Department of Enterprise, Trade and Investment
www.detini.gov.uk

Guidance v2.1

Non-Domestic Northern Ireland Renewable Heat Incentive – Guidance

Volume 2: Ongoing Obligations, Payments

March 2016

Contents

Overview

The Department of Enterprise, Trade and Investment (DETI) has suspended the Northern Ireland RHI scheme to new applicants from 29 February 2016. Ofgem continue to administer the Non-Domestic RHI scheme on DETI's behalf. This suspension only applies to the Northern Ireland RHI scheme. The Great Britain RHI scheme is unaffected.

This is the guidance document for the Non-Domestic Northern Ireland Renewable Heat Incentive (NIRHI), a Department for Enterprise, Trade and Investment (DETI) financial incentive scheme worth up to £25 million of investment over the first 4 years to promote the uptake of renewable heat.

DETI has established a NDRHI Scheme under section 113 of the Energy Act 2011 and the Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012. The Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012 ("2012 regulations") was amended by the Domestic and Non-Domestic Heat Incentive (Amendment) Regulations (Northern Ireland) 2015 ("2015 regulations"). Both 2012 regulations and 2015 amendment regulations are collectively referred to as "the Regulations" but where necessary 2015 regulations has been specifically referenced.

Section 114 of the Energy Act 2011 provides that DETI and the Gas and Electricity Markets Authority (GEMA) may enter into arrangements for GEMA to act on behalf of DETI for or in connection with the carrying out of any functions that may be conferred on GEMA in respect of the NIRHI. DETI and GEMA have entered into an Administrative Arrangements whereby GEMA administers the conferred functions under the Administrative Arrangements and DETI carries out the retained functions the Administrative Arrangements. GEMA carries out the day to day administration through its office (Ofgem).

The overarching policy and detailed legislative framework for the NIRHI are the responsibility of DETI. Ofgem's E-Serve division has extensive experience in delivering similar environmental schemes, such as the GB Domestic and Non-Domestic RHI schemes and the Renewables Obligation.

Volume One of the guidance describes the eligibility requirements of the NIRHI and how prospective installations can become accredited or registered as applicable.

Volume Two describes the ongoing requirements for NIRHI participants, information on how periodic support payments are calculated and paid, and Ofgem's / DETI's compliance and enforcement powers.

The guidance is aimed at prospective NIRHI participants in the non-domestic sector and sets out how Ofgem, on behalf of DETI, intends to administer the scheme. It is not intended to be a definitive legal guide.

Context

This document describes how GEMA / Ofgem administer the Northern Ireland Renewable Heat Incentive (NIRHI) on behalf of DETI and the other processes retained by DETI. The NIRHI is a financial incentive scheme designed to increase the uptake of renewable heat technologies. The NIRHI is a key policy measure in supporting the achievement of the NI Executive target of 10% renewable heat by 2020 and the wider UK target of 15% renewable energy by 2020 as required by the European Union.

Since 1 November 2012 the NIRHI has been available to parties in non-domestic sectors with eligible installations, and to producers of biomethane. From 18 November 2015 the NIRHI includes biomass tiering and capping, amendments to the medium and large tariff bands for biomass and the introduction of relocation amongst other small changes.

Support for the domestic sector was introduced on 9 December 2014. For more information on the domestic NIRHI, please see the domestic guidance.[1]The NIRHI policy and tariff rates are set by DETI.

DETI introduced the Northern Ireland Renewable Heat Incentive (NIRHI) using enabling powers contained in the Energy Act 2011.

Associated documents

Readers should be aware of the following documents which support this publication.

- Energy Act 2011[2]
- The Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012[3]
- The Renewable Heat Incentive (Amendment) Regulations (Northern Ireland) 2015[4]

[1] http://www.nidirect.gov.uk/index/information-and-services/environment-and-greener-living/energy-wise/energy-saving-grants/renewable-heat-incentive-rhi/domestic-rhi-introduction.htm
[2] www.legislation.gov.uk/ukpga/2001/16/contents/enacted
[3] http://www.legislation.gov.uk/nisr/2012/396/contents/made
[4] http://www.legislation.gov.uk/all?title=renewable%20heat%20incentive

Executive Summary

The Northern Ireland Renewable Heat Incentive (NIRHI) is a financial incentive scheme designed to increase the uptake of renewable heat technologies and reduce the UK's carbon emissions. Broadly speaking, the scheme provides a subsidy per kWhth of eligible renewable heat generated from accredited installations and a subsidy payable to producers of biomethane for injection.

DETI has appointed Ofgem to administer the NIRHI on their behalf. Ofgem's E-Serve division has extensive experience in delivering similar environmental schemes, such as the Renewables Obligation. DETI is responsible for developing the underpinning NIRHI policy including setting tariffs, establishing the legislative framework, and the introduction of further scheme elements in phase two.

Scheme Eligibility

The scheme supports non-domestic renewable heat installations and the production of biomethane for injection in the national gas grid. This guidance is for participants on the non-domestic scheme only. For information on the domestic scheme, please see the domestic guidance[5].

The following renewable heat technologies are supported on the non-domestic scheme:

- solid biomass and solid biomass contained in municipal waste (including combined heat and power (CHP)),
- ground and water source heat pumps,
- geothermal (including CHP),
- solar thermal (at capacities of less than 200 kWth),
- biogas combustion (except from landfill gas but including CHP; at capacities of less than 200 kWth)
- biomethane injection

Ongoing obligations

Once part of the NIRHI scheme, participants will need to comply with a number of ongoing obligations which are explained in this guidance such as regular submission of heat data, meter readings and fuel data for certain bioenergy installations. Participants are expected to maintain

[5] http://www.nidirect.gov.uk/index/information-and-services/environment-and-greener-living/energy-wise/energy-saving-grants/renewable-heat-incentive-rhi/domestic-rhi-introduction.htm

their heating equipment and meters, and report any significant changes to their installation or heat uses to Ofgem. Participants are required to make annual declarations to Ofgem confirming their compliance, and may be selected for audits and/or a site inspection. Failure to comply with ongoing obligations (including notification of a change of ownership of an accredited installation) may lead to Ofgem taking compliance action against a participant.

Guidance Document structure

The guidance sets out our procedures for the administration of the NIRHI under the Regulations. Volume One provides details on eligibility requirements and how to apply for the NIRHI. Volume Two provides details of the ongoing obligations on participants, how periodic support payments are calculated, and Ofgem's compliance and enforcement powers.

The guidance is not a definitive legal guide to the NIRHI, (although its publication is made in accordance with the Regulations). Prospective participants are advised to familiarise themselves with it and read it in conjunction with the Regulations as it gives further elaboration on the obligations on participants under the Regulations and how Ofgem intend to administer the scheme according to the Regulations on behalf of DETI. In the event of any conflict between the Regulations and the guidance, the Regulations take precedence.

INTRODUCTION

1

Policy Context

1.1 The European Union's (EU's) 2009 Renewable Energy Directive[6] set a binding target that 20 per cent of the EU's energy consumption should come from renewable sources by 2020. The UK share of this target commits the UK to increasing the share of renewable energy to 15 per cent by 2020. Northern Ireland is expected to contribute to the UK's share of the EU target both in terms of renewable electricity and renewable heating.

1.2 In September 2010, the NI Executive agreed the Strategic Energy Framework (SEF). The SEF outlined key energy policy areas for Northern Ireland and included four key energy goals;

- Building competitive markets;
- Ensuring security of supply;
- Enhancing sustainability; and
- Developing our energy infrastructure.

1.3 The development of renewable heat in Northern Ireland is supporting the delivery of these four energy goals as well as assisting in reducing carbon emissions and providing opportunities for 'green jobs'. Therefore, a target of 10 per cent renewable heat by 2020 has been endorsed by the NI Executive. The implementation of the NI RHI is a key policy measure in the delivery of this target.

NIRHI overview

1.4 The NIRHI is a financial incentive scheme designed to increase the uptake of renewable

[6] 200928/EC

heat and reduce the UK's carbon emissions. Broadly speaking, the scheme provides a subsidy per kWhth of eligible renewable heat generated from accredited installations and by registered producers of biomethane. The objective of the NIRHI is to significantly increase the proportion of the UK's heat that is generated from renewable sources, driving change in a heat sector that is currently dominated by fossil fuel technologies. It aims to encourage the uptake of renewable heat technologies by compensating for barriers to their adoption, including the current higher upfront costs and operational expenditure for these technologies as compared to those using traditional fossil fuels.

1.5 A range of renewable heat technologies are supported under the NIRHI including solar thermal, ground and water source heat pumps, biomass and biogas boilers, geothermal, energy from solid biomass in municipal waste and biomethane injection into the gas grid. Payments are made on a quarterly basis over a 20 year period to the owner of the NIRHI installation or producer of biomethane.

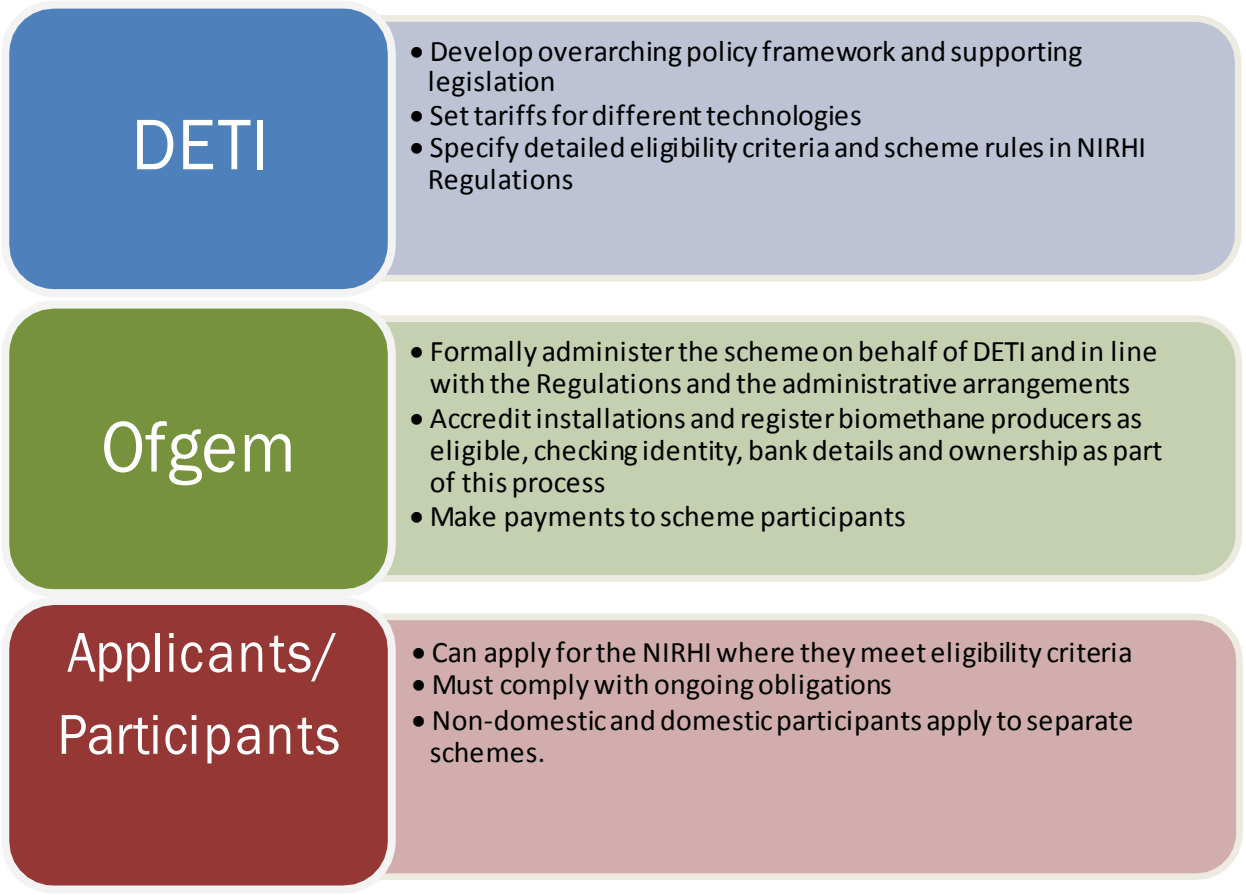
1.6 DETI has introduced the NIRHI in two phases:

- In the first phase, addressed in this guidance document, the NIRHI was opened to parties with eligible installations in non-domestic sectors, and to producers of biomethane.
- The second phase of the scheme extended the scheme to the domestic market from 9 December 2014. This phase is not covered in this Guidance document.
- Amendments to the Non-Domestic NIRHI came into force on 11 November 2015, and include the introduction of a tiered tariff and an annual cap on eligible heat for small and medium commercial biomass and changes to the biomass banding for medium and large biomass. The provision for relocation of an installation is also covered, as well as other minor changes. Details are addressed in this guidance document.

Respective Roles

1.7 DETI is responsible for developing the underpinning NIRHI policy including setting tariffs, establishing the legislative framework, and the introduction of further scheme elements in the future phases of the scheme. Any queries about these aspects should be addressed to DETI.

1.8 DETI has appointed Ofgem to administer the NIRHI. DETI has agreed with Ofgem that, except in the case of certain enforcement functions, Ofgem will administer the NIRHI on our behalf. Ofgem's E-Serve division has experience in delivering similar environmental schemes such as the GB Domestic and Non-Domestic RHI schemes and the Renewables Obligation.



DETI, Ofgem and participants are involved in making the NIRHI work and each plays a distinct but important role in the scheme. The diagram above provides a brief overview of the responsibilities of each entity.

Ofgem's and DETI's Key Functions

1.9 The Regulations detail DETI's key functions with respect to the NIRHI. The use of 'Ofgem', 'them', 'their' and 'they' are used interchangeably in this guidance when referring to the exercise of Ofgem's powers and functions under the NIRHI.

1.10 Key functions, some of which are shared between Ofgem and DETI include:

- Accreditation of installations and registration of producers of biomethane which meet the eligibility criteria, including verifying identity, bank details and ownership of an installation;

- Making payments on a quarterly basis to participants for the eligible heat generated or biomethane produced;

- Monitoring and enforcing compliance with the initial eligibility and ongoing requirements

of the NIRHI as outlined in the Regulations;

- Undertaking inspections to ensure participants' ongoing obligations under the NIRHI are being complied with;

- On request by DETI providing information on the progress of the scheme; and

- Providing a review procedure that allows prospective, current and former participants to challenge Ofgem's decisions in relation to the administration of the NIRHI if participants believe Ofgem's decisions are incorrect.

1.11 Ofgem will carry out these functions as efficiently and effectively as possible. They cannot however, act beyond the scope of the powers as laid down in the Regulations and Section 114 of the Energy Act 2011.

Publication of tariffs

1.12 DETI publishes an adjusted tariff table on an annual basis to reflect changes in the Retail Prices Index (RPI)[7]. This will be published on or before 1 April each year for the period commencing 1 April of that year and ending 31 March the following year.

Reporting

1.13 DETI publishes information in the respect of the following matters;

- aggregated details of accredited installations and fuel type

- aggregated details of the technology replaced

- total amount of periodic support payments made in that reporting period

- total amount of heat generated for which payments have been made under the NIRHI

- sustainability information for certain installations using biomethane

- volume of biomethane injected by registered biomethane producers

1.14 We will also publish the following aggregated information on our website on an ongoing basis:

- the number of accredited NIRHI installations and registered biomethane producers

[7] The general purpose domestic measure of inflation in the United Kingdom. More information available from the Office of National Statistics (www.statistics.gov.uk)

- the technology and installed capacity of the installations

- the total amount of heat generated and biomethane produced together with the total amount of periodic support payments made under each tariff

Queries

1.15 Any queries relating to the scheme operation or applicant eligibility should be emailed to rhi.enquiry@ofgem.gov.uk with the nature of the query clearly marked. If you are an existing participant, please note in the query that you are a participant and your installation number. Written queries should be sent to the address on the front of this guidance clearly marked for the attention of the NIRHI operational team. For telephone enquiries, the team can be contacted on 0845 200 2122. The phone line is open Monday to Friday, except public holidays. Please check the Ofgem NIRHI website for the opening hours of the phone line.

Guidance documents

Overview

1.16 The guidance is divided into two volumes for the reference of applicants and participants on the NIRHI.

- **Volume One** provides an overview of the NIRHI, including Ofgem's powers and duties with respect to the NIRHI, and information on the eligibility requirements which an applicant must meet and the accreditation or registration process which an applicant must go through in order to become accredited or registered for the scheme and be eligible for incentive payments.
- **Volume Two** (this volume) details the payment calculation and payments provisions for the NIRHI, and ongoing obligations with which a participant needs to comply in order to receive NIRHI payments. This includes information about how to submit periodic data to Ofgem, including meter readings and annual declarations. Consequences of non-compliance, inspection arrangements and the review process are also outlined.

1.17 There are two main purposes of the guidance. The first is to help clarify how the Non-Domestic NIRHI works and the criteria for joining the NIRHI. The second is to set out what your ongoing obligations will be once you are a participant on the scheme, and to provide information on periodic data, fuel eligibility and payments.

Scope of this Guidance

1.18 This guidance does not claim to anticipate every scenario which may arise. Where a scenario arises which is not addressed in this guidance, Ofgem will adopt an approach

which they consider to be consistent with the relevant legislation. Any guidance published in addition to this will be posted on our website.

1.19 This guidance is not intended to provide comprehensive legal advice on how the Regulations should be interpreted or itself to have legal effect. At all times, the onus is on the owner of an installation or producer of biomethane to ensure that they are aware of the requirements of the Regulations.

1.20 This guidance describes Ofgem's and DETI's approach to matters concerning its general administration of the scheme in accordance with the current Regulations. If the Regulations change in the future Ofgem and DETI will reconsider accordingly.

1.21 Where a participant contracts with third parties in relation to the generation of renewable heat or the production of biomethane, it is the participant's responsibility to ensure, via contractual or other arrangements, that these parties also comply with any relevant ongoing obligations under the NIRHI. The obligations entered into by the participant on becoming accredited or registered remain those of the participant rather than being transferred to the third party concerned.

Territorial Applicability

1.22 In accordance with the Act, we can only make payments to eligible renewable heat installations that are generating heat in Northern Ireland or to biomethane producers injecting into the grid in this region.

Treatment of personal data

1.23 All personal data collected from participants by Ofgem will be processed in accordance with the Data Protection Act 1998. Ofgem is a public Authority and must protect the public funds they handle, so they may use the information you have given them to prevent and detect fraud. As part of this process, your information may be supplied to a third party that conducts ID verification and bank account validity checks. They may also share this information, for the same reasons, with other government organisations involved in the prevention and detection of crime. Please note that some personal data will be shared by Ofgem with DETI for the purpose of monitoring the scheme.

OVERVIEW OF ONGOING OBLIGATIONS

2

Chapter summary

This chapter provides an overview of the ongoing obligations a participant is required to comply with. This includes the information required on a periodic and ad hoc basis to demonstrate ongoing eligibility.

Periodic Information

Ongoing reporting requirements

2.1 Once you have received NIRHI accreditation for your installation or have successfully registered as a biomethane producer under the scheme, there are obligations that you need to meet. Where applicable, these obligations, known as 'ongoing obligations', must be adhered to for as long as you are a participant in the scheme.

