STATUTORY INSTRUMENTS

# 2018 No. 611

# The Renewable Heat Incentive Scheme Regulations 2018

## PART 2

### Eligibility and matters relating to eligibility

### CHAPTER 3

### Eligibility criteria in relation to metering and steam measuring

**Metering of plants in simple systems where application for accreditation of the plant was made before 24th September 2013**

**21.** A class 2 heat meter must be installed to measure the heat in kWhth generated by a plant where—

(a) the plant is generating and supplying heat solely for one or more eligible purposes within one building;

(b) no heat generated by the plant is delivered by steam;

(c) the plant is not a CHP system; and

(d) the application for accreditation of the plant was made before 24th September 2013.

**Metering of plants in complex systems where application for accreditation of the plant was made before 24th September 2013**

**22.**—(1) This regulation applies to a plant where regulation 21 does not apply and the application for accreditation of the plant was made before 24th September 2013.

(2) Subject to regulation 27—

(a) where heat generated by the plant is delivered by liquid, class 2 heat meters must be installed to measure both the kWhth of heat generated by that plant and the kWhth of heat used for eligible purposes by the heating system of which that plant forms part; and

(b) where heat generated by the plant is delivered by steam, the following must be installed—

(i) steam measuring equipment to measure both the heat generated in the form of steam by the plant and the heat in the form of steam used for eligible purposes; and

(ii) a class 2 heat meter or steam measuring equipment to measure any condensate or steam which returns to the plant.

(3) Where this regulation applies, and more than one plant is supplying heat to the heating system supplied by the plant, steam measuring equipment or class 2 heat meters must be installed, as appropriate, to measure the heat generated in kWhth by all plants supplying heat to that heating system.

**Metering in respect of applications for accreditation made on or after 24th September 2013**

**23.**—(1) Subject to regulation 24, this regulation applies to any plant in respect of which an application for accreditation is made on or after 24th September 2013.

(2) Subject to paragraph (3) and regulation 27—

(a) where heat generated by the plant is delivered by liquid—

(i) one class 2 heat meter, and

(ii) such other class 2 heat meters as may be necessary,

must be installed so as to enable the kWhth of heat generated by that plant which is used for eligible purposes to be determined;

(b) where heat generated by the plant is delivered by steam—

(i) such steam measuring equipment as may be necessary, and

(ii) such class 2 heat meters to measure any condensate returning to the plant as may be necessary,

must be installed so as to enable the kWhth of heat generated by that plant which is used for eligible purposes to be determined.

(3) For the purposes of determining the heat generated by a plant which is used for eligible purposes it is not necessary to measure heat loss—

(a) which may be disregarded in accordance with regulation 75(2), or

(b) for which a heat loss calculation may be provided in accordance with regulation 75(4) or (5).

**Metering in respect of shared ground loop systems**

**24.**—(1) Subject to paragraph (2), regulation 23 applies in respect of each ground source heat pump which forms part of a shared ground loop system.

(2) But where a ground source heat pump which forms part of a shared ground loop system is installed in domestic premises, regulation 23 only applies if one or more of the following conditions is met—

(a) the ground source heat pump provides heat to the same property as another plant ("plant B"), unless plant B—

(i) is a solar thermal plant;

(ii) is designed and installed to heat only one room;

(iii) captures heat from air which is expelled from the property and transfers that heat into fresh air entering that property without generating additional heat;

(iv) is an immersion heater for a domestic hot water cylinder or is any other plant which solely generates heat for the purpose of heating domestic hot water; or

(v) is a supplementary electric heater which is controlled by the same control system as the control system governing the ground source heat pump;

(b) the property to which the ground source heat pump provides heat was occupied for less than 183 days in the 12 month period ending with the tariff start date for the shared ground loop system and is not a new-build property; or

(c) the ground source heat pump is capable of using a fuel when generating heat for an eligible purpose.

(3) Where a ground source heat pump which forms part of a shared ground loop system is installed in domestic premises and one or more of the conditions in paragraph (2) is met, a certified installer must have been responsible for the installation of any heat meter required by these Regulations.

**Electricity metering in respect of ground source and air source heat pumps in respect of which the application for accreditation is made on or after 28th May 2014 and shared ground loop systems**

**25.**—(1) This regulation applies to any ground source heat pump or air source heat pump in respect of which an application for accreditation is made on or after 28th May 2014 and to shared ground loop systems.

(2) Where this regulation applies to a ground source heat pump or air source heat pump, the following meters must be installed—

(a) such electricity meters as will enable the seasonal performance factor of the heat pump to be determined to the satisfaction of the Authority;

(b) in the case of a ground source heat pump, where that heat pump is capable of simultaneous heating and cooling, such metering as will enable the heat drawn from the ground, including water in the ground, or from surface water, to be measured.

