## Query relating to the use of historic data to calculate the Balancing Number Calculation

Whilst the Balancing Number has been calculated using the training period, it would appear that an old data set has been utilised.

230.31	30.04	01.70	2.20	100.40
67.42	1.60	10.62	0.27	54.93
361.46	12.23	22.84	0.58	325.81
3,685.55	751.88	677.43	) 21.30	2,234.95

The extract above shows that a figure of 677.43GWh for iGT CSEPs has been used to calculate the balancing number.

Historic	Years: 2009	/10	Historic	Years: 2010	)/11	Historic	rears: 2011	/12
LDZ	SSP UG	L SP UG	LDZ	SSP UG	L SP UG	LDZ	SSP UG	L SP UG
EA	30.686	4.083	EA	27.290	3.435	EA	23.892	2.787
EM	95.415	9.696	EM	85.871	8.996	EM	76.325	8.296
NE	3.696	0.119	NE	4.258	0.210	NE	4.819	0.302
NO	14.236	1.674	NO	12.456	1.417	NO	10.675	1.159
NT	45.909	12.334	NT	39.153	10.484	NT	32.395	8.633
NW	24.894	5.851	NW	24.249	5.694	NW	23.604	5.537
SC	53.551	38.437	SC	50.286	37.733	SC	47.020	37.029
SE	5.963	0.062	SE	8.696	0.349	SE	11.430	0.656
SO	34.519	0.035	SO	36.564	0.328	SO	38.610	0.673
SW	1.675	0.000	SW	9.708	0.013	SW	18.357	0.783
WM	42.856	6.143	WM	37.863	5.199	WM	32.868	4.255
WN	6.572	0.604	WN	6.709	0.620	WN	6.845	0.636
WS	8.793	0.524	WS	9.094	0.562	WS	9.395	0.600
Total	368.765	79.562	Total (	352.195	75.040	Total (	336.235	71.347
			<b></b>					

From the IGT CSEPs Jun 2013 Training.xlsm spreadsheet the historical results for iGT CSEP are 368.765GWh, 352.195GWh and 336.235GWh. This averages at 353.393GWh.

listoric	Years: 2009	9/10	Historic Y	/ears: 2010	)/11	Historic Y	ears: 2011	/12
LDZ	S SP UG	LSP UG	LDZ	SSP UG	LSP UG	LDZ	SSP UG	LSP U
EA	63.031	4.029	EA	59.634	3.381	EA	56.237	2.733
EM	175.929	5.777	EM	166.385	5.077	EM	156.839	4.376
NE	10.240	0.041	NE	10.801	0.133	NE	11.363	0.224
NO	33.281	2.772	NO	31.501	2.515	NO	29.720	2.257
NT	62.716	12.932	NT	55.960	11.082	NT	49.202	9.232
NW	59.823	9.655	NW	59.178	9.498	NW	58.533	9.341
SC	111.909	8.215	SC	108.644	7.511	SC	105.379	6.807
SE	17.098	3.331	SE	19.832	3.618	SE	22.566	3.925
SO	14.028	0.232	SO	16.073	0.525	SO	18.118	0.870
SW	45.974	0.000	SW	54.007	0.000	SW	62.656	0.574
WM	66.741	6.514	WM	61.748	5.570	WM	56.753	4.626
WN	10.482	0.604	WN	10.618	0.620	WN	10.755	0.636
WS	22.543	0.972	WS	22.843	1.010	WS	23.144	1.048
Total	693.793	55.074	Total	677.224	50.539	Total (	661.264	46.650

677.43 GWh is the average of the figures utilising a 2011 estimate. The balancing number is therefore understated by 677.43 GWh – 353.393 GWh = 324.037 GWh ( $\pm 7.7$ m)

### Query relating to the erroneous subtraction of 'temporary UG' from the Total Initial UG

#### **AUGS Definition:**

3.3 Permanent and Temporary Unidentified Gas

**Permanent** UG is consumed in an unrecorded fashion and costs are never recovered **Temporary** UG is initially consumed in an unrecorded fashion, but volumes are later calculated directly or estimated and the cost is recovered via backbilling.