2.2 These ongoing obligations include reporting responsibilities for participants with accredited NIRHI installations or who are registered producers of biomethane. Please see below where you can find information on the major ongoing reporting requirements:

- Annual declarations – refer to the 'Annual Declarations' section below in this chapter
- Meter readings and heat output data – refer to Chapter Three
- Ongoing fuelling requirements – refer to Chapter Four
- Biomass sustainability reporting – refer to Chapter Six

- Treatment of additional capacity – refer to Chapter Seven

- Change in ownership of an NIRHI accredited installation – refer to Chapter Eight

2.3 Submission of reporting information and completion of the annual declaration (see below) must be undertaken by the Authorised Signatory for a participant.

2.4 Not all ongoing obligations which apply to heat generating plants apply to biomethane producers. Where it is stated in this guidance that the obligation relates to an 'installation' or a 'plant', then this would generally not apply to a biomethane producer. As outlined in Volume One, biomethane producers are 'participants' under the scheme so where it is stated that the obligation applies to 'participants', this would generally include biomethane producers. For example, Chapter Seven of this guidance refers to heat generating plants, so these obligations are not relevant to biomethane producers.

2.5 Chapter Nine explains those additional obligations which relate only to biomethane producers.

Other ongoing eligibility requirements

Maintenance of equipment

2.6 As an ongoing obligation, participants who own heat generating installations are required to maintain their equipment to ensure it is working effectively. Given the wide range of eligible technologies, it is not practical to specify a particular level of maintenance or frequency of servicing; what would be appropriate for a biomass boiler may not be for a solar thermal system. As a general principle Ofgem requires the equipment to be maintained in line with manufacturer instructions where available. Participants will need to keep any evidence of maintenance work carried out, for example servicing receipts, and to provide Ofgem with this evidence upon request.

Maintenance of meters

2.7 The Regulations require participants to keep all NIRHI-relevant heat and steam meters and associated metering equipment, where relevant:

- continuously operating in the normal course of business

- properly maintained and periodically checked for errors

- re-calibrated at least every ten years, or within such period of time as may be specified in accordance with manufacturer's instructions where available, whichever is the sooner[8].

[8] Regulations, Part 4, Chapter 3, Regulation 34(1c)

2.8 The requirements apply to all metering equipment and include, where relevant, flow meters, temperature sensors and pressure sensors. For example, Ofgem would expect temperature sensors or (for steam meters) differential pressure sensors to be checked on a regular basis.

2.9 Participants will be required to declare that periodic meter readings submitted to Ofgem is correct to the best of their knowledge and belief, and they may ask for an explanation of the internal processes the participant has in place to ensure that meter readings are accurate.

2.10 Evidence of the calibration of meters' components in compliance with the manufacturer's requirements, such as service and maintenance invoices, receipts or certificates, should be retained as they are expected to be available for review upon request.

2.11 The calibration of meters and associated components should be carried out by the manufacturer or by organisations with relevant accreditation (applicable to Class 2 heat metering, steam metering and relevant temperature/pressure calibrations) from the United Kingdom Accreditation Service (UKAS). Further information on UKAS accreditation or the scope of accreditation held by an organisation can be obtained by contacting UKAS directly.

2.12 In addition, where calibration and testing is carried out by the manufacturer, it is expected that calibration and testing equipment used to calibrate NIRHI metering equipment should comply with appropriate International, European or British standards.

2.13 The MID Annex I places certain requirements on heat meters with regard to protection and security of the calculator/digital integrator component. Participants are required to keep all meters continuously operating and properly maintained in accordance with the manufacturers' instructions. They must also ensure that the meters are periodically checked for errors and retain service and maintenance invoices, receipts or certificates for the duration of their participation in the scheme. Failure to do so would be a breach of their ongoing obligations and, could result in enforcement action being taken against them as set out in Chapter Ten, 'Compliance and enforcement powers'.

Notifying Ofgem of a change

2.14 A participant must notify Ofgem when there has been any change in circumstances which may affect their eligibility to receive RHI payments, if they have ceased to comply or become aware that they will not be able to comply with their ongoing obligations. They must notify Ofgem within 28 days of the change taking place, or of when they became aware.

2.15 This includes a change to any financial arrangement that was agreed for the purchase and installation of the NIRHI installation, whereby that arrangement may now be considered to be a grant. Please see Volume One, Chapter Four for further information on grants.

2.16 It also includes changes to their accredited NIRHI installation or the heating system of which it forms part, addition or removal of any other plants on the heating system, changes

in ownership of all or part of the accredited installation or if the accredited installation is moved to a new location. Please see the 'How to submit information' section below for information on how to inform Ofgem of a change.

2.17 If your system will be exporting heat off site, the same principles for advising them will also apply to any change of circumstance which may affect your eligibility to receive periodic support payments, including a change of heat use, or a major change in relation to any equipment used in the transportation or metering of eligible renewable heat.

2.18 If you fail to advise them of relevant matters within 28 days, that will be a breach of one of your ongoing obligations as a participant. In these instances, Ofgem would have the power under the Regulations to take enforcement action against you. In deciding whether such action is appropriate, Ofgem will consider all the circumstances of the case, including, for example, any reasons given for the delay in notification, the impact of the unreported change on eligibility or expected levels of tariff payments, any previous delays in your required notifications etc. For further information, please refer to Chapter Ten.

2.19 You must also notify Ofgem in writing within 28 days if any of the information you provided in support of your application for accreditation or registration was incorrect. They will then assess on a case by case basis any impact on your tariff rate or eligibility.

2.20 Participants must keep their contact details, bank details, and Authorised Signatory information up to date.

2.21 Participants must allow Ofgem reasonable access to an accredited installation and its associated infrastructure in accordance with Part Nine of the Regulations. Please see Chapter Eleven of this volume for more information on the reasons for which they may seek access.

How to submit information

2.22 Periodic information, as noted under section 'Ongoing reporting requirements' above, must be submitted to Ofgem as part of a participant's ongoing obligations. Also, under the Regulations, formal 'notices' as described in section 'Notifying Ofgem of a change' above must be submitted in writing to Ofgem and must be made within 28 days of the event. These may be transmitted electronically. In practice, while both types of data can be submitted in writing by post, the most efficient way to submit data will be through the Ofgem NIRHI Register, and it is requested that this is the submission route used. You will be informed where an alternative submission route for particular pieces of information is applicable. The data you will need to submit is dependent upon the technology type of your installation and any separate conditions agreed with Ofgem. Please refer to the appropriate chapter of this volume to establish when, how and in what format the information relevant for your installation needs to be provided to Ofgem.

2.23 Provisions for late, estimated and incorrect data will also be explained. Please see the 'Queries' section in Chapter One, Volume One for information on how to raise a query relating to applicant eligibility or the operation of the scheme. Please contact Ofgem if submission of data or notices in writing presents a problem for you so they can make alternative arrangements. It is the participant's responsibility to ensure Ofgem has

received the information in a timely fashion.

Annual declarations

2.24 All participants are required to sign[9] an annual declaration every year on or before the anniversary of the date on which the installation became accredited. The annual declaration will confirm that the accredited NIRHI installation is meeting the eligibility criteria and ongoing obligations of the scheme, including that:

- they are not generating heat for the predominant purpose of increasing their periodic support payments
- the equipment is maintained. (If Ofgem is concerned that equipment is not being maintained, it can seek further evidence and where satisfied that it is not being maintained, take appropriate enforcement action.)
- the information provided for the previous 12 months has been accurate and complete to the best of the participant's knowledge and belief
- there has been no change in circumstances which may affect the participant's eligibility to receive the NIRHI.

2.25 There is a 30 day window in which you can submit the declaration: the declaration must be submitted by the anniversary of your accreditation date for the respective installation at the latest and can be submitted up to 30 days before that. For example, if your installation became accredited on 10 November 2014, your window to submit the required annual declaration would be 10 October - 9 November 2015. Ofgem will notify each participant of their annual declaration obligation by sending a reminder.

2.26 If an NIRHI participant fails to sign their annual declaration this will be treated as a failure to comply with an ongoing obligation of the scheme and Ofgem may take compliance action, which may include suspending or withholding payments. They will normally recommence payments if the declaration is subsequently submitted within a reasonable period, but long term failure to submit a declaration may result in further compliance action. For further details, please see Chapter Ten.

2.27 The Authorised Signatory for the installation is responsible for signing the annual declaration, thereby agreeing to its terms. Responsibility cannot be delegated to other parties.

2.28 Participants will be able to submit their annual declaration online through their NIRHI account, or for those participants who do not have access to the internet, in hard copy by post.

[9] For participants completing online annual declarations, a confirmation completed by the Authorised Signatory from their secure NIRHI user account replaces a physical signature

PROVISION OF PERIODIC DATA INCLUDING METER READINGS

3

Chapter summary

This Chapter provides guidance on the submission of meter readings by participants. Ofgem's approach to late, incorrect and estimated data is also explained.

What is periodic data?

3.1 Once an installation is accredited, or a producer of biomethane registered, participants will need to submit information on a regular basis as an ongoing obligation, and in order for Ofgem to calculate the appropriate payment, such as:

- meter readings
- annual declarations – see Chapter 2
- fuel data (for certain bioenergy installations – see Chapter 4)
- biomass sustainability information (for biomethane producers – see Chapter 6)
- supporting data or calculations as set out in conditions of accreditation, or other evidence which may be required for us to calculate the appropriate payment

3.2 This information is referred to as 'periodic data'.

3.3 Periodic data must be provided for all accredited NIRHI installations and biomethane producers. Participants with more than one accredited installation will need to provide periodic data separately for each installation.

3.4 For further information on the periodic data required from producers of biomethane see Chapter Nine. For biomethane producers, it is energy and volume measurement rather than meter readings which are required.

Frequency of submission of periodic data

3.5 The frequency with which meter readings must be provided is determined by the installation capacity:

- installations with a capacity of under 1MWth will be required to take and submit quality meter readings
- installations with a capacity of 1MWth and above will be required to take monthly meter readings.

3.6 Fuel data and biomass sustainability information (where applicable) are required to be submitted quarterly in all cases.

Meter readings

3.7 Participants will be required to submit meter readings in kilowatt hours of heat (kWhth). These meter readings are used to calculate the Eligible Heat Output (EHO) for the accredited installation. The EHO determines the periodic support payments you will receive.

All participants will be required to submit meter readings regardless of whether their installation is classed as 'simple' or 'complex', for metering purposes, or if they are a registered producer of biomethane. (Please see Volume 1, Chapter 7 for further details on the classification of simple and complex installations.)

Supporting meter readings

3.9 Participants need to provide a meter reading[10] for all NIRHI-relevant meters. It is an ongoing obligation that meter readings are provided as cumulative figures in kWhth.

When do I need to take meter readings?

3.10 Ofgem will require applicants to take an initial meter reading for all NIRHI-relevant meters and provide this as part of their application for accreditation, as the date on which this application is submitted will often coincide with the date of accreditation (see Volume One, Chapter Two for more information on date of accreditation). The same time periods apply

[10] Here, 'meter' refers to both heat meters and steam measuring equipment (or steam 'meters'). Further information on meters and metering requirements can be found in Chapter Seven of Volume One.

to the relevant energy measurement readings for biomethane producers. The initial reading must be taken within 3 days prior to the date of submission of their application.

3.11 Participants will then need to take subsequent meter readings quarterly or monthly as set out above. The month or quarter will run from the installation's date of accreditation. For example, the first quarterly reading for a 100kWth installation that has a date of accreditation of 30 November 2014 will need to be taken within +/- 3 days of 30 February 2015. A 2MWth installation accredited on the same day will need to be taken within +/- 3 days of 30 December 2014.

3.12 All meter readings must be taken within +/- 3 days of the required date.

3.13 Participants will then have up to one month after the end of the relevant monthly/ quarterly period to submit their meter reading(s) to Ofgem. It is in your interest to submit your required data to Ofgem early on in your submission window as they will only begin to process your payment once they have received your data. In other words, the sooner you submit your data, the less time you may need to wait to receive your payment (subject to any queries Ofgem may have regarding any of the periodic data submitted).

3.14 An example timetable for providing meter readings for one quarter is shown below.

Date	Activity	Meter readings required
03/04/2015	<u>Application</u> Participant applies for accreditation on a 500kWth ground source heat pump.	Initial meter readings provided as part of the application for accreditation.
30/04/2015	<u>Accreditation</u> Installation is accredited, with a date of accreditation of 03/04/2015.	A new reading at this stage is not required.
29/06/2015	<u>3 days prior to end of quarter</u> Window for taking meter readings opens at start of the day (as it is 3 days before the end of the quarter on 02/07/2015). Submission window for entering meter readings on to the NIRHI IT system opens at start of day.	Meter readings must be taken for all NIRHI-relevant meters in the next 6 days.
02/07/2015	First quarter ends.	
05/07/2015	<u>3 days after the end of the quarter</u> Window for taking meter readings closes at end of the day (as it is 3 days after the end of the quarter on 02/07/2015).	Meter readings must have been taken for all NIRHI-relevant meters.

01/08/2015	One month after the end of the first quarter. Submission window for entering meter readings closes at end of day.	Meter readings for all NIRHI-relevant meters must have been entered on to the Ofgem NIRHI Register.

3.15 The timing and process for taking meter readings and providing them to Ofgem will be set out in the information sent to participants when their application for accreditation has been approved.

Submission of meter readings while awaiting accreditation

3.16 Participants will need to take meter readings at the appropriate frequency once their application for accreditation or registration has been submitted and is being reviewed by Ofgem. This will enable accurate payments to be made if the application is approved. This is most likely to be relevant to large installations as monthly meter readings are required, and where a complex accreditation could take over a month to gain approval.

3.17 Where the eligible installation has not yet been accredited (or in the case of a biomethane producer that producer has not been registered), the month or quarter will run from the date of submission of the application. For more information about determining the date on which your application was deemed submitted for these purposes, please see Volume One, Chapter Two, section 'Date of accreditation'.

How to submit information to Ofgem

3.18 Meter readings and other periodic data should be submitted via the participant's account on the Ofgem NIRHI Register.

3.19 The Ofgem NIRHI Register will be able to accept periodic data in time for first quarterly data submissions. In the event that participants with installations over 1MWth need to submit monthly data before then they should email the data to Ofgem. Further information will be given at the time of application.

3.20 We will discuss the requirements for submission of periodic data with registered biomethane producers as part of their registration onto the scheme.

Late data

3.21 The Regulations allow Ofgem, at their discretion, to accept periodic data that is late. They will consider each late data request on a case-by-case basis. Where they suspect that participants may be failing to comply with ongoing obligations, they may take further steps, as detailed in Chapter 10 of this volume to determine the facts and decide what action, if any, may be appropriate to deal with the matter.

3.22 However, it is in the following circumstances that requests of this kind are most likely to be regarded sympathetically:

1) The participant has documentary evidence to demonstrate that they attempted to send the data to Ofgem

- *It is expected that the majority of these cases will relate to technical problems, however the onus is on the participant to resolve their own technical problems. Participants are encouraged to keep all associated evidence of this*

- *In addition, participants are expected to take all reasonable action to ensure delivery of the data. This includes responding to any error messages they may receive, and where appropriate querying whether data has been submitted. A participant should contact Ofgem to arrange for an alternative way to submit the data (such as email) if any problems accessing the Ofgem NIRHI Register are ongoing*

2) There has been a material incident at an accredited NIRHI installation, for example there has been a serious fire or a major flood

- *It is expected that participants will normally inform Ofgem of this before the deadline*

3) There has been an unplanned absence of a key staff member and it has not been possible to arrange cover
- *It is expected that in the vast majority of cases participants will be able to arrange cover and it is likely Ofgem will be less sympathetic to larger organisations that should have adequate resources to cover absences*

4) New procedures have been introduced or existing procedures have been changed and the transition to the new procedures has made it difficult for the participant to submit their data on time

- *In all cases, the nature of the new or changed procedure and, the lead time which was provided before it was implemented and how it was communicated will be taken into account. When coming to a decision, the following factors will also be taken into account:*

  – whether the participant has notified Ofgem of potential problems before the deadline

  – whether the participant has previously made any late data requests and on what basis

  – whether the participant has taken appropriate action to try to prevent the delay in data submission, and

  – the length of the delay in data submission.

3.23 This is not an exhaustive list but indicates the types of circumstances in which they would be more likely to exercise discretion in accepting late data.

Errors in data

3.24 Where Ofgem consider it appropriate they may accept revised meter readings or other periodic data if:

- the participant subsequently realises that the information originally submitted is erroneous, or
- Ofgem become aware through other routes, such as audit, that this is the case.

3.25 Ofgem will consider each request relating to revised periodic data submission on a case-by-case basis. As deliberately or carelessly submitting inaccurate data would generally constitute a failure to comply with ongoing obligations, they may take further steps as detailed in Chapter 10 of this volume to determine the facts and decide what action, if any, may be appropriate to deal with the matter. In doing so, they will take a number of factors into consideration, including how the error was notified to them.

3.26 In addition to any action which Ofgem may take in relation to a particular error in data submitted as described above, where errors in your periodic data or material or repeated, we may decide to take further enforcement action against you. 'Materiality' for these purposes will be determined on the basis of all relevant circumstances (this may include the period over which the error occurred, the amount by which the payments were affected, the means by which the error was discovered (e.g. by audit or inspection or by notification from the participant), the extent to which the participant should have been aware of the error and the degree of cooperation demonstrated by the participant in rectifying the error.

Use of estimates

3.27 In exceptional circumstances, Ofgem, solely at its discretion, may accept estimated meter readings on which to base calculations of payments. This may be relevant where a participant satisfies them that it would not be possible to provide accurate meter readings for a quarterly period.

3.28 An example of why a participant may want to use an estimate would be if there was a temporary failure of metering equipment which meant that an accurate reading was not possible. This discretion may also apply to accepting estimates of other associated data as may be required, and we would expect to apply similar principles to the approach set out below for estimated meter readings.

3.29 The method for estimating meter readings will need to be agreed in advance with Ofgem. This means that the onus is on the participant to contact them as soon as the need for estimation arises and provide evidence of the reasons why accurate meter readings will

not be available. A participant must seek agreement to use an estimate at the latest in advance of the deadline for provision of data for the relevant period.

3.30 Ofgem will only accept estimated meter readings that are not agreed within the timeframe detailed above in exceptional circumstances. Agreement to the provision of estimated meter readings for one quarterly period does not necessarily mean that an estimate will be acceptable for a subsequent period, nor does it in any way imply a waiver of your metering, maintenance or other ongoing obligations under the Regulations.

Additional Information for Heat Pump Installations

3.31 In addition to the submission of periodic data listed above, all participants with an NIRHI accredited Heat Pump installation will be asked to provide additional data related to the electrical input to the heat pump unit. This information has been requested in order to assess the performance of commercial and industrial heat pump installations receiving NIRHI periodic payments. This data is not mandatory or individually attributable so participants are not required to submit data in order to comply with the requirements of the scheme.

3.32 The additional data requests would capture the following information for all heat pumps installations at all scales:

- Total electricity consumed[11] by the heat pump unit (in kWh);
- Electricity consumed by the source pumps[12] and/or fans;
- Electricity consumed by the emitter fans and/or pumps[13]; and
- Electricity consumed by back-up heaters[14] integral to the heat pump system.

[11] Electricity consumed by the heat pump(s) compressor(s) and control system(s).
[12] Source pump(s), these are the pumps that circulate thermal transfer fluid in the ground loop to collect heat from the "source" (i.e. ground). For open loop systems, these are the pumps that move fluid from the source through the heat pump unit.
[13] Emitter fan(s), these are the fans used to circulate warm air in a ducted heat distribution system. Emitter pump(s), these are the pumps used to circulate fluid in a wet heat distribution system.
[14] These are heat sources that are outside the compression cycle.

