Offtake Meter Performance Report – 2020/21

Wales & West Utilities

July 2021

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WALES&WEST UTILITIES

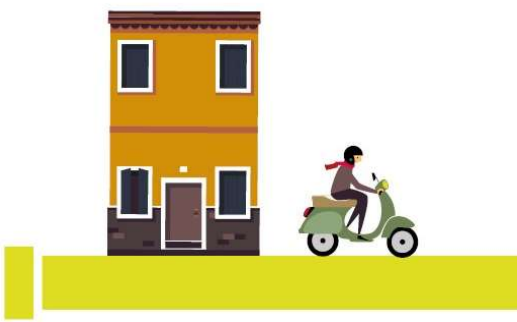
Offtake Meter Performance

Wales & West Utilities 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 31st July 2021.

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 April 2020 to March 2021 were reported.

2. Regulatory Reporting Pack Meter Error Report

The following table 1 shows the RIIO-GD1 performance RRP 2020/2021 report for offtake meters energy contribution within the networks operated and maintained by Wales & West Utilities.

LDZ	SW	WN	WS	Network Total
Total Energy (GWh)	30623	6833	25957	63412
Abs Error (GWh)	0.000	0.000	0.000	0.000
% Error	0.000%	0.000%	0.000%	0.000%

Table 1 - Meter Error RRP Report

3. Annual ME2 Meter Validations

ME2 maintenance activities for the period April 2020 to March 2021 as shown in Table 2.

Validation 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.

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Table 2 – Summary of ME2 Meter Validations – April 2020 to March 2021

Site Name	LDZ	Meter Type	Open Meter Error Report's	Last Validation End Date	Validation Start Date	Validation End Date	Started within 12 months of last?	Reconciliation Required?	Comments
Aylesbeare (MUA)	SW	Ultrasonic		22/02/2019	19/02/2020	25/02/2020	Yes	No	
Aylesbeare (MUB)	SW	Ultrasonic		22/02/2019	19/02/2020	25/02/2020	Yes	No	
Choakford (MRA)	SW	Turbine		14/03/2019	04/03/2020	30/03/2020	Yes	No	
Choakford (MRB)	SW	Turbine		14/03/2019	04/03/2020	30/03/2020	Yes	No	
Cirencester (MRA)	SW	Turbine		01/07/2019	19/06/2020	18/06/2020	Yes	No	
Cirencester (MRB)	SW	Turbine		01/07/2019	19/06/2020	18/06/2020	Yes	No	
Coffinswell (MRA)	SW	Turbine		25/06/2019	15/06/2020	14/09/2020	Yes	No	
Coffinswell (MRB)	SW	Turbine		25/06/2019	15/06/2020	14/09/2020	Yes	No	
Dowlais (MUA)	WS	Ultrasonic		01/08/2019	22/06/2020	24/06/2020	Yes	No	
Dowlais (MUB)	WS	Ultrasonic		01/08/2019	22/06/2020	24/06/2020	Yes	No	
Dyffryn Clydach (MRA)	WS	Ultrasonic		20/08/2019	06/07/2020	10/07/2020	Yes	No	
Dyffryn Clydach (MRB)	WS	Ultrasonic		20/08/2019	06/07/2020	10/07/2020	Yes	No	

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Site Name	LDZ	Meter Type	Open Meter Error Report's	Last Validation End Date	Validation Start Date	Validation End Date	Started within 12 months of last?	Reconciliation Required?	Comments
Easton Grey (MUA)	SW	Ultrasonic		20/03/2019	10/03/2020	20/03/2020	Yes	No	
Easton Grey (MUB)	SW	Ultrasonic		20/03/2019	10/03/2020	20/03/2020	Yes	No	
Evesham (MRA)	SW	Turbine		12/04/2019	14/04/2020	24/04/2020	Overdue	No	Slight delay in starting validation due to scheduling constraints.
Evesham (MRB)	SW	Turbine		12/04/2019	14/04/2020	24/04/2020	Overdue	No	Slight delay in starting validation due to scheduling constraints.
Fiddington (MUA)	SW	Ultrasonic		28/10/2019	03/08/2020	26/08/2020	Yes	No	
Fiddington (MUB)	SW	Ultrasonic		28/10/2019	03/08/2020	26/08/2020	Yes	No	
Gilwern (MUA)	WS	Ultrasonic		14/05/2019	28/05/2020	01/06/2020	Overdue	No	Slight delay in starting validation due to scheduling constraints
Gilwern (MUB)	WS	Ultrasonic		14/05/2019	28/05/2020	01/06/2020	Overdue	No	Slight delay in starting validation due to scheduling constraints.
Ilchester (MUA)	SW	Ultrasonic		31/05/2019	11/05/2020	27/05/2020	Yes	No	
Ilchester (MUB)	SW	Ultrasonic		29/11/2019	11/05/2020	27/05/2020	Yes	No	
Kenn (MRA)	SW	Turbine		02/08/2019	20/07/2020	23/09/2020	Yes	No	
Kenn (MRB)	SW	Turbine		15/07/2019	20/07/2020	23/09/2020	Overdue	No	Slight delay in starting validation due to scheduling constraints.
Littleton Drew (MRA)	SW	Turbine		16/07/2019	29/06/2020	08/07/2020	Yes	No	
Maelor (MUA)	WN	Ultrasonic		03/10/2019	26/10/2020	26/10/2020	Overdue	No	Delay in starting validation due to construction works on site.

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Site Name	LDZ	Meter Type	Open Meter Error Report's	Last Validation End Date	Validation Start Date	Validation End Date	Started within 12 months of last?	Reconciliation Required?	Comments
Maelor (MUB)	WN	Ultrasonic		04/10/2019	26/10/2020	26/10/2020	Overdue	No	Delay in starting validation due to construction works on site.
Pucklechurch (MRA)	SW	Turbine		29/10/2019	05/10/2020	13/10/2020	Yes	No	
Pucklechurch (MRB)	SW	Turbine		29/10/2019	05/10/2020	13/10/2020	Yes	No	
Ross (SW) (MRA)	SW	Turbine		06/06/2019	05/05/2020	15/05/2020	Yes	No	
Ross (SW) (MRB)	SW	Turbine		06/06/2019	05/05/2020	15/05/2020	Yes	No	
Seabank (MUA)	SW	Ultrasonic		20/09/2019	02/09/2020	17/09/2020	Yes	No	
Seabank (MUB)	SW	Ultrasonic		20/09/2019	02/09/2020	17/09/2020	Yes	No	