



## Non- Domestic Renewable Heat Incentive NI Audit Strategy

This paper sets out the means by which Ofgem will fulfil its responsibilities to audit NI NDRHI installations to verify compliance with the scheme requirements

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### 1. Version History

Version	Date	Author	Comments
1	1 September 2011	Ade Obaye	
2	16 January 2014	Rob Reid	
3	28 January 2014	Rob Reid	Incorporates Ade Obaye comments
4	20 February 2014	Rob Reid	Incorporates Jacqueline Balian comments
5	4 March 2015	Amy Powell-Tuck	Annual review which also incorporates Grant Thornton recommendations
6	13 July 2016	Shaneigh Turner	Spilt of GB and NI audit strategy for clarity. This version will cover the strategy specific to Northern Ireland sites only.

### 2. Introduction

2.1. The Renewable Heat Incentive (RHI) is a Government environmental programme that provides financial incentives to increase the uptake of renewable heat. For the non-domestic sector it provides a subsidy, payable for twenty years to eligible, non-domestic renewable heat generators and producers of biomethane for injection.

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2.2. Ofgem are responsible for implementing and administering the scheme. Our duties and functions lie primarily in the administrative and compliance elements of the scheme. These include:

- Receiving and assessing applications for accreditation
- Receiving and reviewing periodic generation data for accredited non-domestic installations
- Receiving and assessing proposed fuel measurement and sampling procedures for biomass fuels
- Receiving and assessing fuel measurement and sampling data for biomass generators
- Calculating periodic support payments to accredited installations and making payments
- Undertaking enforcement action such as withholding payments, reducing payments or revoking accreditation
- Undertaking fraud prevention and detection activities including site and desk audits, ID verification checks and reviews of information provided

2.3. With a scheme of this size, it is important that measures are put in place to protect the available funds from fraud and ensure that payments are only made to those that are entitled. An on-going cycle of RHI installation audits is a key tool in ensuring this.

2.4. Inspections of Northern Ireland NDRHI installations are permissible under the [RHI Regulations \(Northern Ireland\) 2012 \(as amended\)](#).

2.5. Part 9 – Inspection, Regulation 49 states that:

The Department or its authorised agent may request entry at any reasonable hour to inspect an accredited RHI installation and its associated infrastructure to undertake any one or more of the following—

- (a) verify that the participant is complying with all applicable ongoing obligations;
- (b) verify meter readings;
- (c) take samples and remove them from the premises for analysis;
- (d) take photographs, measurements or video or audio recordings;
- (e) ensure that there is no other contravention of these Regulations.

2.6. “We have interpreted “reasonable hour” to mean that site inspections will generally be conducted between 9am – 5pm, Monday to Friday. In order to simplify access and ensure availability of key personnel, data and documentation, we will normally give prior notice of inspections (10 working days for post-accreditation audits, 5 working days for pre-accreditation audits). However, there may be occasions where we believe it is appropriate to conduct unannounced site inspections and we reserve the right to do so.

2.7. This paper outlines the Audit Strategy for 2016/17.

### 3. Audit Objectives

3.1. The objectives for the NDRHI Audit Programme are:

- Monitor participant compliance against RHI eligibility criteria and obligations
- Detect instances of suspected abuse, misuse, fraud or non-compliance
- Act as a deterrent to those that may be tempted to break the rules of the scheme
- Use information gained (e.g. quality of system design) to act on and improve scheme understanding and capture lessons learnt
- Complete site audits on installations selected taking a risk based approach

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- Consider additional sampling of Statistically selected sites using the Grant Thornton Monetary Unit Sampling calculator

3.2. In order to satisfy these objectives, audits will be completed on a sample of targeted installations to ascertain whether:

- Information provided during accreditation or registration is correct
- An installation has been installed as declared on the application form and schematic
- An installation exists / is eligible to be accredited or registered
- Eligible heat generation claims are plausible given the capacity of an installation and the amount of fuel being used
- Accurate and reliable fuel measurement data is being submitted to Ofgem
- Meter readings/output volumes notified to Ofgem are appropriate and are such that correct support payments are being made quarterly
- Meter numbers, positions, installation date, calibration date are correct
- Temperature sensors are appropriately placed and have not been tampered with
- The installation does not have a heat rejection facility, or if it does, that it is appropriately metered (to detect where a participant may be purposefully wasting heat)
- Any calculations of ineligible heat are plausible and failure to install meters is reasonable
- Heat losses are being measured appropriately
- Systems have been suitably installed, commissioned and maintained
- On-going obligations are being followed

3.3. All installations are subject to the potential for inspection during accreditation, registration and throughout the duration of eligibility for NDRHI payments.