ONGOING FUEL ELIGIBILITY REQUIREMENTS

4

Chapter summary

This chapter explains the ongoing fuel eligibility requirements that bioenergy plants must comply with. Guidance is provided on how these requirements can be met, including information on how contaminated fuels and ancillary fuels should be accounted for. Requirements for plants using solid biomass contained in municipal waste are also explained.

4.1 This chapter applies to certain installations or biomethane producers using fuels derived from biomass[15]. Relevant plants are those producing biogas for conversion into biomethane and those generating heat using:

- solid biomass
- solid biomass contained in municipal waste
- biogas

4.2 These plants have specific ongoing fuelling requirements and allowances that they must follow, in addition to the initial requirements for accreditation and other ongoing obligations. These are outlined in this chapter.

4.3 Please contact Ofgem for any queries on eligible fuels to be used and fuel measurement and sampling (FMS) arrangements.

4.4 Where a plant generating heat from solid biomass, solid biomass contained in municipal

[15] See Volume One for the eligibility criteria for plants using biomass-based fuels.

waste or biogas only uses 100 per cent biomass fuels (i.e. no ancillary fossil fuel or any contaminated fuel or feedstocks as set out later in this chapter), the only ongoing fuelling requirement is to keep records of fuel/ feedstock purchase and use, including invoices (except for biomethane producers where sustainability reporting also applies – see Chapter Six). This ongoing record keeping requirement applies to all plants using these sources of energy. Where fuels are not purchased from a third party but are instead harvested by the NIRHI participant themselves (e.g. when a woodland owner harvests wood from their own land), a boiler log should be kept of all deliveries made to the boiler house, along with records of where harvesting has taken place.

Definition of 'energy content'

4.5 In this chapter and related appendices, we refer frequently to 'energy content', which means the amount of energy contained within a fuel or feedstock. Specifically, the Regulations refer to the substance's "gross calorific value (GCV) within the meaning of British Standard BS 7420:1991". For example, Ofgem may need to know the number of Megajoules (MJ) of energy contained in a given quantity (e.g. a tonne) of fuel, or the percentage of the energy content of a fuel (or combination of fuels) that is from a fossil or biomass source.

General fuel eligibility criteria

Peat ineligibility

4.6 Peat does not count as biomass so cannot be included in any NIRHI claim, either as a feedstock for the production of biogas or as a fuel itself.

Anaerobic digestion

4.7 When biogas produced by anaerobic digestion is used to generate heat or to produce biomethane, that biogas is only eligible when certain 'feedstocks' have been used in its production. Feedstocks are the material (e.g. slurry, sewage or food waste) that is converted into the biogas. The eligible feedstocks are:

- solid biomass
- solid waste
- liquid waste[16].

4.8 Please note that installations that generate heat from landfill gas or participants producing biomethane which is derived from the conversion of landfill gas are not eligible

[16] The definition "waste" has the same meaning as in Article 2(2) of the Waste and Contaminated Land (Northern Ireland) Order 1997. (S.I. 1997/2778 (N.I. 19), Article 2(2) was amended by SR 2011 No.127)

under the NIRHI.

Gasification and pyrolysis

4.9 When biogas produced by gasification or pyrolysis is used to generate heat or to produce biomethane, that biogas is only eligible when the feedstocks used to create the gas are solid biomass or municipal waste.

Prohibition on fossil fuel – exceptions for ancillary and contaminated fuel

4.10 Accredited installations having an installation capacity of between 45kW and 1MW which use solid biomass, and accredited installations which use solid biomass contained in municipal waste or biogas are not permitted to use fossil fuel within the installation, other than in cases which fall under the following two exceptions:

- Ancillary fuel (small amounts of fossil fuel necessary for the effective operation of the installation) up to a limit specified in the Regulations

- Contaminated fuel (where the biomass fuel / municipal waste contains fossil fuel contaminant within the limits specified in the Regulations)

4.11 Other than this, use of fossil fuel in these types of accredited installation would be a breach of a participant's ongoing obligations under the Regulations.

4.12 Ofgem may take enforcement action against participants in breach of their ongoing obligations. They may suspend or permanently withhold your payments for any quarterly period in which ineligible fuels are used or for which ancillary or contaminant fossil fuel limits are exceeded. Ofgem, in exercising their discretion, will take into account all relevant circumstances, including factors such as the degree of ineligible fuel use, the period for which this continued, the reasons why ineligible fuel came to be used and the manner in which any breach came to light. Where infringements of fuel requirements are material or repeated, they may also take other compliance or enforcement action against you, including revocation of your accreditation or registration.

4.13 Installations generating heat using the following forms of biomass can use fossil fuel for 'permitted ancillary purposes' related to the ongoing operation and maintenance of the boiler or other heat generating equipment:

- solid biomass (plants with installation capacity between 45kWth and 1MWth)
- solid biomass contained in municipal waste
- biogas (from anaerobic digestion, pyrolysis or gasification)

4.14 These purposes are:

- cleansing other fuels from the accredited NIRHI installation's combustion system prior to using fossil fuel to heat the combustion system to its normal temperature

- the heating of the accredited NIRHI installation's combustion system to its normal operating temperature or the maintenance of that temperature
- ignition of fuels of low or variable calorific value
- emission control
- in relation to accredited NIRHI installations which are combined heat and power (CHP), standby generation or the testing of standby generation capacity[17]

4.15 This refers to fossil fuel used in the same plant as the biomass (e.g. in the same boiler chamber), rather than the use of fossil fuel in a different boiler. As outlined in Volume One, Chapter Four, section 'Fossil fuelled and dual fuelled biomass plants', a fossil fuel boiler is permitted alongside an eligible installation provided it is metered separately and excluded from heat supported by the NIRHI.

4.16 Where the use of fossil fuel for these specified ancillary purposes is required at the plant, up to 10 per cent of the energy content of all the fuels (biomass and fossil) used at the plant during the quarter can be from fossil fuel for ancillary purposes.

4.17 Where the energy content is above this level, the participant would be in breach of its ongoing obligations. As described above, this may result in the suspension or withholding of your payments for the period for which the ancillary fuel limit is breached, or for material or repeated breaches of the requirements, in other compliance and enforcement action being taken against you.

4.18 For details on how plants should demonstrate that they meet this requirement, see the 'How to meet ongoing requirements where ancillary or contaminated fuels are used' section below.

Contaminated fuels and feedstocks

4.19 Certain plants can use biomass contaminated with fossil fuel (though see paragraph below). For example, wood contaminated with varnishes, glues or paints (which are often derived from fossil fuels) are permitted. This is what regulations refer to as 'contaminated' fuels or feedstocks. 'Uncontaminated' or '100 per cent biomass' fuels or feedstocks would not contain any fossil fuels of this kind.

4.20 However the Regulations[18] do not permit the deliberate addition of fossil fuel to solid biomass with a view to the contaminated fuel being used in an installation. For example, deliberately adding waste fossil fuel oil to virgin wood would mean that wood could not be used in the NIRHI.

4.21 The plants where biomass contaminated with fossil fuel may be used are the same as the

[17] "Standby generation" means the generation of electricity by equipment which is not used frequently or regularly to generate electricity and where all the electricity generated by that equipment is used by the accredited NIRHI installation;

[16] For biogas plants for this particular requirement, it is the energy content of the biogas which is to be compared to the fossil fuel use, rather than of the feedstock (although, as stated, this does not formally need to be measured)

[18] Regulations, Part 4, Regulation 29(3) and 30(2)

plants permitted to use ancillary fossil fuel except that:

- fossil fuel contamination is not considered relevant to plants using biogas derived from anaerobic digestion as, in this case, contaminants are expected to remain as residues from the digestive processes and would not affect biogas output, and

- whilst ancillary fuel use is not relevant to facilities producing biogas for conversion into biomethane, these plants are permitted to use biogas contaminated with fossil fuel within the specified limits.

4.22 Therefore, contaminated fuel limits only apply to the following participants:

- biogas heat generation plants and biomethane producers (when the biogas or biomethane has been produced using gasification or pyrolysis), and
- installations using the following forms of biomass to generate heat:

    - solid biomass with an installation capacity of between 45kW and 1 MWth corresponding GB guidance bullet refers to "of above 45kW". Has to be different here as payment are not made in NI for 1MW and above biomass plants

    - solid biomass contained in municipal waste

    - biogas (from gasification and pyrolysis only).

4.23 Applicants must declare up-front as part of the accreditation process whether contaminated fuels are to be used at the plant. The contamination criteria for the various technologies is outlined below.

Contamination limits for solid biomass plants between 45kWth and 1MWth

4.24 For these solid biomass plants, the energy content of the contamination must be 10 per cent or under of all the biomass fuels (contaminated or otherwise) used in that quarter.

4.25 As the 10 per cent or under requirement applies to the quarterly period, individual deliveries of fuels can be above 10 per cent contamination by energy content. So a contaminated waste wood fuel or municipal waste fuel above 10 per cent contamination could be used, as long as the total contamination for the quarter was under 10 per cent.

4.26 For details on how plants should demonstrate that they meet this criterion, see the 'How to meet ongoing requirements where ancillary or contaminated fuels are used' section below.

Contamination limits for municipal waste plants

4.27 For plants burning municipal waste, the contamination contained within that waste can be up to and including 50 per cent in each quarterly period. For information on how this can be evidenced, see section 'Specific municipal waste fuel measurement criteria' below.

Contamination limits for gasification and pyrolysis plants

4.28 The solid biomass feedstock would need to meet the 10 per cent or under contamination by energy content criteria explained above in the 'Solid biomass between 45kW' and 1MW' section.

4.29 The municipal waste feedstock would need to meet the 50 per cent biomass criteria outlined in the 'Specific municipal waste fuel measurement criteria' section below.

Contamination limits for anaerobic digestion plants

4.30 As explained above, the Regulations do not require participants to take account of any fossil fuel contained in feedstocks used for anaerobic digestion.

4.31 Where the energy content is above the levels outlined in the scenarios in this section, the participant would be in breach of its ongoing obligations. As described above, this may result in the suspension or withholding of your payments for the period for which the ancillary fuel limit is breached, or for material or repeated breaches of the requirements, in other compliance and enforcement action being taken against you.

How to meet ongoing requirements where ancillary or contaminated fuels are used

Ancillary fossil fuels requirements Biogas

4.32 Whilst installations using biogas must ensure that the energy content derived from fossil fuels used for ancillary purposes does not exceed 10 per cent, there are no requirements to submit documentary evidence of this on a quarterly basis. In addition, as the payment calculation takes no account of this ancillary fossil fuel use for these installations, the exact percentage of energy content derived from fossil fuels is not required.

4.33 However, where participants do use ancillary fossil fuel, they must keep certain documentation for audit purposes to support their claim that the energy content derived from fossil fuels used for ancillary purposes does not exceed 10 per cent. This documentation includes:

- all fossil fuel invoices and receipts
- where invoices and receipts do not relate to energy content, a description of the type of fossil fuel purchased (so that we can calculate energy content or GCV)
- a stated efficiency of the boiler, engine or other heat generating equipment (which can then be compared against the fossil fuel purchase documentation).

4.34 Ofgem will regularly review this documentation on a sample basis.

Solid biomass contained in municipal waste

4.35 Where fossil fuel is used for ancillary purposes, the plant must follow the FMS procedures outlined later in this chapter, as well as keeping records of fuel purchases.

4.36 The energy content of the ancillary fossil fuel used in plants will be deducted pro-rata from the payment calculation made (as a total of the energy content of all fuels) as required by the Regulations. For example, where a plant uses ancillary fossil fuel, the energy content of that fuel as a proportion of the total fuels used in a quarter will be deducted from the final payment.

Contaminated fuels and feedstocks

Solid biomass with installation capacity of between 45kWth and 1MWth.

4.37 As set out above, solid biomass plants with an installation capacity between 45kWth and 1MWth are allowed to use contaminated solid biomass fuels, but the energy content of these fuels cannot exceed 10 per cent of the energy content of the biomass fuels used in the quarter.

4.38 Applicants should inform Ofgem during the accreditation process that they intend to use a contaminated fuel.

4.39 No deduction will be made from the payment calculation for fuel contamination that does not exceed 10 per cent of the energy content of the biomass fuels used. Again, there is no requirement to provide documentary evidence on a quarterly basis (but records of fuel purchases will still need to be kept – Ofgem may ask to review these records).

4.40 Where an applicant proposes to use a contaminated fuel at this capacity range of boiler, they should keep evidence to support their claim that the fossil fuel contaminants will not be above 10 per cent of the biomass fuels in a given quarter. This documentation includes:

- a boiler warranty or boiler fuel specification clearly showing that fuels above 10 per cent contamination by energy content are not to be used in the boiler
- a fuel supply contract or purchase specification clearly showing that the energy content of the contamination will not be above 10 per cent of the biomass fuel, and
- initial sampling demonstrating that the energy content of the contamination is not likely to be above 10 per cent of the biomass fuel (for further details on sampling, see the FMS section below).

4.41 Ofgem will regularly review this documentation on a sample basis.

4.42 The limit of 10 per cent contamination and ancillary fuel allowances are exclusive of each other – up to 10 per cent of each are allowed.

Anaerobic digestion

4.43 The relevant tariff calculation in the Regulations assumes that for any feedstock contaminated with fossil fuel (e.g. food waste which contains plastic food packaging), the fossil fuel element does not digest and therefore contribute to the calorific value of the biogas. There is no requirement for the contamination of the feedstock to be measured and no deduction is made from the payment.

Gasification / pyrolysis

4.44 Where the participant has declared upfront that the installation will use feedstock contaminated with fossil fuel, they will have to follow the FMS procedures outlined later in this chapter. This is to ensure compliance with the contamination criteria and because the tariff payment is 'pro rated' to deduct the fossil fuel contamination in the feedstock.

4.45 Where municipal waste is used as a feedstock, the criteria in relation to assessing whether contamination is likely to exceed 50 per cent also applies – see the 'Specific municipal waste fuel measurement criteria' section for details of this.

4.46 No account is to be taken of the energy content of the char, or any other by-products of the process. This is because regulations regarding fossil fuel- derived content relate to the input feedstocks used at the biogas production plant, rather than to the biogas itself.

Fuel measurement and sampling

4.47 The term 'fuel measurement and sampling' (FMS) refers to the way in which certain participants in the NIRHI are required to determine the renewable biomass proportion of their input fuels. This is done on a quarterly basis and is based on the energy content of the fuels. By 'measurement', we mean determining the amount or quantity of a fuel (for example in tonnes or cubic metres). This may, for example, be through weighing the fuel. By 'sampling', we mean taking small sample amounts of fuel and testing them to determine specific properties such as their GCV.

When FMS is required

4.48 As described in the 'Ongoing fuel requirements' section above, FMS is only required when a participant generates heat from fossil fuel at their installation and when the Regulations state that the tariff should be apportioned 'pro rata' to adjust for any fossil fuel use. Where only 100 per cent biomass fuels are used, no measurement or sampling of the fuel is required.

4.49 Participants that need to calculate the energy content of the biomass, fossil fuel and contamination contents of their fuels should review the specific regulations relating to this

found in the Regulations[19].

4.50 Where 'pro rating' is stipulated in the NIRHI regulations, Ofgem need to know the energy content of all the fuels (including contaminated fuels) added together and used within the quarter. They also need to know the energy content of the biomass fuels in relation to the total fuels used.

4.51 Where fossil fuel is used which does not result in the generation of heat (i.e. the generation of metered hot liquid/ steam), installations do not need to measure this as contributing to their fossil fuel use. For example, if fossil fuel is used for start-up or testing, and does not contribute to heat being generated, this would not contribute to the fossil fuel proportion in the quarterly period. You would need to agree with Ofgem as part of the Fuel Measurement and Sampling Questionnaire how to ensure that where fossil fuel is not measured for this purpose, it would not contribute to the generation of heat (i.e. adding to the metered heat generation).

Simplified approach where only ancillary fossil fuel is used and no contamination

Purpose of the FMS questionnaire

4.52 The FMS questionnaire is Ofgem's way of reviewing the proposed procedures that a participant will follow to determine the renewable portion of their fuel use each quarter[20]. Ofgem will approve these procedures where the procedures set out the basis for accurate ongoing reporting. Ofgem will review and approve these at the accreditation stage to ensure that participants follow appropriate procedures once accredited, thus reducing the likelihood that we would need to withhold payment due to inaccurate or incorrect periodic data being subsequently provided.

4.53 More detail on how to measure and sample accurately can be found in Appendices 2-5.

When to submit FMS procedures

4.54 If a participant is required to carry out FMS for an installation, the participant will need to submit the proposed procedures detailing how they will do this. Procedures are submitted in a form provided by Ofgem, the Fuel Measurement and Sampling Questionnaire (FMS Questionnaire), available on the Ofgem NIRHI website.

4.55 Participants should submit their initial FMS Questionnaire at the time of submitting their application for accreditation or registration. Ofgem will not review your application until they have received your FMS Questionnaire, and applications cannot be approved without an approved FMS Questionnaire. This is because without an approved FMS questionnaire they cannot be confident that the ongoing obligations relating to the use of solid biomass, biogas or biomethane (Regulations, Part 4, Chapters 1 and 2) can be complied with.

[19] Regulations, Part 4, Chapters 1 and 2
[20] Regulations, Part 4, Chapter 3, Regulation 36 (4)

4.56 If existing procedures subsequently change (for example when a new type of fuel is used at the plant, or when new measurement equipment is installed), the FMS Questionnaire will need to be amended and re-submitted for approval online.

Format of FMS procedure

4.57 The FMS must be provided on the Microsoft Excel template supplied by Ofgem that will be available on Ofgem's website to download. This will then need to be converted to PDF format before it can be uploaded to the NIRHI Register.

Approval of FMS: case-by–case approach

4.58 We recognise that no single biomass heat installation is identical to another and that different installations will use combinations and quantities of fuels from different sources. Ofgem will therefore agree FMS procedures on a case-by-case basis, according to the specific setup and conditions at each plant. However, before approving FMS procedures, they must be satisfied that the approach which you are proposing is capable of adequately demonstrating ongoing compliance with the fuel requirements as set out in the Regulations.

Alternative proposals for measurement methodologies

4.59 As an alternative or supplemental approach to the measurement and sampling of input fuels used by an installation, participants can propose that any fossil fuel component of fuel used can be measured by analysing any gases or other substances that are created as part of the combustion process. These will typically be analysis of the flue gases resulting from combustion.

Quarterly FMS measurement: carry-over of fuel-stocks

4.60 Measuring the weight of biomass used in a quarterly period is required to calculate the NIRHI payment. This means that the weight of any stocks carried over from the previous quarter must be measured in the quarter of use.

4.61 A strict interpretation of the requirement to account accurately for the weight of biomass used within a quarter would mean that measurements had to be taken at the stroke of midnight on the last day of each quarter. Ofgem realise that this may not be practical. As such, they will therefore accept measurements taken +/- 3 days after the end of the quarterly period (in line with meter readings).

4.62 In deciding when to take weight measurements of stock carried over from one quarterly period to the next, good practice would be to measure the fuel at the same time each quarterly period. Whilst Ofgem may be able to allow some flexibility where they are satisfied that practical obstacles exist, they encourage measurements to be taken at the same time each quarterly period so that the qualifying percentage can be accurately measured.

4.63 When assessing measurement and sampling information for stock carried over from one quarterly period to the next, they will take a pragmatic approach. For example, they may be able to accept estimates of stock levels (as opposed to requiring sheds to be emptied and stock taken back over weighbridges) in circumstances where they are satisfied that the proposed estimation techniques offer an acceptable level of accuracy and reliability.

