

DECEMBER 22 - GEMSERV

# MEASUREMENT ERROR REGISTER DATA QUALITY

13<sup>TH</sup> DECEMBER 2022

PETE RATLEDGE



**Gemserv**

MAKING THINGS THAT MATTER WORK BETTER

# MEASUREMENT ERROR REGISTER DATA QUALITY



Unique Reference Number	Offtake	LDZ	Downstream Transporter	Significance Low <30GWH Medium >=30<50GWH High >=50G	Declared volume of error (MCM)	Estimated quantity of error (GWh)	Discovered	Error First Notified	First Gas Day Where Error Present	Last Known Good Gas Day	Last Gas Day Where Error Present	Latest Notification Update	Latest Error Status	Live/ Closed	Invoice issued by Xosen	PAFA Notes
<a href="#">SW030</a>	Kenn MTB	SW	Wales & West Utilities - DN	0	0	0	19/03/2013	14/05/2013	16/03/2013		19/03/2013	14/05/2013	No Rec Required	Closed	27/08/2014	Zero value (Significance) Zero value (MCM) Zero value (qWh)
<a href="#">SW023</a>	Pucklechurch MRA	SW	Wales & West Utilities - DN	Low	0.14389	1.58	13/08/2012	28/08/2012	01/06/2012		14/06/2012	16/07/2013	Invoiced	Closed	27/12/2013	
<a href="#">EA011</a>	Matching Green MTA	EA	National Grid - DN	Null	0	0	17/04/2012	20/08/2012	17/04/2012		17/04/2012	25/11/2013	No Rec Required	Closed		Null value (Significance) Zero value (qWh)
<a href="#">SC006</a>	Aberdeen MTA	SC	Scotia Gas - DN	High	292	3223	10/08/2010	24/09/2010	21/07/2009		10/08/2010	03/12/2013	Invoiced	Closed	24/10/2013	Is the gWh value (3,223) here correct?
<a href="#">SC008</a>	Bathgate UMA	SC	Scotia Gas - DN	Low	0.025	0.3	26/05/2010	06/01/2011	11/06/2007		26/05/2010	03/12/2013	No Rec Required	Closed		
<a href="#">SC012</a>	Kinknockie MRA/MRB	SC	Scotia Gas - DN	Low	2.14173	23.8	04/09/2012	05/09/2012	01/04/2007		07/02/2012	18/12/2013	Invoiced	Closed		
<a href="#">SW024</a>	Evesham MTB	SW	Wales & West Utilities - DN	Low	0.370368	4.03	04/09/2012	11/09/2012	28/07/2011		01/08/2012	18/12/2013	Invoiced	Closed		
<a href="#">SW029</a>	Kenn MTA and Kenn MTB	SW	Wales & West Utilities - DN	Low	0.28666	3.119045	19/03/2013	14/05/2013	20/03/2012		16/03/2013	19/02/2014	Invoiced	Closed		
<a href="#">WM013</a>	Hydes Pastures MTB	WM	National Grid - DN	0.03% (NULL)	0.007901	0	10/01/2012	16/05/2012	18/02/2011		20/07/2012	25/02/2014	No Rec Required	Closed	24/10/2013	Invalid value (Significance)
<a href="#">NO010</a>	Coldstream MTA	NO	Northern Gas Networks - DN	Low	0.299868	1.737	22/10/2013	15/02/2014	00/01/1900		30/10/2014	11/03/2014	Invoiced	Closed	27/08/2014	Invalid value (Date value of 1900) (First Gas Day)
<a href="#">SQ002</a>	Braishfield A MTA	SO	Scotia Gas - DN	Low			21/01/2010	25/08/2010	31/12/2009		21/01/2010	24/03/2014	No Rec Required	Closed		No data (MCM) No data (gWh)
<a href="#">SQ011</a>	Braishfield A MTA	SO	Scotia Gas - DN	Low	0.413	4.5	30/06/2011	26/10/2011	01/10/2010		30/06/2011	25/03/2014	Invoiced	Closed		
<a href="#">EA012</a>	Bacton MRD	EA	National Grid - DN	Low	0.151	1.62	04/08/2013	09/08/2013	27/05/2013		04/08/2013	26/03/2014	Invoiced	Closed	26/03/2014	
<a href="#">SQ004</a>	Braishfield A MTA	SO	Scotia Gas - DN	Low	0.433	4.7	30/09/2010	10/01/2011	21/01/2010		30/09/2010	26/03/2014	Invoiced	Closed	28/04/2014	
<a href="#">SE004</a>	Farningham MTA	SE	Scotia Gas - DN	Low			17/02/2010	10/01/2011	17/02/2010		17/02/2010	01/04/2014	No Rec Required	Closed	27/01/2016	No data (MCM) No data (gWh)
<a href="#">NO009</a>	Asselby 7B MRB	NO	Northern Gas Networks - DN	Low	0.28	3.142	25/10/2010	18/02/2011	tbx		04/11/2010	11/04/2014	Invoiced	Closed	28/04/2014	Invalid value of tbx (First Gas Day)
<a href="#">SQ005</a>	Braishfield B MTB	SO	Scotia Gas - DN	Low	0.118	1.3	15/06/2010	13/01/2011	26/01/2010		15/06/2010	11/04/2014	Invoiced	Closed	28/04/2014	
<a href="#">SO006</a>	Braishfield B MTR	SO	Scotia Gas - DN	Low	0.015	0.2	27/04/2010	14/01/2011	25/04/2010		27/04/2010	11/04/2014	Invoiced	Closed	28/04/2014	

