### STATUTORY INSTRUMENTS

# 2009 No. 785

# The Renewables Obligation Order 2009

## PART 5

ROCs to be issued by Authority in respect of renewable output

### ROCs to be issued by Authority in respect of a generating station's renewable output

**24.**—(1) The Authority is to issue ROCs.

(2) Subject to paragraph (3) and article 60 (modifications of this Order in relation to microgenerators in certain circumstances), ROCs—

- (a) are to be issued in respect of a generating station's renewable output in a month, and
- (b) must not be issued before the end of the second month following that month.

(3) When issuing ROCs in respect of electricity generated in a month by a generating station or, in the case of ROCs certifying the matters within section 32B(5), (6) or (8) of the Act, two or more generating stations, the Authority must—

- (a) determine the renewable output of that generating station or, as the case may be, those generating stations in that month in accordance with article 25 or 26 (whichever is applicable);
- (b) where one or more of the criteria set out in articles 36 to 40 have to be satisfied before ROCs can be issued in respect of that station's or those stations' renewable output, deduct from that output any electricity in respect of which any of those criteria are not satisfied; and
- (c) issue ROCs in respect of that station's or those stations' remaining renewable output, the amount of electricity to be stated in each ROC being determined in accordance with articles 27 to 32 (banding and grandfathering).
- (4) This means that, where a generating station generates electricity—
  - (a) wholly from renewable sources a proportion of which is composed of fossil fuel,
  - (b) wholly from renewable sources and the input electricity used by the generating station in generating that electricity exceeds 0.5 per cent of the total amount of that electricity, or
  - (c) partly from renewable sources and partly from fossil fuel,

ROCs are to be issued in respect of a proportion only of the electricity generated by the station.

(5) Where the number of megawatt hours of renewable output in respect of which ROCs are to be issued does not equate to a whole number of ROCs, the number of megawatt hours is to be rounded to the nearest figure which does so equate (and where there are two such figures, the number of megawatt hours is to be rounded upwards).

- (6) In this article "input electricity", in relation to a generating station, means—
  - (a) the total amount of electricity used by that station for purposes directly related to its operation (including for fuel handling, fuel preparation, maintenance and the pumping of

water) whether or not that electricity is generated by the station or used while the station is generating electricity, and

- (b) where the station generates electricity wholly or partly from hydrogen (other than hydrogen that constitutes fossil fuel), any electricity-
  - (i) in respect of which ROCs are or have been issued,
  - (ii) in respect of which ROCs cannot be issued by virtue of any provision of Part 4 (cases and circumstances when a ROC must not be issued), or
  - (iii) which was not generated from renewable sources,

and which is used in the production of that hydrogen (regardless of where or by whom the hydrogen is produced).

#### Calculating a generating station's renewable output

**25.**—(1) Subject to article 26, the renewable output of a generating station in any month is equal to-

(a) where the input electricity used by the generating station during that month does not exceed 0.5 per cent of the gross output of that station during that month, A;

(b) 
$$A \times \frac{B}{C}$$
.

in any other case,

A is equal to

(a)

 $C \times \frac{D}{E}$  where—

(i) C is the gross output of the generating station during the month in question;

- (ii) D is the energy content of all of the renewable sources used in generating that station's gross output during that month, less the energy content of-
  - (aa) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of sub-paragraphs (bb) to (dd) is in part composed);
  - (bb) any of those renewable sources which is Solid Recovered Fuel (other than Solid Recovered Fuel which constitutes biomass);
  - (cc) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;
  - (dd) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed;
- (iii) E is the energy content of all of the fuels used in generating that station's gross output during that month;
- (b) B is the gross output of that station during that month less the input electricity it uses during that month;
- (c) C has same meaning as in sub-paragraph (a)(i).