Fuel Management

4.64 In addition to submitting the FMS Questionnaire, participants will be required to submit the name and type of fuel(s) they are planning to use for their NIRHI installation. This can be done through the Ofgem NIRHI Register. Ofgem will then review these fuels against the FMS Questionnaire the participant has provided and, as appropriate, approve these fuels for use in the installation.

4.65 The fuels submitted should mirror what has been provided on the FMS Questionnaire. Where a new fuel is to be used by the plant (e.g. the plant is proposing to use a fuel sourced from a different country to existing fuels), Ofgem should first be informed through the provision of a revised FMS Questionnaire. This may require the questionnaire to be updated solely with the new fuel being used, or new procedures may be required if the new fuel differs significantly from existing fuels. The new fuel should also be uploaded to the Ofgem NIRHI Register for them to check against the FMS Questionnaire.

4.66 Periodic support payments can only be made once Ofgem has approved the fuel(s) that have been submitted for approval by the participant. Participants are advised to seek approval of fuels in advance of using them where possible in order to avoid subsequent problems should Ofgem has concerns over the suitability of the FMS for that fuel.

Submitting quarterly fuel data

4.67 Each quarterly period, participants required to submit fuel data need to submit this alongside their quarterly meter readings. The same one month submission deadline applies for this data. This fuel data includes the quantity (e.g. in tonnes) of each fuel combusted and the contamination percentage and GCV of each of these fuels.

4.68 Where relevant, sustainability information should also be provided at the same time (see Chapter Six for further details).

Specific municipal waste fuel measurement criteria

Fossil-fuel proportion of municipal waste

4.69 In certain circumstances, Ofgem is allowed under the Regulations to make an assumption about the biomass portion of a municipal waste stream upon receipt of satisfactory information published by the Department of the Environment or a district council. This is where information demonstrates that the fossil fuel derived portion of the waste is unlikely to exceed 50 per cent (and that therefore the solid biomass proportion of

municipal waste is likely to be at least 50 per cent). Upon receipt of this information they are able to assume that the fossil fuel portion of a municipal waste stream is at least 50 per cent.

4.70 In practice, this allows installations to base their FMS approach on the submission of published data[21], rather than requiring regular sampling by the participant. In this case participants will need to gather the evidence they wish to draw upon in order to clearly demonstrate the fossil fuel derived energy content of the fuel. An example of this approach is shown in Table1.

4.71 Where a participant wishes to claim credit for the renewable content of their municipal waste being greater than the 50 per cent assumed under the previous approach, they will need to propose FMS procedures that will demonstrate this. An example methodology that participants may wish to use is outlined below.

Table1: Example methodology for plants seeking to demonstrate that the fossil fuel content of a municipal waste stream is not likely to exceed 50 per cent

Stage	Description
1	Extract a representative sample of the waste and identify the percentage contribution by weight of each of the primary categories within the stream, using a reliable data source to compile a list of primary categories.
2	Draw upon a reliable data source to apply an estimated GCV value to each primary category.
3	Multiply the weight and GCV values obtained for each primary category together.
4	Divide the value obtained at Stage 3 by the sum of the values obtained at Stage 3 and then multiply the resulting value by 100 for each fuel.
5	Draw upon a reliable data source to apply a biodegradable content to each of the primary categories within the fuel.
6	Multiply the values obtained at Stage 4 by the value obtained at Stage 5 for each primary category and sum the resulting value for each primary category to generate the overall qualifying percentage of the stream.

4.72 An example of the use of this methodology is shown below:

Table 2: Municipal waste stream methodology example

Stage 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Primary category	% Contribution by weight	Gross CV	Weight X GCV	% by GCV	Biodegradable content	Qualifying %
Paper and card	30	12.5	375	25.2	1	25.2
Textiles	70	15.9	1113	74.8	0.5	37.4
TOTALS	100	-	1488	100	-	62.6

[21] Participants may find it helpful to access the data available via the Waste Data Flow resource at http://www.wastedataflow.org/home.aspx when considering the use of data-based evidence.

Processed municipal waste

4.73 Where a participant opts to separate and remove certain parts of a municipal waste stream (i.e. to process the waste) prior to using the remaining fuel for heat generation, the composition and energy content of final fuel will clearly change. This will call into question the reliability of published data used as part of a FMS regime, where that data has been compiled based on waste received at the installation before processing takes place. These processes may have resulted in an increase to the fossil fuel derived proportion of the waste.

4.74 For example, a participant may decide to remove certain materials that are likely to have high biomass content so that these materials can be recycled, in which case the fossil derived content of the remaining waste stream will increase.

4.75 Where such a process has taken place, Ofgem would ask the participant to provide an explanation of the process and then for the participant to demonstrate that, in spite of the process taking place, the fossil fuel proportion of the waste is still unlikely to exceed 50 per cent.

4.76 For example, in the scenario outlined above where a participant has removed part of the waste stream for recycling purposes, they would ask the participant to calculate the energy content attributable to the biomass portion of the removed fraction as a percentage of the total energy content pre-processing. Participants are requested to keep relevant supporting evidence of their waste processing regime, for example, Waste Transfer notes or other documentation relating to waste streams which are separated and removed for recycling.

4.77 The participant should then deduct this percentage from the total percentage attributable to biomass pre-processing. This calculation will then provide the participant with the revised total percentage energy content attributable to biomass within the waste stream post-processing.

Further evidence

4.78 In order to verify the proportion of solid biomass contained in municipal waste, the Regulations allow Ofgem to request that a participant either provides a sample of municipal waste used in an accredited installation or implements a sampling regime. The Regulations also give Ofgem the discretion to take account of sampling conducted on any gas or other substance produced as a result of the fuel being used[22]. Ofgem may also request a sampling regime as part of their auditing procedures. For further information on auditing please refer to Chapter 11.

4.79 Ofgem can exercise their power to require sampling at any time but they will generally ask participants to implement sampling in the following scenarios:

[22] Regulations, Part 4, Chapter 1, Regulation 28 (8)

- where a participant has not been able to provide sufficient data-based evidence to demonstrate that the fossil fuel content of a municipal waste stream (before or after it has undergone any process) is not likely to exceed 50 per cent, or

- where a participant wishes to agree an FMS procedure for a municipal waste stream in the belief the fossil fuel content of the stream is less than 50 per cent. Please see Table 2 for an example methodology which participants may wish to use.

4.80 While participants can explore a range of options when designing their FMS procedures, they should bear in mind the key relevant requirement of the Regulations[23], namely that the fossil fuel proportion in a waste stream must be determined according to the energy content of the fuel.

[23] Regulations, Part 4, Chapter 1, 28 (3)

PERIODIC SUPPORT PAYMENTS

5

Chapter summary

This chapter provides guidance on how the periodic support payment which a participant is due in respect of a quarterly period will be calculated, and made. This chapter also outlines what actions by either you or Ofgem may impact on your payment schedule.

Periodic Support Payments

5.1 NIRHI support will be delivered to participants in the form of quarterly periodic support payments (hereafter, 'payments'). These will be made over a number of years rather than as a single upfront payment. Payments will accrue from the accreditation date of an installation, or registration date for biomethane producers, and will be payable for 20 years.

5.2 The tariff levels for the different eligible technologies and the formulae to determine the payments have been set by DETI in the NIRHI Regulations. Ofgem is responsible for making payments to NIRHI participants based on the payment calculations set out in those Regulations.

How payments are calculated

5.3 Payments for installations are calculated by multiplying the applicable tariff(s) by the Eligible Heat Output (EHO) generated in the relevant quarterly period. Payments for biomethane producers are based on the eligible volume of biomethane produced for injection in the period.

5.4 For the majority of participants the EHO and payment amount is calculated by the RHI Register. As part of the application approval process Ofgem has set up the appropriate formula in the system based on the installation's system type and metering arrangements. This allows the system to calculate the heat output data including the EHO and payment amount from your periodic data submission. We will advise applicants for whom this does not apply as part of the application review process.

- The metering classification of your installation will determine the way in which the EHO generated by your installation (or the amount of biomethane you have produced) is calculated. Each installation is classed as 'simple' or 'complex', for metering purposes.

Please see volume 1 chapter 7 for further details on the classification of Simple and Complex.

5.5 Your classification determines what 'quantities' you have to measure in order for Ofgem to be able to calculate your EHO.

If you have a '**simple**' system you can determine your EHO by obtaining a measure of:

- **H**eat **G**enerated **B**y your RHI **I**nstallation (**HGBI**)

If you have a 'complex' system you will need to obtain a measure of 3 different quantities to determine your EHO:

- **H**eat **G**enerated **B**y your RHI **I**nstallation (**HGBI**)
- **H**eat **U**sed by **E**ligible **P**urposes on the system (**HUEP**)
- **T**otal **H**eat **G**enerated by all the plants supplying heat to the heating system (**THG**)

5.6 The metering arrangements of your installation will determine whether you use HGBI or HUEP as your EHO. Once determined, the EHO can then be multiplied by the applicable tariff to calculate your RHI periodic support payment. The RHI Register will perform these calculations once supplied with the relevant meter readings.

Calculation for Simple Systems

5.7 For installations classed as simple systems, the payment calculation is straightforward[24].

Payment = Tariff Level x Heat Generated by NIRHI Installation

Worked Example: Simple system

System type: ground source heat pump, capacity 10kWth

Tariff rate, determined by regulations: £0.084 (8.4 pence)

Data submitted to Ofgem: amount of heat generated in that quarter 6,570 kWhth

Payment = Tariff level x Heat Generated by NIRHI Installation

= 0.084 x 6,570 = £551.88

[24] Regulations, Part 5, Regulation 37

Calculating payments for biogas installations

5.8 The payment calculation for biogas systems needs to take account of the Heat Supplied to the BioGas plant (HSBG) which produced the biogas combusted in the quarterly period. This is considered an eligible use of heat, but it must also be deducted from the EHO. The EHO is determined in the same way as set out in the section above. Once HSBG has been deducted from EHO the resulting figure is multiplied by the applicable tariff to calculate your RHI periodic support payment.

Calculation for Complex Systems

5.9 For installations classed as complex systems, the payment calculation involves more terms[25] – this is to take account of any ineligible plants which are connected to the heating system of which the accredited NIRHI installation forms part and of any ineligible heat uses served by the system. This ensures that only eligible heat attributable to the eligible installation is supported.

Payment = Tariff Level x Eligible Heat Used on System x Heat Generated by NIRHI Installation / Total Heat Generated on System

Worked Example: Complex system
System type: ground source heat pump, capacity 200 kWth

Tariff rate, determined by regulations: £0.013 (1.3 pence)

Data submitted to Ofgem:
- Amount of heat generated by NIRHI installation in that quarterly period: 160,000 kWhth
- Total amount of heat generated by all installations on system: 340,000 kWhth *(note: this implies a further 180,000 kWhth was generated by other ineligible plants in addition to the NIRHI installation)*
- All heat used on the system for eligible purposes: 290,000 kWhth

Calculation: = *Tariff Level x Eligible Heat Used on System x Heat Generated by NIRHI Installation / Total Heat Generated on System*

= 0.013 x 290,000 x 160,000 / 340,000

= £1,774

[25] Regulations, Part 5, Regulation 38

Complex System involving biogas

5.10 For complex systems involving biogas, the formula needs to take account of the heat delivered to the biogas plant which produced the biogas combusted in the quarterly period.

Payment = Tariff Level x (Eligible Heat Used on System – Heat to Biogas plant) x $\frac{\text{Heat Generated by NIRHI Installation}}{\text{Total Heat Generated on System}}$

5.11 There are additional elements to the payment calculation for some eligible technologies in particular circumstances. These additional calculation elements are explained below.

5.12 Where the participant has declared upfront that feedstock contaminated with fossil fuel will be used in the accredited installation, the tariff payment is 'pro rated' to deduct the fossil fuel contamination in the feedstock.

5.13 Therefore the "renewable" percentage of the feedstock (i.e. 1 – contamination %) going into a gasification plant is multiplied by the payment each quarter to determine the final payment. For example, where the contamination percentage is 5 per cent, the payment would be multiplied by 95 per cent to determine the final payment.

5.14 No account is taken of any fossil fuel used for permitted ancillary purposes at the heat generating plant.

Calculating tiered payments

5.15 For biomass installations with a date of accreditation on or after 11 November 2015, a different banding and tiering structure applies which affects payments. The 'small' biomass tariff applies to installations less than 20kWth. The 'medium' biomass tariff applies to installations of 20kWth and above, up to but not including 200kWth. The 'large' biomass tariff applies to installations of 200kWth and above, up to but not including 1000kWth. See Appendix 1 for the list of tariffs which apply.

5.16 For these 'small' and 'medium' biomass installations, a two tiered tariff structure applies, as well as an annual cap on heat that is eligible for payments. The tiering and annual cap are not applicable to 'large' biomass installations.

5.17 This tariff structure operates on a 12 month basis, starting with an installation's date of accreditation or its anniversary. The regulations specify that during that 12 month period, an initial amount of heat equal to the amount of heat generated by the installation running at its installation capacity for 1,314 hours (15% of a year) will be payable at the higher Tier 1 tariff. Any further heat used during that 12 month period will be payable at the lower Tier 2 tariff, up to a maximum of 400,000kWhth. At the start of the next 12 month period, the initial amount of heat will again be payable at the higher Tier 1 tariff. We consider the 'initial heat' threshold will only be crossed when

eligible heat output (e.g. the quantity of heat on which payments will be made) has exceeded the tier threshold, and that the 400,000kWhth is also applied to the eligible heat output.

5.18 Payments for eligible heat output beyond 400,000kWhth in each payment year will automatically be stopped. Participants are responsible for understanding their eligible heat output and the impact on payments, but they could normally expect to be notified if and when they cross the threshold when they enter their periodic data. Payments will resume the following payment year for eligible heat output. Meter readings must still be entered each quarter, even if the participant has crossed the 400,000kWhth limit.

5.19 For biomass installations with a date of accreditation before 11 November 2015, the original banding structure applies, and no tiering or cap applies. Please see Table 1 in Appendix 1.

Payments for biomethane producers

5.20 Registered producers of biomethane have a separate payment calculation formula because heat is not generated in the biomethane injection process. Please see the tariff table at Appendix One to view the tariff rate applicable to biomethane producers.

5.21 To calculate how much biomethane producers should be paid each quarterly period, five elements of data will be required. These elements are:

1) The volume (in cubic meters) and Gross Calorific Value (GCV) (in kilowatt hours per cubic meter) of biomethane injected into the gas network (participants should ensure that, where relevant, appropriate adjustments are made for temperature and pressure) (giving a figure in kWh).

2) The GCV and volume of propane that was contained in the biomethane (appropriately adjusted for temperature and pressure) (giving a figure in kWh)

3) Any heat supplied to the biomethane production process (in kWhth)

4) Any heat supplied to the biogas production plant from an 'external' source (i.e. any source other than from the combustion of the biogas) (in kWhth).

5) The contamination percentage (where the biomethane has been produced from contaminated feedstock that has gone through a gasification or pyrolysis conversion process). This figure will be deducted from 100 per cent to give the solid biomass 'proportion contained in the feedstock' eg a 5 per cent contamination will give a solid biomass proportion of 95 per cent.

5.22 Once registered, biomethane producers will be required to submit the above information regularly as periodic data within the deadline for periodic data submissions. The payment due to a biomethane producer will be calculated by subtracting Items 2-4 in the above list from Item 1. This is then multiplied by the proportion of biomass contained in the feedstock.

5.23 We will discuss the requirements for submission of periodic data with registered biomethane producers as part of their registration onto the scheme. Please see Chapter Nine for further information.

From what date do payments begin to accrue?

5.24 Payments are payable based on quarterly periods as calculated from the date of the accreditation of the eligible installation, or from the date of registration for biomethane producers. For example, if an installation was accredited or a biomethane producer registered on 25 January 2015, then the first quarterly period would be considered to run from 25 January 2015 - 24 April 2015. You will be advised of your payment schedule in a notice from Ofgem once your installation becomes accredited, or once you become a registered biomethane producer.

5.25 Payments will cease after a fixed period of 20 years from the date of accreditation for your installation, or from the date of registration for biomethane producers.

Index-linking of tariffs

5.26 The table of NIRHI tariffs will be updated on an annual basis, with the updated rates commencing on 1 April and ending on 31 March of the following year. The tariff for your installation will be adjusted by the percentage increase or decrease in the UK RPI for the previous calendar year (the resulting figure being rounded up to 10^{th} of a penny, with any twentieth of a penny being rounded upwards).

5.27 Where your quarterly period falls over two applicable tariff years (with part of the period falling before the RPI adjustment and part after the adjustment) then your quarterly payment will be calculated on a pro rata basis. Your payment will be calculated based on the number of days before and after the RPI adjustment on 1 April, and the appropriate tariffs which apply before and after that adjustment.

How the installation of additional plant or changes to the installation may affect your tariff rate

5.28 If you install additional equipment or alter an existing accredited installation, any change to the applicable tariff will only apply once Ofgem has accredited and approved the additional equipment or alteration to the installation. For further details see Chapter Seven.

5.29 If the additional equipment is installed within 12 months of the original equipment accreditation date then the tariff for the original installation would apply to the total capacity of the updated installation (except where the combined capacity exceeds the tariff threshold). The total payment period would also remain the same as the original equipment accreditation date. If the installation of additional equipment takes the combined capacity over a tariff threshold then the new tariff for the larger capacity will apply.

5.30 If the additional equipment is installed more than 12 months after the original equipment accreditation date, then the additional equipment would be metered separately, and have its own accreditation date. The applicable tariff for the additional equipment would be based on

the total capacity of the system (the capacity of the original installation and the additional equipment combined). Payments for the additional equipment will be made over a period of 20 years from the accreditation date of that equipment.

What actions may impact on your payment schedule?

5.31 Please note that Ofgem will not make payments to you until:

- they are satisfied that the information given by the Authorised Signatory is accurate and the installation meets the necessary requirements of the NIRHI scheme
- the installation has approved meters in place and these are fully functional
- they have accredited the installation and you have received confirmation of accreditation from them

5.32 Ofgem will calculate the amount owed to you for a quarterly period once you have submitted all the required periodic data (for further details see Chapter Three), and they have determined the amount of eligible heat generated by your installation (or, for biomethane producers, the eligible volume of biomethane produced).

5.33 Ofgem will review your periodic data submission and determine the amount of eligible heat generated for that quarterly period. They will then calculate the amount payable to you for the quarter as determined by your tariff, taking into account any additional debits, credits or deductions applicable to the payment (for example, due to previous overpayments or as a result of any sanctions which may have been imposed). Ofgem is not liable for any delays to payments however they have been caused and will not pay interest on any payments which may have been so delayed.

5.34 If your periodic data is submitted more than one month after the conclusion of the relevant quarterly period end, then your payment for that quarterly period may be delayed. If there are exceptional circumstances as to why you have submitted your required periodic data after the due date, you will need to provide supporting evidence for your claim. For further details, please see the 'Late data' section in Chapter Three.

5.35 Ofgem may raise a query on your periodic data submission and/or carry out an audit of your system. As a result of this review they may need to adjust the payment you are due or adjust the previous quarter's payment calculations. If you disagree with their decision on this matter then you may lodge a complaint with Ofgem or request a review of their decision. For further details see Chapter Twelve.