## 4. Audit Types

4.1. The main emphasis of the audit programme is around site audits. This is because most non-compliance can only be detected during a site visit.

### *Post-accreditation site audits:*

4.2. Post-accreditation audits are carried out (by an external contractor) on installations that have already been accredited on to the scheme.

### *Pre-accreditation site audits:*

4.3. Pre-accreditation audits are carried out (by an external contractor) on installations that have not yet been accredited on to the scheme. These may be recommended, for example, on the basis of size or complexity of an installation or as a result of concerns raised by accreditation reviewers who require assurance that an installation is eligible for the RHI. Recommendations are considered by the audit team and if selected are treated as a matter of priority.

## 5. Sample size

5.1. Ofgem, as NDRHI scheme administrators, have a responsibility to optimise risk mitigation within an acceptable cost.

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- 5.2. Prior to the scheme audit programme commencing, Deloitte were commissioned to provide a view on appropriate sample sizes<sup>1</sup>. Their method was subsequently adapted by Ofgem as it did not take into account audit findings, in particular non-compliances identified to date and their material impact on payments.
- 5.3. In 2014/15 and 2015/16 sample sizes were based on 3% of the GB auditing sample size as it was agreed that this was appropriate given the size of the NI scheme. This was agreed by DETI and reflected in the Budget Strategy.
- 5.4. In Q3/4 of 2015/16 financial year, an increased number of audits was requested to support allegations of fraud and mis-use. As a result the decision was made to increase the initial sample size of NI audits to 25 to support concerns. These will be completed in Q1&2 of 2016.

### *Statistical sampling*

In 2014/15 Grant Thornton were appointed to conduct an external review of the NDRHI audit strategy<sup>2</sup>. This focused primarily around establishing an appropriate sample size that could be completed at a reasonable operational cost, using a method that would enable the results to be extrapolated across the entire population of NDRHI installations. This was trialled for GB sampling in 2015/16 and has been agreed as an approach to the GB 2016/17 audit programme.

- 5.5. Monetary unit sampling provides a direct linkage between the financial value of payments and sample selection, applying materiality ("an acceptable level of error") and confidence levels to reflect the risks in the population. Each monetary unit (£) has an equal chance of selection; as such the sample is weighted towards those installations that receive the largest payments.
- 5.6. Grant Thornton have provided a spreadsheet to aid with the selection of monetary unit (statistical) samples by the NDRHI team<sup>3</sup>.
- 5.7. Key variables in statistical sampling are population, confidence level, materiality and error rate. These are all used to determine the final sample size.

### *2015/16 Approach*

- 5.8. Whilst we will deliver an audit programme of targeted sites we will consider the use of statistical sample. The below outlines how sites are targeted..

### *Targeted sampling*

- 5.9. Whilst the results of targeted audits cannot be extrapolated across the whole population they do provide value for money by focussing on higher risk areas or emerging trends.
- 5.10. We intend to undertake at least 25 targeted audits in 2016/17. The exact number will depend on results of audits conducted in the first half of the year which is expected to have been completed by the end of July.

<sup>1</sup> "2013/09: Review of the revised RHI Non Domestic sampling methodology" - Deloitte

<sup>2</sup> "Independent review of Ofgem's audit activities in relation to the NRHI scheme (Tranches 1 and 2)" - Grant Thornton

<sup>3</sup> "NDRHI MUS Sampling- blank template"- Grant Thornton

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**6. Site Selection**

*Operational considerations*

6.1. Targeted audits will be selected on an ad-hoc basis in 2016/17 due to a change in the approach. The first round of selection criteria being agreed and audits selected in May 2016. This enables the contractor to organise, plan and implement audits, increasing operational efficiency by reducing stand down time.

*Selection criteria*

6.2. The selection criteria (for targeted audits) will focus on key risk areas, as per previous years, with risk categories reviewed and approved by senior stakeholders prior to the audit programme commencing.

