

METER ERROR REPORT**FINAL**

Reconcile?	Y
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Safety Issue?	N
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Thesis Report No.	
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1. EXECUTIVE SUMMARY

SITE NAME	DEANSHANGER
LDZ	EM
START DATE (actual)	03/12/2014
LAST GOOD DATE	03/12/2014
END DATE	04/12/2014
SIZE OF ERROR (No reconciliation required if under 0.1%)	407.32% (25200 scm)
ESTIMATE – Y/N?	Y
ROOT CAUSE	Failure of meter
ANALYSIS	The rationale applied is declared in the body of this document
METER TYPE	Turbine
AUTHOR	Andy Finch
CHECKED BY	Sue Phillips and Jeanette Gregory

2. BACKGROUND

Gas is supplied to part of the East Midlands Network from Scotia Gas Networks via the NGGD-owned Deanshanger Inter-LDZ installation. The site comprises one turbine meter system.

On the 3rd December 2014 at approx. 09:00 hours, the meter failed. National Grid Gas Distribution System Operator subsequently declared estimated daily volumes. In retrospect, and outside (D+5), it was decided that the estimates were not as appropriate as they might have been for Gas Days 03/12/2014 and 04/12/2014.

The Measurement and Process Group of Network Integrity was subsequently contacted by the System Operator so that what was deemed to be erroneous estimates could be reconciled outside the (D+5) process using the MER process.

3. ERROR QUANTIFICATION AND IMPACT

Using appropriate Distribution National Control System (DNCS) SCADA system historic profile data for this installation, the System Operator was able to revisit the original estimates and re-declare more appropriate revised values.

The following table shows the original estimates, the revised values, the errors and the required correction factors for the period in question:-

Gas Day	Original Declaration (Mcm)	Re-declaration (Mcm)	Error (Mcm)	Required Correction Factor
03/12/2014	0.00410	0.0167	0.0126	4.073170732
04/12/2014	0.00410	0.0167	0.0126	4.073170732

Table 1- Daily Correction Factors

4. CAUSES

The turbine meter failed.

5. RECOMMENDATIONS AND LEARNING

Review the operating envelope of the measurement system and determine whether or not the system remains appropriate for its duty.

Review the maintenance regime.

Consider the possibility of retaining an appropriate spare meter in a secure location.

Review the logic and decisions taken that lead to the original estimates and the need to re-visit the declarations outside the (D+5) period.

Consider whether or not the Inter-LDZ transfer is still required to be an active installation.

REFERENCES

Distribution National Control Centre
DNCS flow profiles
Network Technician
T/PR/ME/2 parts 1 to 3
Measurement and Process Group of Network Integrity

VERSION HISTORY

<i>Version</i>	<i>Changes</i>	<i>Author</i>	<i>Date</i>
<i>Rev O</i>	<i>Original</i>	<i>Andy Finch</i>	<i>26/03/2015</i>

DISTRIBUTION

Asset Owner
Energy Performance
Measurement and Process Group
Asset Strategy
DNCC
Measurement Assurance Group of NGGT
Joint Office of Gas Transporters