Adjustments to periodic support payments

5.36 Ofgem will amend the quarterly payment due to you for the quarterly period if there has been:

- an over-payment/s in (a) previous quarter/s
- an underpayment in (a) previous quarter/s
- if an error has been made

- if your payment is subject to a sanction (For further details see Chapter Ten).

5.37 If Ofgem is concerned that the conditions of the scheme are not being complied with they may apply a formal sanction, which could include:

- the suspension or withholding of a payment
- the revocation of accreditation or registration under the NIRHI scheme.

For further details on compliance, please see Chapter Ten.

Nominated bank account

5.38 Ofgem will pay the amount you are due to your nominated bank account by BACS transfer. Please note that it is a requirement of the NIRHI that the bank account you nominate to receive your payments be an account which accepts pound sterling deposits in the United Kingdom. Failure to nominate a suitable account may result in your payment being delayed until a bank account which meets the requirements of the NIRHI is provided to Ofgem.

5.39 It will be a condition of accreditation that only one bank account will be allowed for each NIRHI participant. Where a participant has more than one accredited installation under the scheme, then payments for all of the installations will be made to the nominated bank account.

Tariff lifetime in the circumstance of a change in ownership of an accredited installation

5.40 Please note that where an accredited installation is sold or transferred to a new owner, the new owner can only receive payments for the remaining period of the original tariff lifetime. For example, if an installation is sold five years and four months after being accredited to the NIRHI, then the new owner will be eligible to receive payments for the remaining fourteen years and eight months of the tariff lifetime.

5.41 For full details on requirements in the circumstance of a change in ownership of an accredited installation, please see Chapter Eight.

BIOMETHANE SUSTAINABILITY REPORTING

6

Chapter summary

This chapter explains the requirements for sustainability reporting for participants who are biomethane producers.

What is Sustainability Reporting?

6.1 Schedule 2 of the Regulations requires biomethane producers to provide Ofgem with quarterly reports on sustainability of fuel and feedstock. The information required is outlined in Table 1 below. This is required for each fuel consignment used.

Table1: Information required for sustainability reporting

Element	Detail	Example
Biomass Type	The material from which the biomass was composed e.g. wood	Food Waste
Biomass Form	Whether the biomass can take different forms e.g. wood chips or wood pellets, the form of the biomass	Shredded domestic and commercial food
Mass	Where the biomass is solid in its mass	1,000 tonnes
By-product	Whether the biomass was a by-product of a 'process' (as defined in the Regulations).	No
Biomass derived from waste	Whether the biomass was derived from waste	Yes
Country of origin	Where the biomass was plant matter or derived from plant matter, the country where the plant matter was grown	Northern Ireland

Country of purchase	Where the information specified in the row above is unknown or the biomass was not plant matter or derived from plant matter, the country from which the participant obtained the biomass.	NA
'Energy crop' (including types and proportions)	Whether any of the consignment was an 'energy crop' (a term defined in the Regulations) or derived from an energy crop and, if so: • the proportion of the consignment which was or was derived from an energy crop. • the type of energy crop contained in the consignment.	No
Environmental quality assurance schemes	Whether the biomass or any matter from which it was derived was certified under an 'environmental quality assurance scheme' as defined in the Regulations and, if so, the name of the scheme.	No
	Where the biomass was plant matter or derived from plant matter, the use of the land on which the plant matter was grown since 30 November 2005.	Used for forestry purposes

When and how to submit the Sustainability Information

6.2 You will be required to report on sustainability information on a quarterly basis, as part of your periodic data. The information provided should be accurate to the best of your knowledge and belief.

6.3 Sustainability information should be provided via the Ofgem NIRHI Register.

Information that is not available

6.4 Obligated participants are required to provide Ofgem with all the information listed in Schedule 2 of the Regulations. However, in particular circumstances, there may be information required by Schedule 2 which is not available to the participant. In such circumstances, please contact Ofgem to explain why the relevant data is not available. They shall then consider whether they are able to agree that the submission of the relevant piece of information is not required.

DETI publication of Sustainability Information

6.5 As part of DETI's reporting obligations under the Regulations DETI will publish sustainability information in aggregate form, on a quarterly and annual basis, on the DETI website. At this stage there are no minimum criteria for sustainability reporting as this is for information purposes only.

Audits

6.6 Participants should be aware that Ofgem may wish to conduct an audit of the sustainability

reporting information provided. Participants should therefore ensure that any information relevant to the sustainability reporting criteria is available on request to an audit team. For further information on Ofgem's audit procedures, please refer to Chapter 11.

TREATMENT OF ADDITIONAL CAPACITY

7

Chapter summary

This chapter provides guidance on how the addition of capacity or a plant to an existing NIRHI installation or to a heating system of which an NIRHI installation forms part will be treated.

The Department of Enterprise, Trade and Investment (DETI) has suspended the Northern Ireland RHI scheme to new applicants from 29 February 2016. No applications for additional capacity will be accepted after 29 February 2016. Your existing accredited installation will remain eligible for RHI payments if you remain compliant with your on-going obligations.

Ofgem continue to administer the Non-Domestic RHI scheme on DETI's behalf. This suspension only applies to the Northern Ireland RHI scheme. The Great Britain RHI scheme is unaffected.

Additional Capacity

7.1 If any renewable or fossil fuelled plant is added to an accredited NIRHI installation or to a heating system of which the accredited NIRHI installation forms part, Ofgem must be notified, irrespective of whether a participant wishes to apply for accreditation of that plant (see Chapter Two). The treatment of a plant which has been so added will depend on whether the plant constitutes 'additional NIRHI capacity'.

7.2 The Regulations state that 'additional NIRHI capacity' means a plant which is first commissioned after the date on which the original NIRHI installation was first commissioned, uses the same source of energy and technology and supplies heat to the same heating system[26].

7.3 In practice, this means that for example that if a participant with an NIRHI-accredited

ground source heat pump installed another ground source heat pump supplying heat to the same heating system, the second heat pump would be considered additional NIRHI capacity. This is regardless of whether the participant wished to apply for NIRHI support on the second heat pump, although the additional NIRHI capacity will only be accredited if the owner applies for accreditation.

7.4 A participant may install a heat generating plant which uses a different technology or source of energy to an existing NIRHI accredited installation and connect it to the same heating system as the NIRHI accredited installation. For example, if a participant installs a solar collector which feeds into the same heating system as their NIRHI -accredited biomass

[26] Regulations, Part 6, Regulation 42(2)

boiler, the solar collector would be considered as a new plant (and as a separate installation for NIRHI purposes). Ofgem only treats a plant which is the same technology and source of energy connected to the same heating system as 'additional NIRHI capacity'. A participant could apply for support for the new plant via an application for accreditation for a new installation if they wish to. However, whether or not the participant wishes to seek such accreditation, he must still notify Ofgem of the addition of the new plant.

7.5 Increasing the capacity of a biomethane plant is not considered to be the installation of 'additional capacity'. If a participant increases the flow rate of their biomethane production plant, they must amend their registration details to reflect the updated flow rate, but do not need to apply for additional capacity. Amending the flow rate and notifying Ofgem of the increase in production is sufficient.

When to inform Ofgem of installing additional capacity or plant

7.6 As specified in the Regulations, participants must inform Ofgem of the addition of capacity to an accredited NIRHI installation, or the addition of a new plant to an accredited NIRHI installation, within 28 days of the addition[27]. Participants must also inform them of the first commissioning of the additional capacity or additional plant within 28 days. This is regardless of whether or not the participant intends to apply for NIRHI support on the additional NIRHI capacity or additional plant. Please see the 'Information that will need to be provided' Section below for further information.

7.7 If a participant fails to notify Ofgem of a new plant or additional capacity within 28 days, appropriate enforcement action may be taken. For further information, please see Chapter Ten.

What may change if you install additional capacity or plant

7.8 Participants must make sure that the original accredited NIRHI installation continues to comply with all appropriate NIRHI eligibility requirements when additional NIRHI capacity has been added (whether or not accreditation has been applied for in respect of the additional NIRHI capacity). For example, the additional NIRHI capacity could affect the metering arrangements required for the original accredited NIRHI installation. Please refer to Volume One, Chapter Seven, 'Metering eligibility requirements' to see if the additional capacity affects the metering arrangements of the original installation.

7.9 Where a participant applies for accreditation for additional NIRHI capacity which is first commissioned within 12 months of the date of first commissioning of the original NIRHI installation, Ofgem will treat the additional and original NIRHI capacity as one installation. Therefore, the participant will also need to comply with eligibility criteria which will apply in respect of this combined installation (see section 'Additional capacity that takes the eligible installation above the biogas or solar thermal upper limit' below. For example, if the additional RHI capacity (which is added within 12 months) takes the combined installa tion

[0]

capacity above 1MWth, participants will need to provide an 'Independent Report on Metering Arrangements' as part of the accreditation application process. Please refer to the 'Independent Report on Metering Arrangements' Section in Chapter Seven of Volume One for further details on this report.

7.10 Participants must similarly ensure that the original NIRHI accredited installation still complies with all the appropriate eligibility requirements when a new plant (which is not 'additional NIRHI capacity') has been added to the same heating system. The most common eligibility requirements that will be affected by a new plant will be the metering arrangements. Further information about these can be found in Volume One, Chapter Seven, 'Metering eligibility requirements.'

How to inform us

7.11 Participants can let Ofgem know they have installed additional capacity or new plant online through their Ofgem NIRHI Register user account if they are applying for accreditation of this additional capacity or new plant, by email, or by post if they are simply notifying them of the amendments to the heating system.

Information that will need to be provided

If applying for NIRHI support on the additional capacity or plant

7.12 NIRHI participants wishing to receive support for additional NIRHI capacity or a new plant must apply to Ofgem for accreditation. Ofgem will assess the eligibility of the additional capacity or new plant before deciding if they can accredit it. They will also make additional checks to verify how it interacts with the original accredited NIRHI installation.

7.13 The criteria which Ofgem will apply in considering whether to accredit additional NIRHI capacity will depend on the date of first commissioning of the relevant additional capacity. Additional NIRHI capacity which is first commissioned within 12 months of the date of commissioning of the original plant will be treated by Ofgem as one installation i.e. as being combined with the original NIRHI accredited plant and must meet the eligibility criteria which are relevant to the combined installation (see this requirement also in relation to the original NIRHI installation in section 'What may change if you install additional capacity or plant' above). This does not apply to additional capacity first commissioned more than 12 months after the original plant was first commissioned which is treated as a separate installation for the purposes of determining eligibility criteria for accreditation, except in respect to:

- the tariff rate which will apply to this additional capacity (which will be based on the combined capacity of the new and original installations) and
- the capacity limits for biomass, solar and biogas installations across both the original and additional NIRHI installations.

7.14 These exceptions are explained in more detail later in this chapter.

7.15 A new plant on the same heating system which uses a different eligible energy source from the original accredited NIRHI installation is treated as a new installation for the purposes of determining the relevant eligibility criteria.

7.16 Ofgem will require the information outlined in Schedule 1 of the Regulations to be submitted as part of the application for accreditation of additional capacity (irrespective of when this was commissioned) of a new plant. They will also require an updated schematic diagram illustrating the metering arrangements and location of the original accredited NIRHI installation and the additional capacity or new plant.

7.17 The additional NIRHI capacity must be metered separately from the original accredited NIRHI installation. A new plant which is an eligible installation for which accreditation is sought must also be individually metered. For further information about metering requirements, see Volume One, Chapter Seven, 'Metering eligibility requirements'.

If not applying for NIRHI support on the additional capacity or plant

7.18 If the participant does not want to apply for NIRHI support on the additional capacity or new plant on the same heating system, they still must provide Ofgem with information explaining how the additional capacity or new plant interacts with the original accredited NIRHI installation and the relevant heating system so they can determine whether the original accredited NIRHI installation still meets the eligibility criteria.

7.19 Ofgem will require information on the technology type, capacity, and commissioning date of the additional capacity or new plant. In addition to this, participants will need to provide an updated schematic diagram showing any changes to metering arrangements, if applicable. Please see the 'Schematic diagram' section in Volume One, Chapter Seven.

7.20 In accordance with the Regulations, additional capacity for which accreditation is not sought still needs to be individually metered. An ineligible plant or a plant for which accreditation is not sought may need to be individually metered, depending on its position in the heating system of which the original NIRHI installation forms part. For further information on metering requirements see Volume One, Chapter Seven, 'Metering eligibility requirements'.

What happens next?

7.21 Ofgem will review the original accredited NIRHI installation's accreditation (as well as the additional capacity or new plant if applied for) in order to determine if the additional capacity or new plant has affected the original NIRHI installation's eligibility.

7.22 If Ofgem find that the additional capacity or new plant (for which the participant has applied for support) is not eligible for NIRHI support, the original accredited NIRHI installation will remain accredited as long as its eligibility is not affected by the additional capacity or new plant.

7.23 If Ofgem has reasonable grounds to suspect the original accredited NIRHI installation is no longer eligible following the installation of additional capacity or new plant on the same heating system, they may, temporarily withhold payments in order to investigate the issue

further (more information on temporary withholding of payments is available in Chapter Ten of this volume). For example, if a participant with an NIRHI accredited heat pump later installed a biomass boiler, and used a single hot water meter to measure the heat generated by both installations, the original accredited NIRHI installation (the heat pump in this case) would be ineligible. This is because the metering arrangements would no longer comply with NIRHI requirements (separate metering is required for installations using a different energy source). For further information about metering requirements, see Volume One, Chapter Seven, 'Metering eligibility requirements'.

Additional capacity that takes the eligible installation above the biogas, biomass or solar thermal upper capacity limit

7.24 Biogas and solar thermal installations of 200kWth and above and biomass installations of 1MWth and above, are not eligible for NIRHI support. Where additional NIRHI capacity which is first commissioned within 12 months of the date of first commissioning of the original NIRHI installation is added to an existing NIRHI accredited biogas, biomass or solar thermal installation, as long as the combined installation capacity remains below 200kWth, or in the case of a biomass installation, 1MWth, the additional capacity will be eligible to be accredited and the combined installation will continue to receive NIRHI support provided the installation meets all other eligibility requirements (see below).

7.25 For example, if a participant installs a 75kWth solar thermal collector on the same system as an NIRHI accredited 100kWth solar thermal installation, the second solar thermal installation (additional NIRHI capacity) would be eligible for NIRHI support, provided it met all other eligibility requirements. This is because the combined installation capacity for solar thermal on that system remains below 200kWth.

7.26 However, if a 150kWth biogas plant is accredited, and another 150kWth biogas plant is later connected to the same heating system, the additional NIRHI capacity would not be eligible for accreditation. This is because if it was accredited it would bring the combined installation capacity for the installation over the upper limit and accordingly, the entire installation capacity of the additional NIRHI capacity would be ineligible for NIRHI support. The first boiler will remain eligible for NIRHI support provided it continues to meet all requirements. The same scenario would apply if a 600kWth biomass boiler was accredited and another 600kWth biomass boiler was later connected to the same heating installation.

7.27 Where additional NIRHI capacity which is first commissioned more than 12 months after the date of first commissioning of the original NIRHI installation is added and the plant generates heat from biogas using a solar collector, this additional NIRHI capacity may only be accredited as a separate NIRHI installation where the installation capacity of the original NIRHI installation, combined with that of all other plants which use the same source of energy and technology and form part of the same heating system, is below the upper installation capacity limit[28]. Where an application for accreditation for additional NIRHI capacity would cause this limit to be breached, Ofgem will decline to accredit the additional NIRHI capacity (resulting in the entire installation capacity of the additional NIRHI capacity being ineligible for NIRHI support). This is because accrediting this additional NIRHI capacity would cause the original NIRHI installation to fall within the definition of 'excluded plants'

[28] Regulations, Part 2, Chapter 2, Regulation 15(1)(c)

and its accreditation would be subject to immediate revocation. On refusal to accredit the additional NIRHI capacity, the original NIRHI installation may continue to be accredited provided it continues to meet all requirements.

Determining the tariff for additional capacity first commissioned within 12 months of the previous installation

7.28 Where additional NIRHI capacity is first commissioned within 12 months of the first commissioning date of the original accredited NIRHI installation, the tariff for the new installation (i.e. original accredited NIRHI installation + additional NIRHI capacity) will be based on the combined installation capacity of the original accredited NIRHI installation and the additional NIRHI capacity.

7.29 The tariff for that installation capacity as at the date of accreditation of the original accredited NIRHI installation will apply to the whole installation, and the tariff will terminate on the tariff end date of the original accredited NIRHI installation.

Determining the tariff for additional capacity first commissioned 12 months or more after the previous installation

7.30 Where additional NIRHI capacity is first commissioned more than 12 months after the first commissioning date of the original accredited NIRHI installation, the original accredited NIRHI installation will continue to receive the same tariff and have the same lifetime as when it was accredited.

7.31 The tariff that is applicable for the additional NIRHI capacity will be determined on the basis of the combined capacity of the original accredited NIRHI installation and the additional capacity[29]. It will be based on the tariff that is applicable on the date of accreditation of the additional capacity. The tariff lifetime will apply from the date of accreditation of the additional capacity.

7.32 The table below illustrates the example above where additional capacity is first commissioned more than 12 months after the original accredited NIRHI installation was first commissioned.

Table 7: Illustrative example of support for additional capacity

	Year first commissioned	Capacity	Tariff	Lifetime
Biomass boiler 1	2012	400kWth	400kWth tariff in 2012	20 years from 2012
Biomass boiler 2	2014	400kWth	800kWth tariff in 2014	20 years from 2014

Additional plant: Tariff, lifetime and specific metering requirements

[29] Regulations, Part 5, Regulation 36(6)

Determining the tariff for a new eligible plant on the same heating system

7.33 Where a new plant which uses a different technology or source of energy is added to an original accredited NIRHI installation, (e.g. a biomass boiler is installed on the same heating system as an NIRHI accredited heat pump) and is accredited to the NIRHI, this plant is treated as a separate installation. The tariff and tariff lifetime are based on the new plant's capacity and first commissioning date only (i.e. the original accredited NIRHI installation capacity does not count towards capacity of the new plant).

7.34 The new plant must be separately metered from the original accredited NIRHI installation in order to determine the contribution of the respective renewable technologies to total heat generation on the system as they will each be treated as separate installations.

CHANGE OF OWNERSHIP OR RELOCATION OF AN RHI ACCREDITED INSTALLATION

Chapter Summary

This chapter explains how Ofgem will manage a change of ownership, or the relocation of all or part of an accredited NIRHI installation.

Change of ownership of an accredited RHI installation

8.1 The Regulations allow for the ownership of an installation, or part of an installation, to be transferred. This means that if you are the existing owner of an accredited NIRHI installation and wish to sell or transfer all or part of the installation, the new owner will be able to assume entitlement to payments under the NIRHI for the remainder of the installation's tariff lifetime provided the conditions below are satisfied.

8.2 Where an accredited installation is bought by or transferred to a new owner, the current scheme participant (outgoing owner) ceases to be entitled to payments for the installation from the date of transfer of ownership. The new owner may apply to receive NIRHI support for the remaining eligibility period of the installation. This is provided that all eligibility criteria are still being met and that we are satisfied that the new owner will comply with the ongoing obligations required under the scheme.

8.3 In order for a new owner to begin receiving payments for an installation which was accredited under previous ownership and ownership of all of which is now transferred, the following steps need to be completed:

- the prospective participant (new, incoming owner) will need to contact Ofgem and notify them of a change in ownership in order to become eligible to receive periodic payments as a participant. Once Ofgem is satisfied that the potential participant is the new owner, that they will comply with the ongoing obligations of the scheme, that they have supplied Ofgem with any information they require and that the installation continues to meet the eligibility criteria, Ofgem will update their register to reflect

that the new owner is now the scheme participant for that installation and;

- the current scheme participant (outgoing owner) needs to advise Ofgem in writing that ownership is being transferred to a new owner.