6.3. In order to make best use of resources and be cost effective, the targeted audit sample will typically consist of installations targeted due to:

- Installed capacity
- Reasonable concerns by staff while processing applications or periodic data submissions
- Risk-based selection based on trends from audit findings and technology

6.4. Table 5 outlines some examples.

<b>Risk factor</b>	<b>Rationale</b>
Risk based - Large biomass	Potential for greatest losses as a result of greatest payments.
Risk based – Technology	Target different technologies, including WSHP’s, GSHP’s and Solar Thermal installations.
Suggested sites/DA referral	Targeted selection of installations identified during or after accreditation that reviewers have suggested on the basis of concerns regarding eligibility / setup of the installation.

**Table 1: Examples of risk based selection criteria**

**7. Audit findings**

7.1. All audit results will continue to be logged on the Management Information log.

*Assurance Rating*

7.2. All completed audits receive an assurance rating, as per the Ofgem E-Serve Audit Assurance Rating Categories (see Table 6 in the Appendix).

*Non-compliance categorisation*

7.3. All non-compliances are categorised into a risk category based on whether they have a material impact and the frequency (High/Low) of occurrence. This approach was agreed by Ofgem’s Risk and Fraud Management Group (RFMG) and DECC’s Audit and Risk Committee (ARC). The same approach has been applied to the categorisation of NI non-compliances as the NI and GB targeted auditing programmes follow the same process so this has been deemed appropriate operationally to ensure consistency.

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### *Potential Error*

- 7.4. Each non-compliance is assigned a 'potential error'. This is the percentage applied to a non-compliance in order to provide a 'snapshot' financial impact (for reporting purposes).
- 7.5. The potential error percentage is applied to the lifetime value for that installation and the resulting potential error value feeds into the assurance rating for that installation.
- 7.6. If multiple material non-compliances exist on one installation the potential errors are added together to provide the overall potential error.
- 7.7. The audit team will work closely with the compliance team to understand what the *actual* impact of non-compliances found to date has been (i.e. following compliance action). This will enable us to review whether the potential error value for each non-compliance is appropriate and whether the method of adding potential error values together for multiple non-compliances is appropriate.
- 7.8. The potential errors of non-compliances will be reviewed on an annual basis and any changes recorded in the 'potential error library'.

### *Observations*

- 7.9. Observations are recorded as part of the site audit process. They refer to incidences that are not directly against regulations (and as such are not non-compliances) but which should be addressed or monitored to improve scheme understanding. Observations will be classified going forward into three categories: 'for information', 'for action' and 'best practise point'.

## **8. Reporting and Governance**

- 8.1. Each audit report is reviewed by a member of the audit team, with any clarifications requested from the contractor recorded on a coversheet. The report is then approved by a different member of the audit team and the closure letter is sent to the participant with the key findings. Any non-compliant installations are passed to the compliance team for action.
- 8.2. Progress against KPIs will be reported internally on a daily and monthly basis.
- 8.3. On a 6-monthly basis, we will review management information on audit findings to date in advance of site selection for the next round of targeted audits. Audit findings will inform decisions regarding our risk-based approach to targeted site selection and will be signed off by senior stakeholders.
- 8.4. Reports will be provided on an ad-hoc basis to internal and joint boards such as the NDRHI Board, Management Committee and Joint Working Group.

## **9. Fraud**

- 9.1. Any audits that unearth suspected fraud will be referred to the central fraud team for further investigation.

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## 10. Required Resources

### *External contractor*

- 10.1. Following an open tender process an external contractor has been appointed to undertake the site audits of NDRHI installations. These will be carried out in accordance with the audit plan while ensuring value for money. The contractor is required to:
- Agree an audit programme with Ofgem
  - Organise and notify participants / applicants of the site visit
  - Review relevant documentation relating to the installation
  - Carry out a site visit (including, where necessary, visiting any off-site heat use measurement or off-site sampling facilities)
  - Provide a report detailing audit outcomes, within agreed timescales
  - Amend / clarify reports based on feedback from the internal audit team
- 10.2. The external contractor will also supply the audit team with a periodic report for the relevant audit round that includes:
- A summary of the NDRHI audit programme findings to date
  - A summary of the NDRHI audit programme findings for the reporting period
  - Feedback on the NDRHI audit programme including any recommended actions related to the RHI Regulations, Ofgem NDRHI communications materials and improvements to internal controls to address issues identified at site audits.