When calculating the UG for 2014/15 the AUGE has used up to date metered volume data for the formula years 2009-2011 to form the training period. The Total Initial UG (GWh) for the 2014/15 AUG year is derived by seasonally normalising the training period and averaging the result.

Temporary UG is recovered via backbilling (reconciliation).

Backbilling (reconciliation) has completed on the training period (this is precisely the reason the AUGE has selected this period).

Therefore there can be no Temporary UG contained within the training period.

Therefore there should be no temporary UG subtracted from the Total Initial UG (GWh) to derive permanent UG (GWh).

For the training period 2009-2011 the Total Initial UG (GWh) = Permanent UG (GWh) by definition.

It may be necessary for the AUGE to calculate the permanent / temporary UG in the 2014/15 but any temporary UG would need to be **ADDED** to the Total Initial UG (GWh) from the training period to derive the Total UG for the forecast year.

This issue erroneously reduces the Total Permanent UG by 2,078.59GWh (£49.7m).

# Query relating to the inclusion of erroneously large AQ values in the calculation of Unregistered Consumption

There are a small number of erroneously large AQs contained within Snapshots 7, 6 and 3 and utilised for consumption calculation by the AUGE. These sites have a proposed AQ in excess of 1TWh (up to 9.3TWh). To put this in perspective a site with an annual consumption of 1TWh would consume c£24m of gas annually at wholesale cost – a site with an annual consumption of 9.3TWh would consume over £220m!



We can see the erroneously included AQs clearly in the chart below.

From the AUGE's own analysis the typical average LSP <12 months unregistered AQ as a proportion of total LDZ AQ is around 3%. Yet with these erroneous sites included results are recorded of 29.13% and 67.48% for NW, 65.14% and 65.26% for SW, 23.7% and 22.9% for NT and 21.5% and 12.15% for SC. For the NE LDZ a result of 123% (which is impossible) is recorded.

Contained within Snapshot 7 consumption calculation are the following erroneous AQs:

23310825	NF	9 323 119 002
00010710	NT	0,020,110,002
23312716	INT	3,246,041,209
23309461	NW	9,322,529,308
23312644	SC	1,049,726,204
23312671	SW	4,174,424,201

These 5 sites distort the total AQ by a total of 27.1TWh; DM total AQ is 86TWh therefore these 5 sites (assuming the AQ is correct) account for over 30% of the DM market – this is not remotely feasible.

Contained within Snapshot 6 consumption calculation are the following erroneous AQs:

23312716	NT	3,246,041,209
23313002	SC	1,125,506,804
23312644	SC	1,049,726,204
23312671	SW	4,174,424,201

3 of these 4 sites are the same erroneous sites as contained within Snapshot 7; the total AQ used for consumption calculation is overstated by the total of 9.6TWh. The effect of the inclusion of these 6 unique sites into the consumption calculation is demonstrated below.



<12 Months Unregistered UG Calculations

The inclusion of these erroneously large AQs distorts the calculation of <12 months unregistered UG. The largest error is contained within Snapshot 7 followed by Snapshot 6. As you can see from the chart above this leads the consumption of period 6 (Snapshot 6 -7) being nearly 10 times the size of the average of the other 5 periods.

The effect of this is massively significant.

- The inclusion of these results takes the LSP permanent <12 Unregistered to 325.8GWh and the temporary to 1,954.6GWh; which is larger than the Total UG calculated for AUG Year 2011.
- This in turn takes the Total Permanent UG recorded for AUG Year 2011 to a negative figure (impossible).

- As a representative illustration, if period 6 was the average of periods 1-5 then the result would be 130.7GWh and 784.4GWh for permanent and temporary <12 months Unregistered respectively.
- In this example, the total effect of the inclusion of these 6 erroneous sites is to under record the Total Permanent UG figure by over 1TWh (>£24m).

In addition a site with an AQ >58,000,000KWh is mandatory DM and therefore any permanent UG attributed to these sites should be allocated (via the AUG Table) to the DM sector. The interim Unidentified Gas Volumes for 2014/15 has 0 currently attributed to Larger DM SPCs.

### Query relating to the calculation of consumption from CSEP

In using aggregate AQ to calculate CSEP consumption the AUGE has not taken into account partially consuming sites (as per other calculations of consumption) as such, the AUGE is overstating the consumption from CSEP.