8.4 Ofgem must be notified by the outgoing owner of the change in ownership of an accredited installation within 28 days of the date of the change. If an outgoing owner fails to notify Ofgem of a change of ownership within 28 days, he will be in breach of his ongoing obligations and Ofgem may take enforcement action against him. However, as any such delay or failure by an outgoing owner may impact on the time taken for entitlement to payments to be transferred to a new owner, a prospective owner may wish to consider including an obligation on the outgoing owner to complete the required notification in any transfer documentation.

8.5 Payments for the original owner of an accredited installation will cease to be due to them as from the date of transfer of ownership. This is because eligibility for the NIRHI payments is based on ownership of the relevant installation. Payments for the new owner will only accrue from the date that Ofgem is satisfied of the completion by the new owner of the formalities required to demonstrate their entitlement and will not be back-dated to the date of transfer. For example, if the installation is sold in January 2015 but the new owner does not notify Ofgem and complete the formalities to receive payments until June 2015, then payments for the new participant will only begin to accrue from June for the remainder of the installation's tariff lifetime from its original accreditation date. It is therefore in the interests of the new owner of the installation to notify Ofgem of the transfer of ownership and to provide requested information and agree to the conditions of the scheme as soon as possible.

8.6 If you are the incoming owner of an installation then, whether or not the outgoing owner has notified Ofgem of a change of ownership, you should yourself contact them as soon as possible (but in any event within 12 months of the change in ownership date – see below) to notify them of the change. They may ask you to supply evidence of ownership (in addition to any other information which they may require under the Regulations in order to enter you into the Ofgem NIRHI register or to review the eligibility of your installation). This may delay your entitlement to payments.

8.7 A notification of a change of ownership of an installation must be made to Ofgem and the new owner entered in the NIRHI register as a participant within 12 months of the change of ownership occurring. After this period, if either of these things has not occurred, the installation will no longer be accredited and the incoming owner will not be entitled to any payments.[30] An application for the same installation to re-join the scheme at a later date would not be accepted.

Transfer of part of an installation

8.8 Where only part of an installation has been transferred to a second owner, the new part owner must notify Ofgem of the transfer occurring. They may require the new part owner to provide information upon notification such as evidence of part ownership. The original participant should advise Ofgem of this change of ownership within 28 days of the transfer occurring. This can be done online through your RHI account.

8.9 Please note that where only part of an installation's ownership has transferred, Ofgem will require that the original accredited owner act as the 'representative owner' for all owners of that installation and will therefore continue to be regarded as the participant for that installation for the purposes of the NIRHI[30]. For further information regarding representative owners, please refer to Volume One Chapter Four.

8.10 The representative owner is required to ensure compliance with all ongoing obligations of the scheme. Where there is a change of ownership of part of an installation, we may require that the representative owner provides Ofgem with evidence that they have authority from all other owners to be the participant for the purposes of the scheme.

8.11 Ofgem may extend the period within which they need to be notified of a change of ownership by a new owner of all or part of an accredited installation if they consider there are exceptional circumstances which are relevant.[32]

8.12 Any attempts to continue to receive payments for an accredited installation while no longer in ownership of the installation could constitute fraud and will be dealt with accordingly. Please see Chapter Ten for further information on our approach to fraud.

Relocation of an accredited installation

8.13 If you would like to relocate your accredited RHI installation, you must notify Ofgem within 28 days of the installation being disconnected. You will be required to submit a photograph of the closing meter reading(s) for all RHI relevant meters. Once you have relocated your installation you will need to apply for accreditation via the RHI register. We will then assess if the installation's eligibility criteria are still being met at the new location. Ofgem will cease RHI payments from the date the RHI installation is relocated. Payments will only recommence once notification has been received and it has been determined that the RHI installation should continue to be accredited. On receipt of the notification we may require further information. We will review the information and accreditation to determine whether the RHI installation continues to meet the eligibility criteria at the new location and can continue to be accredited.

8.14 When relocated, if we determine that the RHI installation should continue to be accredited you will receive payments for the remainder of the 20 year tariff lifetime from the original accreditation date.

Tariff lifetime in the circumstance of a change in ownership or relocation of an accredited installation

8.15 Please note that where an accredited installation is sold or transferred to a new owner, the new owner can only receive payments for the remaining period of the original tariff lifetime. For example, if an installation is sold 5 years and 4 months after being

[30] Regulations, Part 3, Regulation 24(8) [32] Regulations, Part 3, Regulation 24(6)

accredited to the RHI, then the new owner will be eligible to receive payments for the remaining 14 years and 8 months of the tariff lifetime.

8.16 If an installation is relocated during its tariff lifetime, the owner must notify us of the change in location and provide any other information we require to assess if the installation remains eligible. We will then review that information and if we decide that the installation continues to meet the eligibility criteria, RHI payments will continue for the remaining period of the original tariff lifetime.

ONGOING SCHEME OBLIGATIONS FOR BIOMETHANE PRODUCERS

Chapter summary

This chapter outlines the ongoing obligations for registered biomethane producers.

Ongoing biomethane obligations

9.1 Participants that are biomethane producers are subject to many of the same ongoing obligations as owners of biomass and biogas plants and should therefore pay careful note to other sections of this volume (for example, fuelling requirements and sustainability reporting). This chapter is designed to cover additional ongoing obligations relating only to biomethane producers.

Propane

9.2 Biomethane may require the addition of propane to bring it to the required quality (calorific value) to inject on to the gas network. The energy content of the propane used within each quarterly period (based on the GCV and volume) must be measured and submitted as part of periodic data. Ofgem will then take this into account in the payment calculation.

9.3 Depending on the specifics of your application for registration, Ofgem may require more frequent collection of propane and other data (e.g. monthly). This more frequent verification is to help them ensure the accurate provision of data. As discussed in Chapter Four, 'Ongoing fuel eligibility requirements', they will also require the submission of an FMS Questionnaire, which includes setting out how the participant intends to measure the propane which has been added to the biomethane.

9.4 Ofgem will consider proposals from biomethane producers to use a reference GCV figure of

propane based on existing data (e.g. from the supplier of the propane), rather than the producer having to measure the GCV every quarter. They would expect this GCV to be verified by comparison to initial samples or analysis of the actual propane used at the plant.

Use of contaminated feedstocks

9.5 The energy content of any contamination in the biomass feedstocks used to produce the gas (where the gas is produced from gasification or pyrolysis) is also deducted. Ofgem will agree how this is to be measured as part of the FMS procedures outlined in Chapter Four.

Heat use for biogas production

9.6 As with accredited biogas installations, any heat used (e.g. from another renewable source, or from fossil fuel) to produce the biogas which is subsequently converted to biomethane must be measured and submitted to Ofgem each quarter, so that they can take account of it in the periodic support calculation. Heat from the combustion of biogas, or waste heat from a biogas engine, is not included in this because this gas has clearly not been transferred onto the grid and received NIRHI. Heat meters must meet the requirements outlined in Volume One, Chapter Seven, 'Metering eligibility requirements'.

COMPLIANCE AND ENFORCEMENT POWERS

10

Chapter summary

This chapter outlines DETI's and Ofgem's approach to ensuring compliance with conditions of the NIRHI scheme, including their enforcement powers and procedural approach to non-compliance.

Compliance with the scheme and enforcement

10.1 The Regulations set out the eligibility criteria and ongoing obligations that must be complied with in order to receive NIRHI payments.

10.2 We (DETI) have provided resources to assist participants in complying with their obligations under the scheme. These include the publication of this Guidance, as well as the hosting of a series of stakeholder engagement activities. Ofgem will provide the NIRHI helpdesk facility, which will deal with queries relating to eligibility requirements, payments and Ofgem's administration of the scheme.

10.3 As administrator of the NIRHI scheme on behalf of DETI, Ofgem has put in place an application process, together with a system of internal checks and review procedures, which aims to ensure that only installations and producers of biomethane that meet the eligibility criteria are accredited or registered, and that these participants receive the correct levels of support as set out in the Regulations. Ofgem has a responsibility to ensure compliance with the rules of the Northern Ireland Renewable Heat Incentive Scheme. A detailed Fraud Prevention Strategy will be developed which includes ongoing liaison with other NI Executive departments, including crime prevention agencies.

10.4 Where Ofgem suspect that participants may be failing to comply with ongoing obligations, they will take steps to determine the facts. In the first instance, they will generally contact a participant to request further information, clarification or relevant evidence. This should be sufficient, in the majority of cases, to establish whether a participant is in compliance. However, if Ofgem is not satisfied with the outcomes of their initial enquiries, they may

undertake a site inspection (see Chapter Eleven) or, if they have reasonable grounds to suspect that a participant has failed or is failing to comply with his ongoing obligations under the scheme, instigate a formal investigation.

10.5 Once Ofgem is satisfied that they are in possession of the relevant facts of a case, they will decide what further action, if any, may be appropriate to deal with the matter. Ofgem's approach may include confirming that a participant is in compliance, contacting the participant informally to advise them of any non-compliance and advising them of what they should do to rectify the situation, or exercising one or more of the range of enforcement actions that are available to them under the Regulations. In circumstances where Ofgem is satisfied that a participant has received a payment which exceeds the amount that the participant is entitled to, or that the participant is in failing to comply with its ongoing obligations, and the participant does not repay the overpayment and Ofgem does not offset the overpayment against future payments made to the participant, we (DETI) may seek to recover such overpayment as a civil debt.

10.6 In deciding whether to take enforcement action, Ofgem will take into consideration all the circumstances surrounding the non-compliance, which may include, for example,

- Seriousness of the non-compliance and the duration
- Whether the participant voluntarily reported the non-compliance
- Reasons why the non-compliance occurred and any mitigating circumstances
- Whether there is a history of non-compliance by the participant
- Whether the participant has gained financially through the non-compliance
- The conduct of the participant after the non-compliance has been discovered

10.7 The range of enforcement actions that Ofgem may exercise under the Regulations and examples of how these might be applied, are described in the rest of this chapter.

Temporarily withhold periodic support payments to investigate alleged non-compliance[31]

10.8 If Ofgem has reasonable grounds to suspect that a participant has failed or is failing to comply with his ongoing obligations under the scheme, and they have been unable to resolve the matter through informal enquiries, they may conduct an investigation to ascertain the full facts of a case. In this case, Ofgem has the power to temporarily withhold all or part of a participant's periodic support payments until such time as the investigation is concluded (up to a maximum of six months from the date that such payments were withheld).

[31] Regulations, Part 7, Regulation 44

10.9 Where Ofgem has applied this sanction, payments will continue to accrue but will not be paid to the participant whilst Ofgem is still investigating (subject to 10.15 below).

10.10 Examples of when Ofgem may decide to withhold payments while an investigation continues may include (but are not limited to): instances where Ofgem has reason to consider that information provided in an application for accreditation or registration was incorrect or where the participant may no longer own the relevant installation but has not informed Ofgem within 28 days.

10.11 If Ofgem do temporarily withhold periodic support payments, they will notify participants within 21 days of making that decision and will let the participant know:

- the reason they suspect the participant is failing or has failed to comply with its ongoing obligations
- the reason why they, are temporarily withholding payments
- the date from which payments will be withheld
- the next steps in the investigation process
- details of the participant's right to request a review of Ofgem's decision including any relevant time limits.

10.12 Ofgem will provide to the participant, at 30-day intervals, an update on the progress of the investigation including whether or not they will continue to temporarily withhold their payments.

10.13 Ofgem will aim to conduct investigations in a timely manner and will not temporarily withhold a participant's periodic support payments for longer than six months. However, if a participant takes longer than two weeks to provide information that they request during their investigation starting from the date on which they requested it, the period of such delay will not count towards the six-month time limit.

10.14 Upon conclusion of an investigation, or after six months, whichever is the earlier; Ofgem will notify the participant of the outcome of the investigation or, if the investigation is not concluded, inform the participant accordingly.

10.15 Where an investigation has been concluded within six months and Ofgem is satisfied that the participant was in (or has resumed) compliance with its ongoing obligations, they will, within 28 days of sending such notification, pay those periodic support payments which have been temporarily withheld, less any proportion of such payments which they decide to permanently withhold or reduce to the extent that this is attributable to the participant's material or repeated failure to comply with ongoing obligations[32].

[36] Regulations, Part 7, Regulation 44

10.16 Where an investigation has not been concluded within six months, Ofgem will notify the participant that such investigation is continuing. Within 28 days of sending such notification, they will pay to a participant those periodic support payments which have been temporarily withheld, less any portion of such payments which Ofgem has decided to permanently withhold (where they are satisfied of the participant's material or repeated failure to comply with an ongoing obligation). The participant will continue to receive periodic support payments in accordance with the participant's existing payment schedule until such time as the investigation is concluded (less any portion of such payments which they have decided to permanently reduce (where they are satisfied of the participant's material or repeated failure to comply with an ongoing obligation). If, on the subsequent conclusion of the investigation, they consider that the participant was in (or has resumed) compliance with its ongoing obligations under the scheme, the matter will be closed.

10.17 However, where Ofgem is satisfied that the participant is either failing to comply with an ongoing obligation or there has been a material or repeated failure by the participant to comply with its ongoing obligations, they may take further enforcement action against him. Payments previously made to the participant which relate to periods during which the participant was not in compliance with his ongoing obligations may be recovered. Such recovery may be by offsetting the amounts against any future periodic support payments or by requiring repayment of the sum due from the participant (see section 'Recouping overpaid periodic support payments' below).

10.18 Where an investigation has concluded and Ofgem is satisfied that the participant is either failing to comply with an ongoing obligation or there has been a material or repeated failure to comply with ongoing obligations, Ofgem may then take further enforcement action (see following sections).

Suspend periodic support payments

10.19 Where Ofgem is satisfied that a participant is failing to comply with an ongoing obligation under the scheme, they may suspend that participant's payments. This means that Ofgem will stop making payments to the participant.

10.20 This sanction will generally be imposed where the participant, whilst currently failing to comply with an ongoing obligation, is capable of rectifying this non-compliance. Examples of this could include (but are not limited to), temporary use of heat for ineligible purposes, breaches of fuel eligibility requirements, a failure to submit periodic data within the specified timeframe or failure to provide requested information, including the annual declaration. Ofgem may also suspend payments if a participant notifies them, that they will be unable to comply with the scheme rules for a particular period (e.g. due to a temporary inability to source eligible fuel etc), but still wish to remain as a participant in the scheme.

10.21 When Ofgem suspend payments they will, within 21 days of that decision, send the participant a notice specifying:

- how the participant is failing to comply with the rules of the scheme
- the reason why the payments are being suspended

- the date from which the suspension is effective

- the steps the participant must take to satisfy Ofgem that they are now complying with the rules of the scheme in order for Ofgem to lift the suspension

- what might happen if the participant fails to satisfy Ofgem that they are now complying with the scheme (which may include imposing one or more of the sanctions referred to in this chapter).

- Details of the participant's right to request a review of Ofgem's decision including any relevant time limits.

10.22 Where Ofgem determine that they are satisfied that the participant is complying with his ongoing obligations under the scheme, they will, within 21 days of making this determination, remove the suspension and take the necessary steps needed to enable the payment of periodic support payments (but only those falling due after the date of Ofgem's determination) to be paid to the participant.

10.23 A participant is not entitled to recover payments which have been suspended during a period of non-compliance.

10.24 However, where a participant has rectified any non-compliance within six months of a suspension being imposed by Ofgem, Ofgem may exercise discretion in paying all or part of the payments that have been withheld due to the suspension. When deciding how they exercise this discretion they will take account of all the circumstances of the case, including the impact of the non-compliance, if any, on the generation of eligible heat. For example, they may consider that non-compliance relating to delays in submitting information or the annual declaration, whilst constituting non-compliance with ongoing obligations, may not have compromised the generation of heat which would otherwise have been eligible for support.

10.25 Where Ofgem do use their discretion to make a payment which they had previously suspended, they will make the payments to the participant within 28 days of their being satisfied that the participant has resumed compliance with ongoing obligations. It should be noted that if non-compliance continues for a period of six months or more from the date of suspension, Ofgem no longer have discretion to repay any part of the payments which have been suspended.

10.26 Ofgem can suspend payments for up to one year. If at the end of this period, a participant has been unable to resume compliance with ongoing obligations, it is possible this may constitute a material or repeated failure by the participant to comply with an ongoing obligation. Ofgem may therefore take further enforcement action on this basis – which could include permanently withholding or reducing periodic support payments, or revoking accreditation or registration as set out below.

Permanently withhold or reduce periodic support payments[33]

[33] Regulations, Part 7, Regulation 45

10.27 Where Ofgem is satisfied that there has been a material or repeated failure by a participant to comply with an ongoing obligation during any quarterly period, they may:

- permanently withhold such proportion of its periodic support payments for that quarterly period as corresponds with the portion of the quarterly period during which the non-compliance occurred or

- reduce by up to ten per cent either the periodic support payment for the quarterly period during which the breach occurred, or the periodic support payment for the following quarterly period.

10.28 This would mean that the participant could receive either no periodic support payment or a reduced periodic support payment for the quarterly period during which it failed to comply, or the participant could have its next quarterly periodic support payment reduced.

10.29 If the decision is made to reduce a periodic support payment, the level of reduction will be determined (based on the factors mentioned at paragraph 10.6 above and any other relevant information), up to a maximum of ten per cent of the payment in question.

10.30 Within 21 days of the decision to permanently withhold or reduce periodic support payments, Ofgem will send a notice to the participant. The notice will specify:

- how the participant has failed to comply with the rules of the scheme

- the reason why the periodic support payment is being withheld or reduced

- the period that the reduction or withholding of payments relates to

- the level of any reduction

- details of the participant's right of review of Ofgem's decision.

Revocation of accreditation or registration[34]

10.31 Where Ofgem is satisfied that there has been a material or repeated failure by a participant to comply with an ongoing obligation, they have the power to revoke the accreditation of an installation in respect of which the participant's failure has occurred, or to revoke the participant's registration as a producer of biomethane. They also have the power to revoke accreditation for any other accredited NIRHI installations owned by the participant.

10.32 On revocation of accreditation, an installation ceases to be eligible for any further payments under the scheme.

[34] Regulations, Part 7, Regulation 46 [39] Regulations, Part 7, Regulation 47

10.33 Examples of cases that might warrant revocation may include (but are not limited to): providing false or materially inaccurate information in order to obtain accreditation or registration, repeated or material errors in periodic data or annual declarations, repeated or material failure to maintain equipment according to manufacturer's instructions or generating heat for the predominant purpose of increasing payments. Any decision made on whether to revoke accreditation or registration will take into account information which Ofgem consider to be relevant, including the factors mentioned at paragraph 10.6 above.

10.34 Within 21 days of making a decision to revoke accreditation or registration, Ofgem will send a notice to the participant. The notice will inform the participant of:

- the reason for the withdrawal of accreditation or registration, including the aspect in respect of which the non-compliance occurred
- an explanation of the effect of the withdrawal (i.e. that they will be removed from the scheme and will not be eligible for future payments at any time, either in respect of the one affected installation, all installations owned by the participant or in relation to production of biomethane by the participant as applicable)
- details of the participant's right to request a review of Ofgem's decision.