### Auditor capabilities

- 10.3. For smaller installations, including those classified as having simple or standard metering arrangements, we will require auditors with the following skills or knowledge:
- Water supply operations
  - Energy and mass balances
  - Data handling
  - Comparing records
  - Fluid mechanics
  - Thermodynamics
  - Understanding of eligible heat use
  - Heat metering
  - Metering installation and calibration
- 10.4. For larger installations, including those classified as having complex or multiple metering arrangements, we will require auditors with the same skills and knowledge as for smaller installations, and in addition:
- Steam system operations
  - Steam metering
  - Biomass/biogas handling
  - Statistics (sampling theory, errors and uncertainty)
  - Process engineering experience
  - Interpreting system schematics

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### *Internal Audit Team*

10.5. The internal audit team are responsible for the development and implementation of the audit programme, including management of the external contractor undertaking site audits on our behalf.

10.6. The team are responsible for specific tasks that include:

- Planning and monitoring the audit programme
- Managing the external contractor(s)
- Administration of the audit programme
- Developing and refining audit checks
- Carrying out desk-based audits
- Approving site audit reports including assurance ratings
- Compiling management information and reporting to senior management
- Assisting with E-Serve audit contract procurement processes

10.7. We will recruit staff with the necessary skills and knowledge to undertake the duties and functions of their respective roles. This will include:

- Strong numerical and analytical skills paying particular attention to detail
- Excellent written and verbal communication skills including reporting to senior management
- Experience of applying the principles and practices of risk management
- Experience of contract monitoring and management

10.8. We will maintain standard operating procedures that are updated periodically, in particular where process improvements are made. These will provide detailed descriptions of processes, roles and responsibilities and timescales for when tasks are required to be carried out. These will be used as the basis for induction training so that new starters can become productive as quickly as possible.

10.9. We will monitor resource requirements taking into account variations in application volumes, audit findings and other factors that have an impact on the audit sample size. The current audit team consists of 4 FTE's.

10.10. The team's work will be carefully monitored using internal KPIs and performance will be reviewed using the 'Internal Monitoring Log'.

### *Budget*

10.11. The budget required to conduct the audit programme will be requested as part of Ofgem's business planning submission to DfE, with spend controlled in line with agreed procedures.

## **11. Appendix**



Ofgem E-Serve Technical Audit Assurance Categories			
Assurance Rating	General Description	Trigger Point(s)*	Description
Unsatisfactory	Audit found <b>major</b> issues of non-compliance.	General: Major issue with eligibility.  OR  Financial: Impact on scheme considered to be in excess of £50,000 or 5% of lifetime payments.  OR  Fraud: There are suspicions of abuse, misuse or fraud	This assurance category will indicate the following:  1. The audited station has been in breach of the licence conditions resulting in the receipt of incorrect payments and an assessment made on the basis that the station should include issues that have a significant impact on the licence.  2. The impact of the audit finding (in excess of £50,000 or 5% of lifetime payments) is significant.  3. There is a suspicion of abuse, misuse or fraud.
Weak	Audit found <b>moderate</b> issues of non-compliance.	General: Moderate issue with eligibility.  OR  Financial: Impact on scheme considered to be in excess of £1,000 or 2% of lifetime payments, but not exceeding £50,000 or 5% of lifetime payments.	This assurance category will indicate the following:  1. The audited station has issues that require a reasonable timescale to ensure compliance, but the result in payments being suspended is not significant.  2. The impact of the audit finding (in excess of £1,000 or 2% of lifetime payments, but not exceeding £50,000 or 5% of lifetime payments) is moderate.
Satisfactory	Audit found <b>minor</b> issues or has recommended introduction of best practice.	General: Minor issues found on site.  OR  Financial: Impact on scheme considered to be less than £1,000 or 2% of lifetime payments.	This assurance category will indicate the following:  1. The audit has identified areas of non-compliance, but the station has complied with certain on-going conditions and the impact is minor or no impact on the wider licence.  2. The impact of the audit finding (less than £1,000 or 2% of lifetime payments) is minor.
Good	No issues found during audit.	N/A	There were no issues noted during the audit.

**Table 2: Ofgem Assurance categories**

\* Potential financial losses are calculated over the total lifetime of the scheme.