Offtake Meter Performance Report – 2020/21

Wales & West Utilities

July 2021

Offtake Meter Performance

XXXXXX operates and maintains several exit points from the National Grid where offtake flow is measured and validated in accordance with the UNC and The Gas (Calculation of Thermal Energy) Regulations.

Report to the Performance Assurance Committee Month YYYY.

Requirements

1. Number and magnitude of Meter Error reports
2. Copy of Regulatory Reporting Pack Meter Error report.
3. Annual ME2 Meter Validation report.

Introduction

This document has been written to demonstrate that instrumentation and equipment associated with measurement systems for the calculation of mass, volume or energy flow rate of gas are functioning correctly. The ME2 Part 3 Work Procedure for Flow Weighted Average Calorific Value (FWACV) Offtakes is used to ensure metering equipment at the offtakes are validated and maintained correctly, thus ensuring that the complete metering system continues to perform within the uncertainty requirements.

ME2 Part 3 - FWACV Offtakes

The ME2 Part 3 Work Procedure sets out a number of tests and calibrations designed to ensure all aspects of flow metering such as flow computers, pressures and temperatures are setup and working within tolerances.

All sites must be validated annually with a maximum interval of twelve (12) months between validations.

Meter Errors

The Offtake Arrangements Document (OAD) requires the Offtake metering Measurement Equipment to be operating within its “Permitted Range” as indicated in the site specific “Supplemental Agreement”. If the Measurement Equipment is found to be operating outside its Permitted Range or with a systematic bias it is classed to be a “Fault”.

The Measurement Error Notification Guidelines only require the notification of faults which are likely to result in a systematic bias to the measured quantity. They do not cover faults associated with equipment operating outside its permitted range when the mismeasurement is of a random nature.

Systematic bias is deemed to be a bias resulting from the measurement system, leading on average to biases in measurement which results in measured values being systematically too high or too low.

Reconciliation

On identification of a possible meter error the Distribution Network is required to supply corrected readings for reconciliation only when the fault identified has a systematic bias of over 0.1% of the total offtake flow during the period of the error. These corrected readings are supplied as part of the “Measurement Error Report (MER)” or the “Significant Measurement Error Report (SMER)”. Where a SMER will be an error estimated to exceed 50 GWh.

Null Reports

Should the magnitude of the total error be calculated to at less than 0.1% of the total offtake flow during the period of the meter error then no reconciliation will be made for any day within the error duration and a null report written.

Requirements

1. Meter Error Reports

No meter errors for the period of January April YYYY to March YYYY were reported.

2. Regulatory Reporting Pack Meter Error report

The following table 1 shows the RIIO-GD1 performance RRP YYYY/YYYY report for offtake meters energy contribution within the networks operated and maintained by XXXXX.

LDZ				Network Total
Total Energy (GWh)				
Abs Error (GWh)				
% Error				

Table 1 - Meter Error RRP Report

3. Annual ME2 Meter Validations

ME2 maintenance activities for the period April YYYY to March YYYY as shown in Table 2.

Maintenance Summary

33 individual metering streams were inspected and tested following the ME2 Maintenance Work Procedure. 7 metering streams were started outside of the 12-month validation window, either due to scheduling constraints or where other work prevented it. No errors which would form a Null or meter error report were identified.

Table 2 – Summary of ME2 Meter Validations – MMM YYYY to MMM YYYY