10.35 In addition, where Ofgem has revoked accreditation or registration from a participant, they may also refuse in the future to accredit any installations owned by that former participant or to register that former participant as a producer of biomethane. Furthermore, where they suspect that a participant has deliberately falsified information provided to Ofgem in order to defraud the scheme we will refer those cases to the relevant authorities for further action.

Recouping overpaid periodic support payments[39]

10.36 Where Ofgem is satisfied that a participant has received a payment which exceeds their entitlement, or has received a payment whilst failing to comply with an ongoing obligation, they will normally seek to recoup the overpaid amount by offsetting it against future periodic support payments.

10.37 There may, however, be instances (for example, where a participant is no longer in the scheme, where the amount to be repaid exceeds any future entitlement to quarterly payments or where the overpayment is significant) where Ofgem may request that a participant to repay the overpaid amount directly. As the Regulations place an ongoing obligation on participants to repay any overpayment of which they are notified, Ofgem may take enforcement action in cases where a participant who remains in the scheme fails to comply with a notice to repay. Where appropriate, we may also take action to recover the overpayment from a participant or a former participant as a civil debt owed to us.

10.38 Within 21 days of the decision either to request repayment or to offset an overpayment against future payments, Ofgem will send a notice to the participant. The notice will specify:

- the periodic support payments that has been overpaid and the amount to be recovered

- the method of recovery (either repayment or offsetting)

- the period within which the overpaid amount must be repaid (where applicable)

- the consequences of failing to make any repayments requested (including potential enforcement action or civil action for debt recovery)

- details of the participant's right to request a review of the decision to request repayment or to offset the overpayment

10.39 Ofgem will usually seek to recover an overpayment either by offsetting it against the full amount of the participant's next payment and all subsequent payments until such time as the amount has been repaid, or by requesting payment in full within 28 days of the issue of a notice to repay. However, if an overpayment to a participant has resulted from an error by Ofgem, they will seek to agree with the participant an appropriate schedule for repayment of the sum due, which may include the ability to repay the amount by instalment or through offsetting of the amount against future payments over a more extended period. Where a participant considers that repayment of a previous overpayment is likely to result in significant hardship, he should contact Ofgem to discuss the position as soon as possible after receiving a notice to repay.

Revocation of sanctions[35]

10.40 Ofgem may revoke a sanction which they have previously imposed on a participant. They may do so where there was an error involved when the sanction was originally imposed, or where it is otherwise just and equitable to do so.

10.41 Ofgem may also revoke a sanction as a result of a current or former participant's successful request for review.

10.42 Within 21 days of the decision to revoke a sanction, Ofgem will send a notice to the participant. The notice will specify:

- the sanction which has been revoked,

- the reason for the revocation

- how they will deal with any loss of periodic support payments incurred by the participant due to the sanction (e.g. where they had suspended, withheld or reduced payments), including timescales for doing so

- details of whom the participant may speak to if not satisfied with how Ofgem propose

[35] Regulations, Part 8, Regulation 48

to deal with any loss of payment.

Evidence of criminal activity

10.43 Irrespective of any action Ofgem may take in relation to non-compliance by a participant, there may be instances where they uncover evidence of possible criminal conduct (for example, fraud). In such cases, based on the nature of the information they hold, we (DETI) may refer the case to the relevant authorities for investigation.

INSPECTION AND AUDIT POWERS

11

Chapter summary

This chapter outlines Ofgem's approach to audit and inspection of installations for which accreditation has been applied for, or granted, under the NIRHI scheme. It also includes guidance on how their audit approach will be applied to facilities operated by producers of biomethane who are applying for, or who have been granted, NIRHI registration.

Audits and inspections

11.1 Ofgem (or agents authorised on their behalf), will carry out a programme of audits of accredited NIRHI installations and biomethane facilities on an ongoing basis. They may also inspect installations during the accreditation application process in order to verify that an installation should be accredited. The primary purpose of these audits is to encourage compliance with the Regulations by identifying instances where participants are failing to meet their ongoing obligations. Audits also help to safeguard the scheme against fraud.

11.2 Audits may be conducted as site inspections or desk based reviews.

Audit of accredited NIRHI installations

11.3 Ofgem's audit programme will cover installations selected on the basis of:

- random sampling across all installations;
- risk-based factors determined by them which may include, for example, the magnitude of payments claimed, the complexity and technology type of the installation and results of any previous audits; and
- specific concerns which may have arisen e.g. as a result of data submitted,

concerns raised by Ofgem staff or following a report made by a third party.

11.4 During a site inspection, the inspector will gather information that will enable Ofgem to check that information provided by a participant during accreditation was accurate and that the installation has been correctly accredited. This will include evidence to enable Ofgem to assess compliance with a participant's ongoing obligations. The inspector will also verify that periodic data provided to Ofgem is accurate so that Ofgem is able to ensure that the right amounts of payments have been and are being made to the participant. As part of the inspection, the inspector may take samples for analysis away from the premises and may also (if appropriate) take photographs, measurements, video or audio recordings.

11.5 For desk-based reviews, Ofgem may ask participants to send in particular documentation for verification. Participants will be required to respond within the timescales specified in the request.

11.6 Participants must keep appropriate records to enable an inspector to verify all of the periodic data which the participant has provided to Ofgem. Participants should also keep all documentation supporting their application for accreditation as this may also be verified during an inspection visit or desk-based review.

Audits for biomethane producers

11.7 Biomethane producers must keep all documentation related to the production and injection of biomethane as may be requested to be sent in for scrutiny as part of Ofgem's desk-based reviews.

11.8 In addition, in order to encourage compliance with the scheme, Ofgem may periodically require biomethane producers to provide an independent, third party verification of their biomethane production, to confirm that the information provided to Ofgem is correct and that the biomethane has come from renewable sources.

Provision of access for site inspections

11.9 Before an installation is accredited, Ofgem has the right to conduct a site inspection in order to satisfy itself that an installation should be accredited[36]. Once an installation is accredited, participants owning accredited NIRHI installations have an ongoing obligation to provide reasonable access to Ofgem or Ofgem's authorised agent for the purposes of inspection[37]. In addition, in instances where the eligible heat use occurs on third party premises not owned or controlled by the participant, the participant will be required, as a condition of accreditation, to ensure access (by contractual or other means) for Ofgem (or their authorised agents) to any relevant premises where the installation is located in order to inspect the heating installation, and also to any non-domestic premises that form part of the heat distribution system served by the installation for the purpose of verifying eligible heat use. Ofgem may also require you to provide confirmation that domestic premises receiving heat from the heat distribution system are indeed domestic and do not have ineligible uses.

[36] Regulations, Part 3, Regulation 22(4).
[37] Regulations, Part 4, Chapter 3, Regulation 33(i).

11.10 Ofgem will conduct inspection visits at a reasonable hour (this will generally be between 9am – 5pm Monday – Friday). In order to simplify access and ensure availability of key personnel and data, they will normally give prior notice of site inspections. However, there may be occasions when they feel it is appropriate to conduct unannounced site inspections and they reserve the right to do so.

11.11 Where a participant unreasonably refuses an inspector access to an installation, this may constitute a breach of the participant's ongoing obligations. As a result, Ofgem may take the decision to either launch a formal investigation (which may involve temporary withholding of a participant's payments), or to take other enforcement action (See Chapter Ten, 'Compliance and enforcement powers'). It should be noted that where they are assessing the appropriateness of any enforcement action, cooperation during inspections and any related investigations is one of the factors which they may take into account.

11.12 If a participant unreasonably refuses access to Ofgem's inspector, Ofgem will send the participant a notice to this effect within 21 days. The notice will inform the participant of the reason why they consider the refusal to be unreasonable and the consequences of this (including potential sanctions). Ofgem will also inform the participant of their right to request a review of the decision.

Outcome of the audit process

11.13 Following an audit, Ofgem will write to the participant concerned to outline any issues identified by the audit and to detail the actions required of the participant to rectify the situation. The participant is then expected to address these issues and report to Ofgem. Depending on the nature of the issues identified and the response of the participant, Ofgem may take the decision to either launch a formal investigation (which may involve a temporary withholding of a participant's payments) or to take other enforcement action (See Chapter Ten, 'Compliance and enforcement powers').

DISPUTE RESOLUTION

12

Chapter summary

This chapter provides guidance on how to request a review of decisions made by Ofgem in their exercise of the functions under the Regulations, or how to raise a complaint because you are unhappy with the way in which Ofgem has treated you, or how they operate.

General RHI queries and complaints

12.1 General queries relating to Ofgem's performance, on our (DETI's) behalf, of the functions under the Regulations should be referred to the Ofgem NIRHI operations team in writing or by telephone following the process detailed in section 'Queries' in Chapter One of Volume One of the Guidance.

12.2 If you are unhappy with the way you have been dealt with, how Ofgem has performed, or how they operate or are unhappy with the way in which Ofgem has reached a decision, you may lodge a complaint with Ofgem using its general complaints handling process. If, following consideration of your complaint by Ofgem, you remain dissatisfied you should refer the matter to DETI.

12.3 Complaints about MCS installation companies should be made to the installation company, relevant MCS certification body or the DETI Consumer Affairs Branch as appropriate. REAL Assurance's complaints process may also be referred to.[38]

Internal reviews of decisions

12.4 Any prospective, current or former participant who is unhappy about a decision regarding their participation in the scheme, which Ofgem has made in exercising the functions under

[38] 3 http://www.realassurance.org.uk/monitoring/complaints

the Regulations (affected person), may ask Ofgem to review the decision.

12.5 Requests for a review of a decision should be sent to Ofgem in writing by the affected person. The NIRHI internal review process has two stages. The first, the formal review process is carried out by Ofgem described further in the section 'Formal review of decisions' below. The second stage, carried out by DETI, is the statutory review process detailed in the section 'Statutory review of decisions' below.

12.6 The purpose of having a formal review is to enable the officer(s) who would usually advise on matters relating to the original decision to reconsider all relevant information, facts and representations (made available to Ofgem in the exercise of the functions conferred on them) regarding the decision. This means that, where issues relating to a prior decision can be addressed to the satisfaction of both Ofgem and the affected person, they are likely to be resolved at this formal review stage by the NIRHI operations team.

12.7 In the normal course of events, Ofgem would encourage affected persons first to request a formal review (during which affected persons are able to provide further information or make representations in support of their requests), and they hope for the majority of issues to be resolved in this way. In cases where the affected person has no further information to submit or they are dissatisfied with a formal review decision, they may choose to proceed to statutory review with DETI for a final review and decision. In making this decision, affected persons should note the restrictions regarding the use of the statutory review process (detailed in the 'Statutory review of decisions' section below).

12.8 The NIRHI internal review processes are paper based processes which do not provide for oral representations of any kind.

Formal review of decisions

12.9 Requests for a formal review of a decision should be made in writing, clearly marked as an NIRHI FORMAL REVIEW, to:

Ofgem Complaints
Ofgem E-serve
Ofgem
9 Millbank London
SW1P 3GE

12.10 The affected person should specify who they are, the decision they wish to be reviewed and the grounds upon which they are requesting a review. They should also include additional information to help Ofgem deal with the review such as their unique NIRHI reference number, relevant supporting documents/information and a chronology of important dates.

12.11 Ofgem Complaints (which is separate to the NIRHI operations team) will, within two working days of their receipt of the request for review, allocate a unique reference number (review reference number) to the request, reply to the affected person confirming receipt of their request for review and provide an indication of when the affected person can expect to receive a response. They will pass the request for review to the NIRHI operations team for formal review.

12.12 Once received within the NIRHI operations team, all requests for review will be passed to an officer, who is of equal or greater seniority to the person who made the original decision, for review (formal review officer or FRO).

12.13 The FRO may request that the affected person provides further information relevant to the review. Where, in order to discharge their functions under the Regulations, they require further information regarding the review of a decision, the affected person must provide this information if it is in their possession[44]. Where they request any additional information to assist them in reaching a decision regarding a review, affected persons are encouraged to submit such information.

12.14 The FRO will aim to reach a decision within 20 working days of being allocated the review. If it is not possible to do so, Ofgem will write to the affected person within 20 working days to give an update on progress including when they will next be in contact regarding the review.

12.15 Taking into consideration the representations and information provided to them by the affected person and any other decision we have made in exercising our functions under the Regulations which he considers relevant to the review, the FRO will aim to reach what he considers to be the most appropriate decision in the circumstances.

12.16 If the affected person is not happy with a decision made by the FRO and wishes to provide further evidence, information or representations in support of the request for review, the FRO will reconsider his decision based on such additional information. Additional information should be sent to Ofgem Complaints clearly quoting the unique reference number.

12.17 Ofgem Complaints will, within 2 working days of receipt of the additional information, reply to the affected person confirming receipt of such additional information and provide an indication of when the affected person can expect to receive a response.

Statutory review of decisions

12.18 The Regulations entitle an affected person to request a review of a decision made in exercise of the functions under the Regulations [39]. However, to be entitled to this review, an affected person must ensure that Ofgem receive the request for review within 28 days of the date that the affected person receives notification of the original decision or formal review decision that they wish to be reviewed.

12.19 A statutory review may be requested either in relation to an original decision made by a member of the NIRHI operational team, a decision of an FRO, or a decision by DETI to recover overpayments as a civil debt. However, before requesting a statutory review, the affected person should consider the following:

- Where Ofgem consider that an affected person is submitting fresh information or representations with a request for statutory review, they may treat the request for statutory review as a request for formal review. Therefore an affected person

[39] Regulations, Part 4, Chapter 3, Regulation 35. [45] Regulations, Part 10, Regulation 50.

should instigate a statutory review only where they consider that they have already made available to either the original decision maker or the FRO all potentially relevant evidence, information and representations for their consideration

- it may take longer to reach a decision when going through the statutory review process

- The decision of DETI's statutory review officer (SRO) is final and will not be subject to internal review (see paragraph 12.22 below).

12.20 An affected person may request a statutory review by writing to Ofgem Complaints, at the address above, clearly marked as an NIRHI STATUTORY REVIEW. The affected person should specify who they are, the decision they wish DETI to review and the grounds upon which they are requesting a review. They should also include their unique NIRHI reference number and any review reference number, where applicable. The request must be signed by or on behalf of the affected person. Where fresh information or representations have been submitted with this request (see paragraph 12.19 above), Ofgem will notify the affected person that the request will be treated as a request for formal review and will be subject to review by a FRO. If, after the FRO has completed the formal review, the affected person remains unhappy with the formal review decision they may then request a statutory review.

12.21 A letter of acknowledgement will be sent to the affected person within 2 working days of receipt by Ofgem of the request for statutory review.

12.22 The decision will be reviewed by DETI's SRO. The SRO will not have been involved in the events leading to the decision. The statutory review will be based on all the evidence, information and representations submitted by the affected person to the original decision maker or Ofgem's FRO. In addition, Ofgem may request on DETI's behalf such information and declarations relating to information within the affected person's possession as DETI require to determine the review.

12.23 DETI's SRO will aim to reach a decision within 30 working days. If it is not possible to do so in that time, the SRO should provide the affected person with an update within this time. The update will give a timescale (normally 20 working days) for when DETI will next be in contact regarding the request for review. Within 21 days of DETI's SRO reaching their decision, they will write to the affected person (and any other person whom we believe to be affected by the decision), to inform them of the statutory review decision with reasons.

12.24 In relation to statutory reviews which DETI undertake, the SRO can make the following four decisions:

- revoke or vary the decision

- confirm the decision

- vary any sanction or condition that had been imposed, or

- replace any sanction or condition that had been imposed with one or more alternative sanctions or decisions.

12.25 Affected persons should note that the statutory review marks the final stage of the internal review process. Should the affected person be dissatisfied with the SRO's response, they may take their complaint to the Northern Ireland Ombudsman who carries out independent investigations into complaints about public bodies. Details of how to make a complaint to the Northern Ireland Ombudsman can be found on their website at www.ni-ombudsman.org.uk.

Costs

12.26 All affected persons should note that they will be responsible for meeting their own costs in respect of requesting a review from Ofgem, DETI or taking a case to the Northern Ireland Ombudsman.

APPENDICES

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APPENDIX 1: INITIAL TABLE OF NIRHI TARIFFS

Tariff name	Sources of energy or Technology	Installation Capacity	Tariff (pence per kWh)
Small Biomass	Solid biomass including solid biomass contained in municipal solid waste and CHP	Less than 20kWth	6.2
Medium Biomass		20kWth and above up to but not including 100kWth	5.9
Large Biomass		100kWth and above up to but not including 1000kWth	1.5
Small Heat Pumps	Ground source heat pump, water source heat pump, deep geothermal	Less than 20kWth	8.4
Medium Heat Pumps		20kWth and above up to but not including 100kWth	4.3
Large Heat Pumps		100kWth and above	1.3
All Solar Collectors	Solar Collectors	Less than 200kWth	8.5
Biomethane and biogas combustion	Biomethane injection and biogas combustion	All biomethane injection and biogas combustion below 200kWth	3.0

Table 1: This table of tariffs applies to the period from the commencement of the scheme to 31 March 2013. DETI will subsequently make available updated tariff tables each financial year on their website.

Tariff name	Sources of energy or Technology	Installation Capacity	Tariff (pence per kWh)
Small Biomass	Solid biomass including solid biomass contained in municipal solid waste	Less than 20kWth	Tier 1: 6.7 Tier 2: 1.5
Medium Biomass		20kWth and above up to but not including 200kWth	Tier 1:6.4 Tier 2: 1.5
Large Biomass		200kWth and above up to but not including 1000kWth	1.5
Combined Heat and Power	Biomass combined heat and power	New systems all sizes	3.5
		Conversion from fossil fuels all sizes	1.7
Small Heat Pumps		Less than 20kWth	9.0

Medium Heat Pumps	Ground source heat pump, water source heat pump, deep geothermal	20kWth and above up to but not including 100kWth	4.6
Large Heat Pumps		100kWth and above	1.3
All Solar Collectors	Solar Collectors	Less than 200kWth	9.1
Biomethane and biogas combustion	Biomethane injection and biogas combustion	All biomethane injection and biogas combustion below 200kWth	3.3

Table 2: This table of tariffs was introduced as part of the 18 November 2015 regulatory amendments. Please see the DETI website[40] for the most up to date tariff table.

[40] http://www.nidirect.gov.uk/rhi

APPENDIX 2: FMS: MEASURING SOLID BIOMASS

Weight Measurement

2.1. The information contained in this appendix is designed to provide participants with an indication, rather than a prescriptive guide, to the ways in which they may opt to compile a robust fuel measurement and sampling regime. This relates to the use of solid fuels and covers: methods and standards for weight, volume and energy content measurement, contamination identification and prevention, and appropriate fuel storage conditions.

