

UnAccounted for Gas Report

National Grid
Gas Transmission

May 2013

Target audience

Ofgem and other interested industry parties

About this document

This document sets out the work undertaken by National Grid Gas in its role as System Operator, to investigate potential causes of UnAccounted for Gas. It is published to meet

- a. (to 31 March 2013) Special Condition C29: Requirement to undertake projects to investigate the causes of UnAccounted for Gas (UAG), and
- b. (from 1 April 2013) Special Condition 8E: Requirement to undertake UAG Projects to investigate the causes of Unaccounted for Gas (UAG)

If you have any feedback or questions on this document please get in contact with us at:
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1. Introduction

1. This report provides an update on our activity in investigating potential causes of UnAccounted for Gas (UAG) since the February 2013 report and is the final report for 2012/13 up to and including 31 March 2013. Work continues as planned and there have been no major changes in the trend of UAG (the quantity of gas required to balance the NTS i.e. the difference between NTS gas inputs and outputs.) This report should be read in conjunction with the previous report for the explanation of terms and techniques used.
2. The previous report, "UnAccounted for Gas Report: February 2013" published 31 January 2013, is available via the following link:

<http://www.nationalgrid.com/uk/Gas/soincentives/SupportingInfo/>

3. This report discharges National Grid Gas's (NGG's) responsibilities under Special Condition C29 (to 31 March 2013) of our licence "Requirement to undertake projects to investigate the causes of UnAccounted for Gas (UAG)", available via the following link:

<http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/SystOpInc ent/Documents1/Direction.pdf>

and Special Condition 8E (from 1 April 2013) "Requirement to undertake UAG Projects to investigate the causes of Unaccounted for Gas (UAG)", available via the following link:

<http://epr.ofgem.gov.uk/Pages/EPRInformation.aspx?doc=http://epr.ofgem.gov.uk/EPRFiles/National+Grid+Gas+Plc+-+Special+Conditions+Consolidated+-+Current+Version.pdf>

2. Our activities February 2013 to end of March 2013

1. NTS Shrinkage continues to steadily decrease on an annual basis and the total for 2012/13 was the lowest for 10 years. The following Figure 1 shows the Shrinkage values for previous years and the breakdown of Shrinkage into its component parts Own Use Gas (OUG), CV Shrinkage (CVS) and Unaccounted for Gas (UAG).

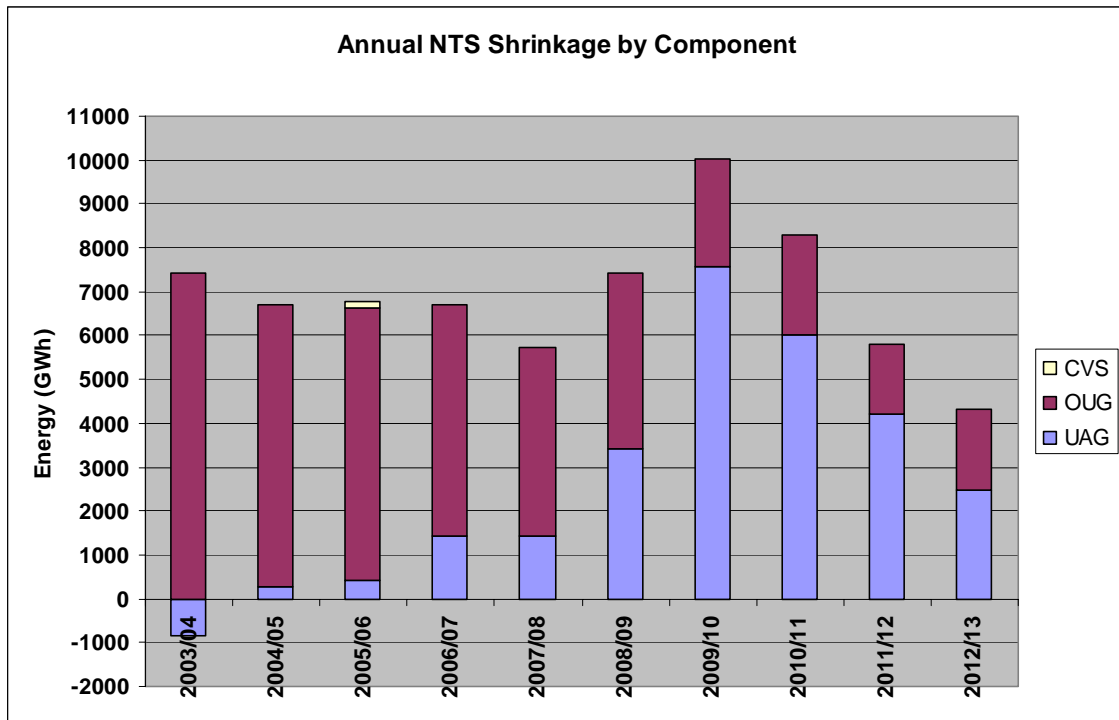


Figure 1: Shrinkage for 2003/04 to 2012/13 inclusive.

