STATUTORY INSTRUMENTS

2012 No. 2999

The Climate Change Agreements (Eligible Facilities) Regulations 2012

Calculation of reckonable energy from combined heat and power stations

7.—(1) Reckonable energy from a combined heat and power station must be calculated by reference to the gross calorific value of the commodity burned to produce it.

(2) Where part of the energy from a combined heat and power station is used in a place, the formulae set out in paragraphs (3) to (5) must apply for calculating the reckonable energy from the station in relation to that place.

(3) The following formula applies in respect of electricity from the combined heat and power station which is used in that place—

$$RE = \frac{2EC \times EP}{2ET + HT}$$

where—

RE is the reckonable energy in respect of electricity from the combined heat and power station which is used in that place;

EC is the total energy content of the relevant commodities burned in the combined heat and power station calculated by reference to the gross calorific value of each commodity;

EP is the quantity of electricity produced by the combined heat and power station which is used in that place;

ET is the total quantity of electricity produced by the combined heat and power station which is used in that place and elsewhere; and

HT is the total quantity of heat produced by the combined heat and power station which is used in that place and elsewhere.

(4) If no electricity from the combined heat and power station is put into public supply, the following formula applies in respect of heat which is used in that place—

$$RHN = \frac{EC \times HP}{2ET + HT}$$

where—

RHN is the reckonable energy in respect of heat from the combined heat and power station which is used in that place;

EC is the total energy content of the relevant commodities burned in the combined heat and power station calculated by reference to the gross calorific value of each commodity;

HP is the quantity of heat produced by the combined heat and power station which is used in that place;

ET is the total quantity of electricity produced by the combined heat and power station which is used in that place and elsewhere; and

HT is the total quantity of heat produced by the combined heat and power station which is used in that place and elsewhere.

(5) If electricity from the combined heat and power station is put into public supply, the following formula applies in respect of heat which is used in that place—

$$RHS = \left[\frac{EC \times HP}{(2ET + HT)}\right] - \left[\frac{HP \times ES}{HT}\left(2.6 - \frac{2EC}{2ET + HT}\right)\right]$$

where—

RHS is the reckonable energy in respect of heat from the combined heat and power station which is used in that place;

EC is the total energy content of the relevant commodities burned in the combined heat and power station calculated by reference to the gross calorific value of each commodity;

HP is the quantity of heat produced by the combined heat and power station which is used in that place;

ES is the quantity of electricity produced by the combined heat and power station and put into public supply;

ET is the total quantity of electricity produced by the combined heat and power station which is used in that place and elsewhere; and

HT is the total quantity of heat produced by the combined heat and power station which is used in that place and elsewhere.

(6) For the purposes of paragraphs (4) and (5), electricity is put into public supply when it is supplied to an electricity utility.

(7) Where absorption cooling is used to produce a cooling supply for use in the installation, installations or parts of installations on a site and the heat for the absorption cooling is from a combined heat and power station—

(a) the heat used to provide the cooling supply must be treated for the purposes of paragraphs (1) to (6) as used in the place where the cooling supply is used; and

(b) the quantity of that heat must be estimated by dividing the output of the cooling supply by the coefficient of performance of the cooling system.