(3) Where this regulation applies to a shared ground loop system—

(a) paragraph (2)(a) applies in respect of each ground source heat pump which forms part of the shared ground loop system for which heat is required to be metered under regulation 24;

(b) where heat generated by a ground source heat pump which forms part of the shared ground loop system is not required to be metered under regulation 24, such electricity meters must be installed as will enable the electrical input into the ground source heat pumps to be metered;

(c) paragraph (2)(b) applies in respect of the ground loop where any of the ground source heat pumps which form part of the shared ground loop system is capable of simultaneous heating and cooling;

(d) where a ground source heat pump is installed in domestic premises—

(i) such electricity meters must be installed as will enable the measurement of the electrical input into—

(aa) any supplementary electric heater that is controlled by the same control system which governs the ground source heat pump; or

(bb) any immersion heater for a domestic hot water cylinder where the heater is controlled by the same control system which governs the ground source heat pump; and

(ii) any electricity meter installed in accordance with paragraph (i) which is not an on-board meter, must—

(aa) be properly calibrated;

(bb) be properly installed by, or under the responsibility of, a certified installer;

(cc) be in good working order; and

(dd) bear a label which identifies the ground source heat pump, supplementary electric heater or immersion heater being metered; and

(e) such electricity meters must be installed as will enable the electrical input into any ground loop circulation pump to be measured, and those which are not on-board meters must—

(i) be properly calibrated;

(ii) be properly installed;

(iii) be in good working order; and

(iv) bear a label which identifies the circulation pump being metered.

(4) An electricity meter installed in accordance with paragraph (3) in domestic premises must, except in the case of an on-board meter, meet the relevant requirements set out in Annex 1 to the Measuring Instruments Directive, the specific requirements listed in Annex V (Active electrical energy meters (MI-003)) to that Directive and the requirements for accuracy class A as defined in Annex V to that Directive.

(5) In this regulation, "on-board meter" means an electricity meter which is integrated into a ground source heat pump and is able to display the electricity consumption, in kWh, of the ground source heat pump, including where applicable, the electricity consumption of a ground loop circulation pump contained within it.

**Shared meters**

**26.**—(1) The heat generated by a plant must be individually metered.

(2) But the heat generated by two or more plants may be metered using one meter provided that—

(a) the plants use the same source of energy and technology;

(b) the plants will, once given accreditation, be eligible to receive the same tariff;

(c) the plants will then share the same tariff start date and tariff end date; and

(d) it is the Authority's opinion that a single meter is capable of metering the heat generated by all of those plants.

**Metering of CHP systems generating electricity only before commissioning as a CHP system**

**27.**—(1) This regulation applies where the plant is a CHP system and the requirements of regulation 16(1)(a) and (b) are deemed to be satisfied in accordance with regulation 16(2).

(2) Where this regulation applies, any existing heat meter or steam measuring equipment installed before 28th November 2011 may continue to be used by a participant to measure the heat generated by the CHP system and used for eligible purposes, provided that the CHP system was registered under the CHPQA before that date.

(3) For the purpose of this regulation, "the CHPQA" means the Combined Heat and Power Quality Assurance Standard, Issue 3, January 2009, as published by the Department of Energy and Climate Change(**1**).

**Matters relating to all heat meters and steam measuring equipment**

**28.**—(1) All heat meters installed or used in accordance with these Regulations must, where applicable—

(a) be calibrated prior to use;

(b) be calibrated correctly for any water/ethylene glycol mixture;

(c) be (or have been) properly installed in accordance with the manufacturer's instructions; and

(d) be positioned to provide accurate measurements.

(2) All steam measuring equipment installed or used in accordance with these Regulations must be—

(**1**) This standard is available at https://www.chpqa.com/guidance_notes/documents/CHPQA_Standard_Issue3.pdf. Hard copies may be obtained from CHPQA Programme, The Gemini Building, Fermi Avenue, Didcot, OX11 0QR.

(a) calibrated prior to use;

(b) capable of displaying measured steam pressure and temperature;

(c) capable of displaying the current steam mass flow rate and the cumulative mass of steam which has passed through it since it was installed;

(d) properly installed in accordance with the manufacturer's instructions; and

(e) positioned to provide accurate measurements.

(3) The requirements in paragraphs (1)(c) and (2)(d) are deemed to be met where the Authority is satisfied that, were the plant to be accredited, the participant would not as a consequence of the failure to install in accordance with the manufacturer's instructions, be entitled to receive periodic support payments which were materially different from those which would have been payable had the manufacturer's instructions been complied with.

**Additional metering requirements for plants generating heat from biogas**

**29.** Where a plant is generating heat from biogas, the following additional metering requirements apply—

(a) a class 2 heat meter must be installed to meter any heat directed from the plant combusting the biogas to the biogas production plant; and

(b) a class 2 heat meter must be installed to meter any heat supplied to the biogas production plant from any source other than—

(i) the plant combusting the biogas; and

(ii) where the biogas has been produced by anaerobic digestion, the feedstock from which it was produced.