Document Title: 'Measurement Error Register (20 October 2022)':

[https://www.gasgovernance.co.uk/sites/default/files/ggf/page/2022-10/Measurement%20Error%20Register\\_0.xlsx](https://www.gasgovernance.co.uk/sites/default/files/ggf/page/2022-10/Measurement%20Error%20Register_0.xlsx)

# ISSUES AND IMPACTS



## ❖ Issues

- ❖ The data in the register is not complete and consistent for all measurement errors documented.
- ❖ The Risk Model uses performance history in terms of impacts and frequency of occurrence to evaluate the risk.
- ❖ It is recognised that some data contained within the table is >10 years old and attempting to 'fill in the gaps' or reconcile data maybe challenging (or simply not possible)
- ❖ To ensure consistency data standards need to be applied on the historical data (where possible) and on that provided going forwards
- ❖ Data needs to be provided for all events regardless of their impact

## ❖ Impacts

- ❖ The Risk Tool utilises data provided within the Measurement Error Register and considers elements such as the frequency of events, the impacts of the events and the length of time of events. Complete and accurate data will improve risk evaluations.

# NEXT STEPS



## ❖ Recommendations

- ❖ PAFA to issue a Request for Information (RFI) to the Distribution Networks (DNs) to review and complete the data in the Measurement Error Register (ideally back for a minimum of 5 years)
- ❖ PAFA and Distribution Networks to work together to understand the availability of data, best practice and what data standards might be applied going forwards to ensure accuracy and consistency in the Register going forwards.

## ❖ Desired Outcomes

- ❖ Existing Register dataset has been verified as being as accurate and complete as possible
- ❖ Best practice and standards agreed for data collection and collation going forwards
- ❖ The Risk Tool utilises the most accurate and complete information going forwards to support and assist with future risk assessments.

# SUPPORTING DETAIL OF DATA QUALITY ISSUES 1



In reviewing the Measurement Error Report (MER) data published on the Joint Office website in October 2022 a number of potential data quality issues came to light of which are detailed at a high level below:

## **ISSUES IDENTIFIED:**

### **- Estimated Quantity of Error (GWh):**

There are a number of examples where further clarity is sought in respect of the GWh value present within the document, these include:

1/ No data is contained within the cell

2/ A value of 0 (zero) or NULL is contained within the cell (with a specific focus on instances with a Latest Error Status value of 'Invoiced' as opposed to a status value of 'No Rec Required' whereby it is assumed that zero or NULL values are valid)

3/ A value of 'Unknown' is contained within the cell

4/ A value of TBC (To Be Confirmed) is contained within the cell

5/ One instance whereby a value of 'See Report' is contained within the cell

# SUPPORTING DETAIL OF DATA QUALITY ISSUES 2



## ISSUES IDENTIFIED:

### - Declared volume of error (MCM):

There are a number of examples where further clarity is sought in respect of the MCM value present within the document, these include:

1/ No data is contained within the cell

2/ A value of 0 (zero) or NULL is contained within the cell (with a specific focus on instances with a Latest Error Status value of 'Invoiced' as opposed to a status value of 'No Rec Required' whereby it is assumed that zero or NULL values are valid)

3/ A value of 'Unknown' is contained within the cell

4/ A value of TBC (To Be Confirmed) is contained within the cell

5/ One instance whereby a value of 'See Report' is contained within the cell



# SUPPORTING DETAIL OF DATA QUALITY ISSUES 3

## ISSUES IDENTIFIED:

### - Significance (Low <30GWh / Medium >=30<50GWh / High >=50GWh):

There are a handful of examples where further clarity is sought in respect of the significance value present within the document, these include:

- 1/ A value of 0 (zero) or NULL is contained within the cell
- 2/ An erroneous value of '0.03% (NULL)' is contained within the cell

### - Date value of 00/01/1900:

There are a multiple instances where a date value of 00/01/1900 is contained within a cell

### - No date value present:

There are a small number of instances where no data is contained within a cell whereby a date value is expected

### - Usage of TBC / Unknown / Not Known / n/a:

There are a multiple instances where a value of either TBC (To Be Confirmed), Unknown, Not Known or n/a (not applicable) are present within the data

### - Invoice issued by Xoserve:

There are a handful of examples whereby a perceived erroneous value of 'Biomethane' is contained within the cell



GEMSERV

[PAFA@GEMSERV.COM](mailto:PAFA@GEMSERV.COM)

---