(3) Subject to paragraph (4), where during any month the renewable output of a generating station is generated in two or more ways and the amount of electricity to be stated in each ROC issued in respect of that renewable output is not always the same (because the amount of electricity to be stated in ROCs issued in respect of electricity generated in one or more of those ways differs from the amount to be stated in ROCs issued in respect of some or all of the remaining electricity by virtue of articles 27 to 32), the proportion of the station's renewable output which, for the purposes of those articles, is generated in each of those ways is  $F \div G$  where—

- (a) F is the energy content of the renewable sources used when generating electricity in that way during that month less the energy content of—
  - (i) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of paragraphs (ii) to (iv) is in part composed);
  - (ii) any of those renewable sources which is a Solid Recovered Fuel (other than Solid Recovered Fuel which constitutes biomass);
  - (iii) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;
  - (iv) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed; and
- (b) G is the energy content of all of the renewable sources used in generating that generating station's gross output during that month less the energy content of—
  - (i) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of paragraphs (ii) to (iv) is in part composed);
  - (ii) any of those renewable sources which is Solid Recovered Fuel (other than Solid Recovered Fuel which constitutes biomass);
  - (iii) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;
  - (iv) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed.

(4) In any month where a generating station generates some or all of its renewable output using mixed gas, the proportion of the station's renewable output which is, for the purposes of articles 27 to 31—

$$\frac{H}{I} \times \frac{J}{L}$$

generated using mixed gas in the way described as "AD" in Schedule 2 is

(b) generated using mixed gas in the way described as "electricity generated from sewage

$$\frac{H}{I} \times \frac{K}{L}$$

gas" in that Schedule is

- (5) In paragraph (4)—
  - (a) H is the energy content of the mixed gas used when generating the generating station's renewable output during the month in question;

- (b) I is the energy content of all of the renewable sources used in generating that station's renewable output during that month;
- (c) J is the dry mass of—
  - (i) any waste which constitutes a renewable source (other than sewage), and

(ii) any biomass (other than sewage),

from which the mixed gas used in generating that station's renewable output during that month is formed, less the dry mass of any digestible fossil fuel from which that waste or biomass is in part composed;

- (d) K is the dry mass of the sewage from which the mixed gas used in generating that station's renewable output in that month is formed; and
- (e) L is the dry mass of all of the material from which the mixed gas used in generating the station's renewable output during that month is formed, less the dry mass of any digestible fossil fuel from which that material is in part composed.
- (6) In this article—

"dry mass", in relation to a fuel, means the mass of the fuel when any water present in it has been removed;

"excepted generating station" means a generating station-

- (a) which was accredited on or before 31st March 2011;
- (b) which, since being accredited, has not ceased to be accredited at any time; and
- (c) in respect of which, if it was not accredited as at 31st March 2009, preliminary accreditation was held on and from that date until the date on which it was accredited;

"gross output", in relation to a generating station, means the total amount of electricity generated by that station;

"input electricity" has the same meaning as in article 24;

"mixed gas" means gas formed by the anaerobic digestion of sewage together with-

- (a) waste which constitutes a renewable source (other than sewage), or
- (b) biomass (other than sewage).

#### Renewable output of a qualifying combined heat and power generating station

**26.**—(1) For the purposes of determining the renewable output of a qualifying combined heat and power generating station in any month during which it generates electricity from waste (other than waste which constitutes biomass or is used for permitted ancillary purposes or is in the form of a liquid or gaseous fuel produced by means of gasification, pyrolysis or anaerobic digestion), article 25 applies subject to the following modifications.

- (2) For paragraph (2)(a)(ii) of article 25, substitute—
- "(ii) D is the energy content of all of the renewable sources used in generating that station's gross output during that month, less the energy content of—
  - (aa) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of sub-paragraph (bb) or (cc) is in part composed);
  - (bb) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;

(cc) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed,

multiplied by the proportion which the qualifying power output of that station bears to its total power output;".

- (3) For paragraph (3)(a) of that article, substitute—
  - "(a) F is the energy content of the renewable sources used when generating electricity in that way during that month less the energy content of—
    - (i) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of paragraph (ii) or (iii) is in part composed);
    - (ii) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;
    - (iii) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed; and".
- (4) For paragraph (3)(b) of that article, substitute—
  - "(b) G is the energy content of all of the renewable sources used in generating that generating station's gross output during that month less the energy content of—
    - (i) any fossil fuel from which those renewable sources are in part composed (other than fossil fuel from which a fuel the energy content of which is deducted by virtue of paragraph (ii) or (iii) is in part composed);
    - (ii) any of those renewable sources which is a liquid fuel produced by means of pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 10 megajoules per metre cubed;
    - (iii) except in the case of an excepted generating station, any of those renewable sources which is a gaseous fuel produced by means of gasification or pyrolysis and which has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the station of less than 2 megajoules per metre cubed.".