2. NGG as System Operator (SO) for the National Transmission System (NTS) has a role in the identification and management of UAG.
3. In 2011/12 the total net UAG (i.e. adjusted for meter errors) was 4,357 GWh and for 2012/13 this has reduced to 2307 GWh. This was the lowest for 5 years as shown in Table 1 below.

	Assessed UAG GWh	Net Reconciled GWh	Corrected UAG (net of Reconciliations) GWh
2008/9	3531	-375	3156
2009/10	7551	-3178	4373
2010/11	5996	-1222	4774
2011/12	4305	52	4357
2012/13**	2478**	-171**	2307**

**includes some provisional information

Table 1: Cumulative magnitude of meter error reconciliation on Assessed UAG.

- In March 2013 Ofgem approved Modification Proposal 0398 - 'Limitation of Retrospective Invoicing and Invoice Correction (3 to 4 year solution)', with an implementation date of 1 April 2014. The UNC contains a 'Code Cut Off Date' which limits retrospective invoicing to a specified period (currently 4 years to 4 years and 365 days). With the implementation of Modification 0398, invoicing for charges associated with any date beyond the Code Cut Off Date are considered to be closed; any errors (charges or credits) discovered, and agreed, outside of the 4 year limit will not be reconciled. The implementation of this Proposal will impact Transporters in their ability to undertake future meter reconciliations. The revised timescales will reduce NGG's ability to target Shrinkage costs to those that incurred them.

Further information on this modification is available via the following links:

<http://www.gasgovernance.co.uk/03950398>

<http://www.ofgem.gov.uk/Licensing/GasCodes/UNC/Mods/Documents1/NG%20NTS%20Response%20to%20395%20and%20398%20Consultation.pdf>

- Since the last report, the monthly assessed UAG (which is the total volume of positive and negative UAG) values for November and December 2012 have been revised due to an IT issue at a terminal being resolved within the "Month plus 15" close out period. The assessed monthly UAG figures have remained around the same for the last 6 months and are shown in Figure 3 below.

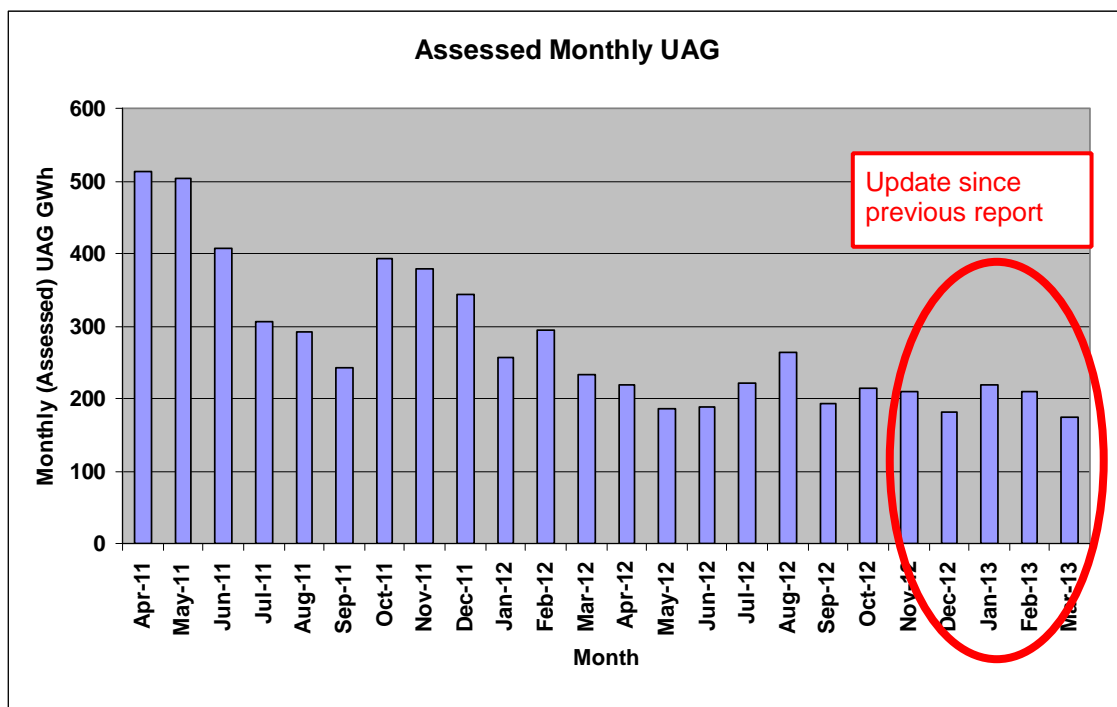


Figure 3: Assessed Monthly UAG April 2011 – March 2013

- Figure 4 shows that average daily UAG (yellow line) has been around 7.5 GWh/day since July 2012 and after a slight increase at the beginning of February has returned to a trend of slowly decreasing. Daily UAG data has been published on the National Grid website since October 2012 and Figure 4 has been taken from the website via the following link:

