

**Additional Analysis – Network Revised SND Values**

**Background :**

The annual estimates of aggregate NDM SND for 2006/07 have changed only for the six LDZs: SC, SE, SO, WN, WS and SW.

The basis used is same approach as applied in the original representation and the previous analysis presented at DESC on 25<sup>th</sup> July.

$$\frac{ALP_{0607}(1+WCF_{0607} * DAF_{0607}) - ALP_{0506}(1+WCF_{0506} * DAF_{0506})}{ALP_{0506}(1+WCF_{0506} * DAF_{0506})}$$

This estimate of scaling factor in each LDZ is once again computed as follows:

$$\text{Overall unscaled \% over-allocation} = \frac{\sum (\text{Aggregate EUC AQ} \times \text{Percentage Over-Allocation in EUC})}{\sum (\text{Aggregate EUC AQ})}$$

$$\text{Estimated scaling factor} = 100 / (100 + \text{overall unscaled \% over-allocation})$$

The extent of potential WCF bias is once again taken to be the percentage difference between the revised annual aggregate NDM SND for 2006/07 and the corresponding annual aggregate NDM SND in 2005/06.

The analysis has used a LDZ specific potential WCF bias. This potential bias figure has only changed in the six aforementioned LDZs.

LDZ	Potential WCF bias
SC	2.9%
NO	4.9% (unchanged)
NW	6.0% (unchanged)
NE	4.6% (unchanged)
EM	5.5% (unchanged)
WM	7.9% (unchanged)
WN	0.12%
WS	-0.79%
EA	6.7% (unchanged)
NT	8.7% (unchanged)
SE	3.6%
SO	5.2%
SW	2.0%

What these potential bias figures indicate is that the different network specific annual aggregate NDM SNDs for 2006/07 is still less than the corresponding annual aggregate NDM SND applicable in the current gas year 2005/06, except for WS LDZ. In other words the potential WCF bias is still positive in all except WS LDZ. When the computations are undertaken, the following estimates of scaling factor ensue:

LDZ	Estimated scaling factor
SC	0.968009
NO	0.950123
NW	0.935859
NE	0.950927
EM	0.952109
WM	0.913320
WN	0.988827
WS	1.009434
EA	0.936775
NT	0.917737
SE	0.961975
SO	0.945943
SW	0.980912

The scaling differs only in the six affected LDZs. Note the scaling greater than one corresponding to the potential WCF bias of different sign in WS LDZ.

The overall scaled allocations of NDM demand may then be assessed in terms of over or under allocation, for these particular instances of LDZ specific potential WCF bias. The results, summarised for the 01B EUCs and all other EUCs in aggregate (i.e. the sector that is reconciled by difference vis-a-vis the sector that is subject to reconciliation), are as follows:

SCALED % Over (+) or Under (-) Allocations		
LDZ	01B EUCs	All "Non-Domestic" EUCs
SC	0.18%	-0.42%
NO	-0.27%	0.78%
NW	-0.21%	0.60%
NE	-0.79%	1.93%
EM	-0.70%	1.86%
WM	-0.33%	0.73%
WN	-0.70%	1.63%
WS	-0.76%	2.40%
EA	-0.37%	0.98%
NT	0.09%	-0.18%
SE	-0.26%	0.86%
SO	-0.21%	0.55%
SW	-0.67%	1.82%
Overall	-0.32%	0.84%

**Conclusion:**

Once again these scaled estimates of over/under allocation are small. Because the effect of WCF bias and scaling factor act in opposition and tend to be of similar magnitude for weather sensitive EUCs (such as 01B), the overall **scaled** effect on the 01B EUCs (i.e. the so called small supply points) is very small and is different from the unscaled values. Moreover, the results are LDZ dependent. In the six LDZs that have changed annual aggregate NDM estimates the effect of this altered set of potential WCF bias values differs from LDZ to LDZ.

The reason why in many LDZs the altered (larger) aggregate NDM SND values result in a slightly worse scaled allocation position (for the 01B EUCs, for example) is that each LDZ shows its own specific relationship with potential WCF bias and this relationship is a complex one.

The analyses previously presented provide two further data points for each of the six affected LDZs, giving potential WCF bias and resultant over/under allocation to the 01B EUC in the LDZ. These plus, the results of the new analysis may be usefully compared to ascertain the pattern of behaviour in each of these LDZs. The first row in each table is the analysis presented here with revised Network views of SND, the second row is the LDZ analysis presented earlier, and the final row is that using a national aggregate bias and SND.

LDZ: SC	
Potential WCF Bias	Ensuing scaled allocation to 01B
2.9%	+0.18%
4.2%	+0.29%
6.4%	+0.48%

LDZ: SO	
Potential WCF Bias	Ensuing scaled allocation to 01B
5.2%	-0.21%
6.4%	-0.11%
7.1%	-0.05%

LDZ: WS	
Potential WCF Bias	Ensuing scaled allocation to 01B
-0.79%	-0.76%
6.3%	-0.30%
6.4%	-0.29%

LDZ: SE	
Potential WCF Bias	Ensuing scaled allocation to 01B
3.6%	-0.26%
6.4%	-0.04%
8.1%	+0.08%

LDZ: WN	
Potential WCF Bias	Ensuing scaled allocation to 01B
0.12%	-0.70%
5.0%	-0.13%
6.4%	+0.03%

LDZ: SW	
Potential WCF Bias	Ensuing scaled allocation to 01B
2.0%	-0.67%
6.4%	-0.36%
7.0%	-0.32%