

**METER ERROR REPORT****FINAL**

Reconcile?	Y
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Safety Issue?	N
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**1. EXECUTIVE SUMMARY**

SITE NAME	Cirencester	
LDZ	SW (Wales & West)	
START DATE (actual)	09 <sup>th</sup> January 2023	
LAST GOOD DATE		
END DATE	09 <sup>th</sup> March 2023	
SIZE OF ERROR (No reconciliation required if under 0.1%)	1.03% over registration (2.17 GWh)	
ESTIMATE – Y/N?	Y	
ROOT CAUSE	Data entry correction following flow signal failure	
ANALYSIS	Comparison of recorded offtake flow against RBD flow data.	
METER TYPE	Turbine	
AUTHOR	C. Litster	
CHECKED BY	J. Hill	
ACCEPTED BY NETWORK		
RECONCILIATION	Distribution	Transportation

## 2. BACKGROUND

Cirencester Offtake has duty/standby turbine meter streams, using a gas chromatograph for RD and CV determination and PTZ correction.

Following the installation of new telemetry equipment on the 09<sup>th</sup> January 2023, it was found that there was an incompatibility between the existing equipment and the new telemetry which prevented the F1 meter flow value from being transmitted from site into the WWU Scada system. During the period from the 09<sup>th</sup> of January 2023 to the 09<sup>th</sup> March 2023 the flow data was estimated by using the daily conditions and known profile days.

## 3. ERROR QUANTIFICATION AND IMPACT

As the error was a telemetry error, the metering systems were working as normal, and the flow values recorded via Danint. The resulting RBD data has been used to compare the estimated F1 daily flow values against the flow recorded in WWU's HPMIS database.

The error has been calculated as an over-registration of 1.03% (2.17 GWh) and is the difference between the estimated and HPMIS volumes.

It is recommended that the error be reconciled using the daily correction factors table in Appendix A.

## 4. CAUSES

Flow signal failure following the installation of new telemetry equipment. It has been found that the intrinsically safe barrier between the Omni flow computer and the new telemetry equipment was incompatible with the new installation, this has since been replaced.

## 5. RECOMMENDATIONS AND LEARNING

The error should be reconciled by applying the offtake daily flows detailed in Appendix A.

On any further telemetry replacement projects, it is imperative that the correct equipment is available on the day and that an NRO contingency plan is put in place to cover this possibility.

## REFERENCES

HPMIS Database.

## VERSION HISTORY

<i>Version</i>	<i>Changes</i>	<i>Author</i>	<i>Date</i>
0	First Issue	C. Litster	27/04/23

**APPENDIX A – Daily Corrected Flows**

<b>Gas Day</b>	<b>Daily Correction Factor</b>
09-Jan-23	0.980491
10-Jan-23	1.003436
11-Jan-23	1.016546
12-Jan-23	0.996456
13-Jan-23	1.007041
14-Jan-23	1.054035
15-Jan-23	0.903528
16-Jan-23	0.995019
17-Jan-23	1.170656
18-Jan-23	0.976376
19-Jan-23	1.000933
20-Jan-23	0.986320
21-Jan-23	1.008111
22-Jan-23	1.000005
23-Jan-23	0.994195
24-Jan-23	0.997209
25-Jan-23	0.998122
26-Jan-23	1.001072
27-Jan-23	1.001574
28-Jan-23	0.998468
29-Jan-23	0.994507
30-Jan-23	1.010088
31-Jan-23	1.003890
01-Feb-23	1.000239
02-Feb-23	0.962598
03-Feb-23	1.012664
04-Feb-23	0.972663
05-Feb-23	1.017863
06-Feb-23	0.722452
07-Feb-23	0.989173

<b>Gas Day</b>	<b>Daily Correction Factor</b>
08-Feb-23	1.006904
09-Feb-23	0.998765
10-Feb-23	1.004539
11-Feb-23	0.994872
12-Feb-23	1.079198
13-Feb-23	1.062323
14-Feb-23	0.996976
15-Feb-23	1.029896
16-Feb-23	0.972104
17-Feb-23	1.002055
18-Feb-23	1.002748
19-Feb-23	1.000574
20-Feb-23	0.995529
21-Feb-23	0.994685
22-Feb-23	0.691338
23-Feb-23	1.004436
24-Feb-23	1.001230
25-Feb-23	1.014773
26-Feb-23	1.014537
27-Feb-23	1.012034
28-Feb-23	1.000863
01-Mar-23	1.000962
02-Mar-23	1.000858
03-Mar-23	1.007728
04-Mar-23	1.003542
05-Mar-23	0.976246
06-Mar-23	1.015082
07-Mar-23	0.997434
08-Mar-23	1.009230
09-Mar-23	1.001774