Table 2.1: Weight measurement using a weighbridge

Question	Answer
When is the weight measurement taken?	At installation on delivery
How is the weight measurement taken?	By totalising weighbridge deliveries
How often is the weight measurement taken?	Every delivery
How is any fuel carried over from one quarter to the next accounted for?	Stocks run down at quarter end
Are any industry standards met?	The British Standard BS EN 30012-1 for weighbridge calibration. This presents in detail methods of calibration for static weighing devices and for determining periodic confirmation intervals. This is reviewed with further details in the following code of practice: Code of Practice for the Calibration of Industrial Process Weighing Systems, Institute of Measurement and Control, October 2003.
How is accuracy ensured?	Weighbridges will normally achieve an accuracy of +/- 0.5% of the load. Participants of public weighing equipment have responsibilities to ensure that they can perform their duties competently and honestly. No one may operate public weighing equipment unless they hold a certificate from a Chief Trading Standards Officer. Although the weighbridge at a heat installation is unlikely to be a public weighing facility, good practice would be that the weighbridge is operated as if it were, and that the appropriate certificate is obtained. Regular calibration is an integral part of the quality

Table 2.2: Weight measurement using a weighbridge and stock calculation

Question	Answer
When is the weight measurement	At installation on delivery and stock calculation at quarter end.
How is the weight measurement taken?	By totalising weighbridge deliveries and performing a stock calculation at the end of each quarter.
How often is the weight measurement taken?	Every delivery and at a stock calculation at the end of each
How is any fuel carried over from one quarter to the next accounted for?	By a stock calculation at quarter end. This can be done typically by transit over a weighbridge, survey of the stockpile, or level measurement of a bin.
Are any industry standards met?	The British Standard BS EN 30012-1 for weighbridge calibration. This presents in detail methods of calibration for static weighing devices and for determining periodic confirmation intervals. This is reviewed with further details in the following code of practice: Code of Practice for the Calibration of Industrial Process Weighing
How is accuracy ensured?	Accuracy can be maximised by operating the stocking area so as to reduce the remaining quantity to a very low level at the period end. This could be achieved by separating each period's stock. Weighbridges will normally achieve an accuracy of +/- 0.5% of the load. Participants of public weighing equipment have responsibilities to ensure that they can perform their duties competently and honestly. No one may operate public weighing equipment unless they hold a certificate from a Chief Trading Standards Officer. Although the weighbridge at a heat installation is unlikely to be a public weighing facility, good practice would be that the

Table 2.3: Weight measurement using a belt weigher

Question	Answer
When is the weight measurement taken?	Immediately prior to combustion
How is the weight measurement taken?	Directly from a belt weigher
How often is the weight measurement taken?	Throughout the burn
How is any fuel carried over from one quarter to the next accounted for?	n/a
Is any method of verification used?	Totalised weighbridge delivery figures and stock level calculation at the end of each quarter (if applicable).

Accuracy

2.2. Belt weighing devices vary substantially in accuracy according to their principle of

operation, construction and installation. The Organisation Internationale de Métrologie Légale (OIML) has classified those intended for commercial use into three classes as per the Table below. Good practice is considered to be class 0.5.

Table 2.4: Accuracy of belt weighers

Class	Percentage of the mass of the totalized load for:	
	Initial verification	In-service
0.5	0.25	0.5
1	0.5	1.0
2	1.0	2.0

2.3. There is an international recommendation from OIML that specifies the metrological and technical requirements for belt conveyor equipment. This provides standardised requirements and test procedures for evaluating this equipment in a uniform and traceable way.

2.4. The title of the international recommendation is:

'Continuous totalizing automatic weighing instruments (belt weighers). Part 1: Metrological and technical requirements – Tests. OIML R 50-1 Edition 1997 (E)'

Further information can be found at www.oiml.org

2.5. Please note regular calibration is an integral part of the quality assurance of all weighing devices. Where possible, inaccuracies from excessive tension or stiffness in the belt, irregular loading, or installation too close to non-weighing rollers should be avoided. Guidance for the calibration of stand-alone electronic weighing devices can be found on the OIML website.

APPENDIX 3: FMS: INDUSTRY STANDARDS

Below is a list of industry standards that can be used and followed to support fuel measurement and sampling plans and procedures (Ofgem will ask as part of the Fuel Measurement and Sampling Questionnaire whether any of these are to be followed):

- BS EN 303-5:1999 (Part 5) Heating boilers for solid fuels hand and automatically fired, nominal heat output of up to 300 kW - Terminology, requirements, testing and marking.

- BS EN 12809:2001 +A1:2004 Residential independent boilers fired by solid fuel - Nominal heat output up 50kW – Requirements and test methods

- BS 7420:1991 Guide for determination of calorific value of solid, liquid and gaseous fuels (including definitions)

- BS EN ISO 10012:2003 Measurement management systems. Requirements for measurement processes and measuring equipment

- BS EN ISO 6974 –determines the composition of natural gas with defined uncertainly by gas chromatography

- BS EN 15440:2011 Solid Recovery fuels Method for the determination of biomass content

- BS EN 15358:2011–Solid recovered fuels –quality management systems –particular requirements for their application to the production of solid recovered fuels

- CEN 343 –A set of European draft standards which covers many aspects of the measurement, sampling and management of solid recovered fuels

- Directive 2004/22/EC on measuring instruments applies to measurements of flue gas volume

- EN 15440: 2011 Solid recovered fuels – Methods for the determination of biomass content

- EN 15442: 2011 Solid recovered fuels- Methods for Sampling

APPENDIX 4: FMS: SAMPLING FUELS FOR ENERGY CONTENT

Sampling fuels for energy content

Sampling is required to identify the energy content of a fuel and must be both of a sufficient quantity for analysis to be undertaken and representative of the fuel used in that quarter

4.1 The approach that should generally be used when developing a robust sampling regime is to:

- Take a series of incremental samples.
- Combine these to form a composite sample.
- Extract a representative sub-sample of the composite sample for analysis.
- While some factors that can affect the precision and accuracy of sampling are:

- The size of the sample relative to the whole.
- The number of increments taken during the sampling period to produce a composite sample.
- The method used to extract the sample.
- The location of sample extraction. If the fuel is not sampled immediately before combustion, it is generally expect the fuel sampled to be as representative as possible to what is combusted.
- The method used to extract a sub-sample from the composite sample for subsequent analysis.

Sampling frequency

4.2 To ensure that NIRHI Payments are issued for fuel used in each quarter, the energy content reported within quarterly data submissions must relate to the fuel used in that quarter. This means that fuel sampling is required within the quarter of burn. This may include both sampling from the fuel delivered that quarter as well as re-sampling stock carried over from deliveries in previous quarters.

4.3 Where sampling is required, samples are usually taken either from each delivery or from the fuel stream immediately prior to combustion. Participants are also welcome to

propose other sampling intervals e.g. once per day, providing it can be demonstrated that this regularity is able to provide accurate and reliable results.

4.4 When considering how frequently to take samples, installations should consider how consistent the GCV of their biomass fuel is, how many fuel sources they have and how much biomass they are using.

Weighted averaging

4.5 Good practice when calculating the average GCV of a number of composite samples is to use a weighted average.

Verification

4.6 When conducting sampling, participants should consider how they might verify the results and may wish to consider using a second method of sampling analysis at the stage of agreeing FMS procedures.

Energy content measurement for solid fuels

Table 4.1: sampling immediately prior to combustion

Question	Answer
How is the energy content measurement taken?	Increments are taken from the nearest possible point immediately prior to combustion.
How often are sample increments taken?	Depends on the material being burned and the number of deliveries: at a minimum this will be once a quarter.
How is any fuel carried over from one quarter to the next accounted for?	N/A
How is the sample prepared?	The overall size of the composite sample may be over 200kg, but the actual amount of material that is required for chemical analysis is usually less than five grams. Therefore it is necessary to obtain a representative sample of the composite sample that is suitable for chemical analysis. This can be achieved by using a combination of sample size reduction (using a suitable shredder) and sample splitting procedures to produce a finely powdered sample.

What steps are in place to ensure that the sample is representative of the whole?	Installations should explain how sampling will be undertaken, which demonstrates that the sample taken is representative of the whole. The objective of any sample extraction procedure is to ensure that all particles have an equal chance of reporting to the sample. This is particularly important when the material being sampled contains a wide range of particle sizes (such as chipped wood), as the finer sized particles will tend to settle towards the bottom of the material in a delivery vessel or in a stockpile, and towards the bottom of the flow of material on a conveyor. For a given accuracy, the required sample weight is directly proportional to the size of the largest particle in the mixture being sampled. This means that the weight of sample needed reduces as the particle size reduces, and thus the total size of a sample of sawdust will be smaller than that of a sample of woodchips.
Is any method of verification used?	Previous quarter's results are used as a comparison.

Table 4.2: Energy content measurement from delivery vessels

Question	Answer
How is the energy content measurement taken?	Increments are taken manually from delivery vessels.
How often are sample increments taken?	Every delivery.
How is any fuel carried over from one quarter to the next accounted for?	Stocks run down at quarter end.
How is the sample prepared?	The overall size of the composite sample may be over 200kg, but the actual amount of material that is required for chemical analysis is usually less than five grams. Therefore it is necessary to obtain a representative sample of the composite sample that is suitable for chemical analysis. This can be achieved by using a combination of sample size reduction (using a suitable shredder) and sample splitting procedures to produce a finely powdered sample.

What steps are in place to ensure that the sample is representative of the whole?	Installations should explain how sampling will be undertaken, which demonstrates that the sample taken is representative of the whole. The objective of any sample extraction procedure is to ensure that all particles have an equal chance of reporting to the sample. This is particularly important when the material being sampled contains a wide range of particle sizes (such as chipped wood), as the finer sized particles will tend to settle towards the bottom of the material in a delivery vessel or in a stockpile, and towards the bottom of the flow of material on a conveyor. For a given accuracy, the required sample weight is directly proportional to the size of the largest particle in the mixture being sampled. This means that the weight of sample needed reduces as the particle size reduces, and thus the total size of a sample of sawdust will be smaller than that of a sample of woodchips.
Is any method of verification used?	Previous quarter's results are used as a comparison.

Table 4.3: Energy content measurement from stockpile

Question	Answer
How is the energy content measurement taken?	Increments are taken manually from delivery vessels and from a stockpile.
How often are sample increments taken?	Every delivery and from stockpile at the beginning of each quarter.
How is any fuel carried over from one quarter to the next accounted for?	Stockpile sampled at the beginning of the quarter.
How is the sample prepared?	The overall size of the composite sample may be over 200kg, but the actual amount of material that is required for chemical analysis is usually less than five grams. Therefore it is necessary to obtain a representative sample of the composite sample that is suitable for chemical analysis. This can be achieved by using a combination of sample size reduction (using a suitable shredder) and sample splitting procedures to produce a finely powdered sample.

What steps are in place to ensure that the sample is representative of the whole?	Installations should explain how sampling will be undertaken, which demonstrates that the sample taken is representative of the whole. The objective of any sample extraction procedure is to ensure that all particles have an equal chance of reporting to the sample. This is particularly important when the material being sampled contains a wide range of particle sizes (such as chipped wood), as the finer sized particles will tend to settle towards the bottom of the material in a delivery vessel or in a stockpile, and towards the bottom of the flow of material on a conveyor. For a given accuracy, the required sample weight is directly proportional to the size of the largest particle in the mixture being sampled. This means that the weight of sample needed reduces as the particle size reduces, and thus the total size of a sample of sawdust will be smaller than that of a sample of woodchips.
Is any method of verification used?	Previous quarter's results are used as a comparison.

APPENDIX 5: FMS: FURTHER INFORMATION ON ALTERNATIVE METHODS FOR DETERMINING A CONTAMINATION PERCENTAGE FOR WASTE FUELS

5.1. Plants using municipal waste or solid biomass contaminated with fossil fuel may wish to consider using the CEN 343 group of industry standards to support the development of their FMS procedures. CEN 343 is a set of standards covering many aspects of the production, handling and measurement of solid recovered fuels. The following are the standards you may need to comply with:

CEN/TS 15440: 2006 Solid recovered fuels - Method for the determination of biomass content, is a standard that provides methodologies for determining the biomass fraction of a representative waste sample.

CEN/TS 15440: 2006 includes two methods for determining the biomass percentage by energy: selective dissolution and manual sorting. The standard explains the process a laboratory should follow and the conditions under which the methods can be used.

5.2. Operators must ensure that they are using fuels that meet the conditions set out in the standard in order for a sampling regime based on this standard to be viewed as being reliable. For example, fuels must not contain substances for which the methods prescribed in the standards do not work, such as coal and charcoal.

The Selective Dissolution Method

5.3. This method relies on the fact that under the conditions specified in the standard biomass materials will dissolve and whatever is left undissolved will therefore be fossil derived. Since the dissolution method that can be used to directly determine the GCV of the biomass in the sample, it is preferential to the manual sorting method.

The Manual Sorting Method

5.4. In this method, a representative sample of the solid recovered fuel is sorted by hand into various sub-fractions e.g. plastics, paper/cardboard, wood and inert matter. These constituents are then dried to a constant weight and separated into biomass, non-biomass and inert categories.

5.5. The calorific value of the biomass content of the sample can now be determined through establishing the average net calorific value for each category on a dry basis. Manual sorting can also only be applied to waste materials over a certain particle size.

Potential for Error

5.6. Participants seeking to utilise the selective dissolution and manual sampling methods outlined in CEN/TS 15440 should bear in mind that these methodologies have several limitations. These are outlined in Annex G for the standard.

5.7. For example, as regards selective dissolution operators will need to consider that the biodegradability of certain non-biomass materials e.g. coal or polyurethane plastics, may lead them to dissolve and therefore they would be considered biomass. A list of such materials is considered in the standard. Also, since the manual sorting method is to some extent reliant on estimation it is therefore prone to human error.

Use of the Selective Dissolution Method for Waste Wood Fuels

5.8. The methods outlined in CEN/TS 15440 were primarily designed for use with waste fuels e.g. SRF. However, operators have utilised the selective dissolution method to determine the fossil fuel derived contamination percentage of waste wood fuels e.g. which are contaminated by small quantities of paint, varnish and adhesives. These fuels naturally have a higher biomass content than SRF or similar waste fuels.

5.9. Within Annex G of the standard it states that the reliability of the method may be compromised when used with fuels with very high biomass contents e.g. >95%. Therefore where waste wood fuels are utilised alongside the selective dissolution method Ofgem may seek to impose a minimum contamination level which will be assumed for the NIRHI payment. This will be considered on a case by case basis.

Re-release of the Standard

5.10. Ofgem will monitor the re-release of CEN Standards and at such point as an updated version of CEN/TS 15440 is released this will be reviewed. Ofgem/DETI may then seek to alter their approach based on any developments in the standard as regards the addition of new methodologies or re-evaluation of those already included.

Carbon-14

5.11. Ofgem is aware that this method could potentially be used for the determination of the biomass content of feedstocks. We are happy to discuss the current Ofgem position[41] as regards the use of this approach with interested participants at the time of an accreditation application.

[41] See 'Determination of biomass energy content of waste feedstock by post combustion analysis of flue gases: Carbon-14 technique proposal' at http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/FuelledStations/Documents1/14C%20publicity.pdf, published by Ofgem 07/07/11

APPENDIX 6: GLOSSARY OF RHI TERMS

A

ACCREDITATION

In order to receive support under the NIRHI, an eligible installation will have to be accredited by Ofgem. Accreditation (which is defined in the Regulations) is the term used to denote admission of an applicant to the NIRHI once it has been determined that the installation meets the eligibility criteria of the scheme and that the application for accreditation is properly made.

ADDITIONAL NIRHI CAPACITY

Additional NIRHI capacity, which is defined in the Regulations, means a plant which is first commissioned after the date on which an NIRHI installation was first commissioned, uses the same source of energy and technology as the original plant and supplies heat to the same heating system.

ADDITIONAL PLANT

Additional plant means a heat generating plant which uses a different technology or source of energy to an existing accredited NIRHI installation but is connected to the same heating system as the accredited NIRHI installation.

ANCILLARY FOSSIL FUEL

Ancillary fossil fuel refers to the small amounts of fossil fuel necessary for the effective operation of the installation.

ANNUAL DECLARATION

The annual declaration is a confirmation that must be signed by the Authorised Signatory to confirm that the accredited NIRHI installation/registered biomethane producer has met the eligibility criteria and ongoing obligations of the scheme for the previous 12 months.

AUTHORISED SIGNATORY

An Authorised Signatory is a person who is authorised to open and use an account with the Ofgem NIRHI website or provide information by post, submit periodic data and complete the NIRHI annual declaration.

B

BIOENERGY

This term is used as shorthand for any of the following technologies: solid biomass, solid biomass from municipal waste, biogas, biomethane.

C

CHP

'CHP' is defined in the Regulations and refers to a Combined Heat and Power plant.

COMMISSIONED

This means, in relation to an eligible installation, that all tests required by industry standards for the installation to be able to deliver heat for the purpose for which it was installed have been completed. For a legal definition, please see the Regulations.

COMMON HEADER

This is the main pipe to which plants supply heat, and from which heat uses are supplied. A heating system may have multiple common headers.

COMPLEX INSTALLATION

A complex installation is any installation that is not considered simple.

F

FLOW PIPE

The pipe carrying the hot water flow leaving an installation or heat use is commonly referred to as the flow pipe.

FUEL MEASUREMENT AND SAMPLING (FMS)

The term 'fuel measurement and sampling' (FMS) refers to the way in which the renewable biomass proportions of input fuels are determined. By 'measurement', we mean determining the amount or quantity of a fuel (for example in tonnes or cubic meters). By 'sampling', we mean taking small sample amounts of fuel and testing them to determine specific properties such as their GCV.

I

INSTALLATION CAPACITY

The installation capacity is defined in the Regulations as the 'total installed peak heat output capacity of a plant' (which includes the 'total installed peak heat output capacity' of a single plant (installation) made up of two or more component plants).

K

KILOWATTS (kW)

A kilowatt is a measure of power i.e. the rate at which energy is transferred or converted. A kilowatt is equal to 1 kilojoule of energy transferred/converted each second.

KILOWATT-HOURS (kWh)

A kilowatt-hour is the measure of energy transferred or converted over a period of time. A kilowatt-hour is equal to the amount of energy generated by an installation with a power capacity of 1kW in an hour or an installation with a power capacity of 2kW in a half-hour etc.

N

NOMINATED INDIVIDUAL

An individual within an organisation nominated to act on the organisation's behalf in relation to the NIRHI.

O

ONGOING OBLIGATIONS

Ongoing obligations refer to the obligations that need to be met to remain accredited or registered to the scheme. The term is defined in the Regulations.

P

PARTICIPANT

A participant is defined in the Regulations as the owner of an accredited NIRHI installation, a representative owner, or a producer of biomethane who has registered with Ofgem to receive the NIRHI. In practice this means that once the owner or representative owner of an eligible installation or a biomethane producer receives accreditation or registration respectively to the NIRHI scheme, he/she will be referred to as a participant in the NIRHI scheme.

PERIODIC SUPPORT PAYMENTS

NIRHI support will be delivered to participants in the form of quarterly 'periodic support payments', the term being defined in the Regulations.

PERIODIC DATA

Periodic data is the information participants will need to submit on a regular basis as an ongoing obligation, and in order for Ofgem to calculate the appropriate payment.

R

RENEWABLE HEAT INCENTIVE

The Renewable Heat Incentive is a DETI programme designed to provide long-term financial support to renewable heat installations to encourage the uptake of renewable heat.

RENEWABLE HEAT PREMIUM PAYMENT

The Renewable Heat Premium Payment is a separate, complementary grant scheme to the NIRHI. It will provide a one-off payment to eligible domestic generators of renewable heat for the interim period before eligible domestic generators will be able to apply for the NIRHI.

REPRESENTATIVE OWNER

Where there is more than one owner of an accredited NIRHI installation, the owner with the authority to act on behalf of all owners is referred to as the representative owner.

RETURN PIPE

The pipe carrying the cool liquid flow returning from an installation or heat use is commonly referred to as the return pipe.

S

SCHEMATIC DIAGRAM

The schematic diagram is an illustration of the installation and heating system for which NIRHI accreditation is being applied for.

SIMPLE INSTALLATION

A simple installation is an installation which does not deliver heat by steam, does not supply heat to an ineligible purpose, and uses the heat generated in one building.

T

THERMOCOUPLE

Electronic sensor for measuring the temperature of pipework at a given position.