<http://www.nationalgrid.com/uk/Gas/Data/uagd/>

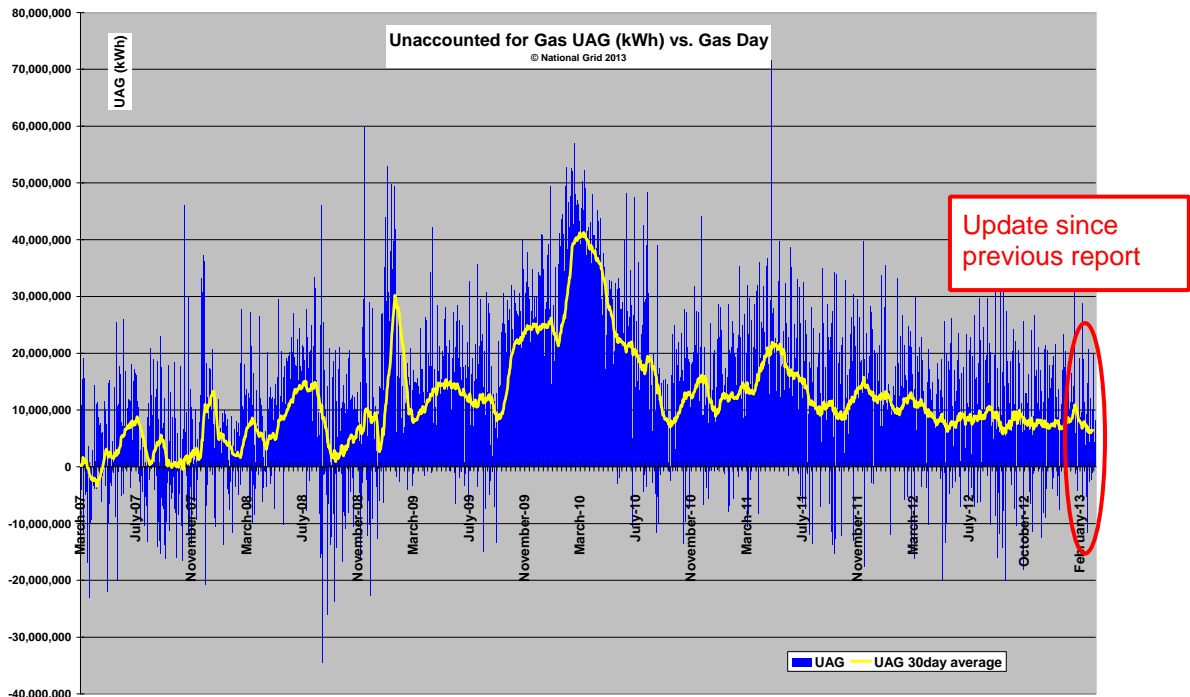


Figure 4: Assessed UAG from 2007 to March 2013 inclusive.

7. Significant effort has been put into continuing to refine our data centred techniques for the analysis of the system data in search of causal factors of UAG. A number of potential sources of UAG have been identified, although these are currently subject to further internal National Grid checks. Initial conversations have been held with owners of some of the affected assets in order to establish how to most effectively progress investigations so that remedial actions may be taken if appropriate.
8. Our site meter validation witnessing programme has made steady progress throughout the year. 2012/13 is the final year of our five year programme designed to visit all NTS to Local Distribution Zone (LDZ) Offtake sites. We have now completed 119 out of 121 Offtake site visits (including 48 Distribution sites visited prior to March 2009) involving all Network Operators. There are still a few NTS to LDZ sites which we have not visited owing to scheduling challenges between the asset owner and ourselves. We will complete these remaining sites at the next mutually convenient ME2 maintenance opportunity.

Year / Site Type	DNO Off Takes	Third Party	Terminal / Storage	Total
2009/10	25	8	11	44
2010/11	17	8	7	32
2011/12	16	6	9	31
2012/13	16	13	5	34

Table 2: Numbers of Meter Validations Witnessed by year

9. There have been a number of discussions on UAG at various industry fora. Regular updates have been given on the progress of NGG's data centred techniques and a number of asset owners have agreed to proactively work with National Grid to reduce UAG. There have been discussions on items such as the impact of introducing new metering technology, Ultra-Sonic Meters (USMs), on UAG and on the confidence in the quality of data which is being analysed by the data centred techniques.

3. Future reports

1. The next UAG report is due 1 October 2013 and then every 6 months until 31 March 2021.
2. Future reports will contain more summary detail on discussions on UAG at industry fora and how UAG projects are being taken forward to reduce UAG.