tropical or subtropical forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by wood.	17
Wood briquettes or wood pellets— (a) which are made from residue from forestry carried out in European temperate continental forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by natural gas.	35
Wood briquettes or wood pellets— (a) which are made from short rotation forestry carried out in European temperate continental forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by wood.	4
Wood briquettes or wood pellets— (a) which are made from short rotation forestry carried out in European temperate continental forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by natural gas.	22
Wood briquettes or wood pellets— (a) which are made from short rotation forestry carried out in tropical or sub-tropical forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by wood.	22
Wood briquettes or wood pellets— (a) which are made from short rotation forestry carried out in tropical or sub-tropical forest; and (b) where the process to produce the wood briquettes or wood pellets was fuelled by natural gas.	40
Charcoal made from residue from forestry carried out in European temperate continental forest.	41
Charcoal made from residue from forestry carried out in tropical or sub-tropical forest.	50
Charcoal made from short rotation forestry carried out in European temperate continental forest.	46
Charcoal made from short rotation forestry carried out in tropical or sub-tropical forest.	57
Wheat straw	2
Bagasse briquettes where the process to produce the bagasse briquettes was fuelled by wood.	17
Bagasse briquettes where the process to produce the bagasse briquettes was fuelled by natural gas.	35
Bagasse bales	20
Palm kernel	27
Rice husk briquettes	28
Miscanthus bales	7
Biogas produced from wet manure.	8
Biogas produced from dry manure.	7
Biogas produced from wheat, where the whole plant was used to produce the biogas.	21
Biogas produced from straw.	21
Biogas produced from maize, where—	34

(a) the whole maize plant was used in the process to produce the biogas; and (b) the maize was not grown by organic farming methods.	
Biogas produced from maize, where— (a) the whole maize plant was used in the process to produce the biogas; and (b) the maize was grown by organic farming methods.	19”

## EXPLANATORY NOTE

*(This note is not part of the Order)*

This Order amends the Energy (Northern Ireland) Order 2003 and the Renewables Obligation Order (Northern Ireland) 2009 (“the 2009 Order”) and makes transitional provision.

The 2009 Order imposes an obligation (“the renewables obligation”) on all electricity suppliers, licensed under the Electricity Order (Northern Ireland) 1992 (“the Electricity Order”) who supply electricity in Northern Ireland. Suppliers must produce, by a specified day, a certain number of renewables obligation certificates in respect of each megawatt hour of electricity that each supplies to customers in Northern Ireland during a specified period known as an obligation period. The Order provides for the renewables obligation to be administered by the Northern Ireland Authority for Utility Regulation (“the Authority”) who are responsible for issuing renewables obligation certificates (NIROCs) to renewable electricity generators on their renewable output.

Articles 2 to 6, 8, 9, 12, 13, 14, 15 and 17 implement, in relation to the renewables obligation, Articles 17 to 19 of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (“the Renewables Directive”). All other Articles of this Order do not implement European Union obligations.

Article 2 amends the definition of “fossil fuel” in Article 55F of the Electricity (Northern Ireland) Order 2003, to remove bioliquids produced directly or indirectly from coal, lignite, natural gas, crude liquid petroleum or petroleum products from the scope of the definition of fossil fuel. In consequence, bioliquids produced directly or indirectly from those products will fall within the definition of renewable sources set out in that section. Article 2 also inserts into that section a definition of “bioliquid”.

Article 3(2) inserts new definitions into Article 2 of the 2009 Order, including a definition for fossil derived bioliquid (which is a sub-category of all bioliquids). Article 3(3) substitutes the definition of “total installed capacity”.

Article 3(4) amends Article 2(2) of the 2009 Order to set out the meaning of references to the energy content of a fossil derived bioliquid in any month during which the fossil fuel proportion of that fossil derived bioliquid varies. Article 3(5) amends Article 2(4) of the 2009 Order to set out how the provisions of the 2009 Order apply if fossil derived bioliquid is mixed with other categories of fuel (such as biomass which is not a bioliquid).

Articles 4 and 5 amend the provisions in Articles 3 and 4 of the 2009 Order for determining the proportion of waste and of biomass which is composed of fossil fuel.

Article 6 inserts a new Article 4A into the 2009 Order. The new Article 4A sets out how to determine the proportion of a fossil derived bioliquid which is to be treated as being composed of fossil fuel. NIROCs will not be issued in respect of the generation of electricity attributed to the proportion of the fossil derived bioliquid which is treated as being composed of fossil fuel (Part 5 of the 2009 Order).

Article 7 makes a correction to Article 18A of the 2009 Order.

Article 8 amends Article 22 of the 2009 Order to widen the exceptions to the circumstances in which no NIROCs are to be issued.

Articles 9 and 15 insert new Articles 22A and 22B and new Schedules A1 and A2 into the 2009 Order. The new Articles 22A and 22B set out additional circumstances in which NIROCs are not to be issued in respect of electricity generated from bioliquid. The new Article 22A includes a requirement that no NIROCs are to be issued in respect of any electricity generated using bioliquid that does not meet the greenhouse gas emission criteria (which are set out in the new Schedule A1) and the land criteria (which are set out in the new Schedule A2).

Articles 10 and 11 amend Articles 27 and 29 of the 2009 Order and insert new Articles 27A, 27B, 27C, 27D, 29A and 29B. The amendments and new Articles permit small anaerobic digestion stations to benefit from enhanced levels of support, provide for certain existing small scale generators to benefit from enhanced levels of support in relation to any additional capacity installed after 31 March 2010 up to certain thresholds and place additional conditions on certain generating stations for accreditation purposes.

Articles 12 and 17 amend Article 46 of the 2009 Order and insert new Schedules 3A and 3B. Article 46 of the 2009 Order requires certain information to be provided to the Authority where electricity is generated from biomass. The amendments made by Article 12 extend these information requirements to fossil derived bioliquids, but remove them from biomass that is, or is derived from, waste. The amendments also impose new information requirements where electricity is generated from biomass (other than bioliquid), including information requirements relating to the greenhouse gas emissions from the use of the biomass to generate electricity (which is to be calculated in accordance with the new Schedules 3A or 3B as applicable).

Article 13 inserts a new Article 46A into the 2009 Order, requiring operators of generating stations claiming NIROCs for the generation of electricity from bioliquid to provide a bioliquid sustainability audit report and to make related provision.

Article 14 amends Article 49 of the 2009 Order, to require the Authority to provide certain information to the Department.

Article 16 makes a correction to Schedule 2.

Article 18 makes transitional provision in respect of the obligation period ending on 31st March 2011.

The European Commission has adopted guidelines (OJ L 151, 17.6.2010, p.19) to serve as the basis for the calculation of land carbon stocks as required by paragraph 10 of Part C of Annex 5 to the Renewables Directive.

A transposition note is annexed to the explanatory memorandum which is available alongside the Order on the legislation website of The National Archive ([www.legislation.gov.uk](http://www.legislation.gov.uk)).