RESPONSE BY GAS TRANSPORTERS TO REPRESENTATION RECEIVED ON NDM PROPOSALS FOR 2006/07

Background :

Gas Transporters are collectively obliged under Section H of the Uniform Network Code to publish annual proposals for NDM Profiling and Capacity Estimation Parameters by the end of June.

Accordingly, in June 2006, NDM Profiling and Capacity Estimation Proposals for 2006/07 (dated 20th June 2006) were published electronically on the xoserve website. The published material comprised the proposals document and appendices, along with a set of additional electronic files containing the proposed NDM profiling and capacity estimation parameters and other supporting information.

In accordance with Section H1.8.3 of the Uniform Network Code, system users were invited to submit representations on the NDM proposals up to but not later than 15th July. As of that date one such representation had been received, from British Gas Trading. This note is a formal response to the representation received.

For information, the timetable for consultation on the annual NDM proposals is set out in Section H of the Uniform Network Code. Key dates are as follows:

- Publication of NDM proposals — by 30th June
- Users to submit any representations — by 15th July
- Review of representations, consultation as appropriate (Demand Estimation Sub-Committee (DESC) meeting on 25th July to consider representations received) — 16th July to 14th August
- Final proposals submitted (date X) — by 15th August
- Transporter or User application for disapproval to Ofgem (date Y) — by 5 business days of date X
- Ofgem determination (if required) — by 5 business days of date Y

REPRESENTATION ON NDM PROPOSALS FOR 2006/07 :

The single representation received presents an analysis undertaken by British Gas Trading which seeks to show the impact of the aggregate NDM SND values proposed for 2006/07 on NDM demand attribution if the forecast NDM SND turns out to be too low.

British Gas Trading (BGT) suggests that the reduction in aggregate NDM SND for 2006/07 from that of 2005/06 is too great to be credible and state that it is not consistent with historical data.

BGT presents an analysis which suggests an over allocation of demand on an unscaled basis should the proposed aggregate NDM SNDs prove to be too low (specifically if the aggregate NDM SNDs that applied in 2005/06 applied in 2006/07 as well).

Accordingly, BGT proposes that it would be inappropriate to go ahead with the proposed values of aggregate NDM SND and therefore expresses the opinion that the current NDM proposals for 2006/07 should not be implemented.

Comments on Analysis Undertaken by British Gas Trading:

The comparative analysis undertaken by BGT makes use of a simplified formula to assess the effect on the allocation of NDM demand if the proposed aggregate NDM SND proves to be too low (specifically if it proves to be too low by a percentage of (1.00-0.94)/0.94 = 6.38%, over the whole gas year on average).

The formula quoted is:

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

While this is a simplification that takes no account of different day of the week patterns in different years it is a reasonable approach in the circumstances.

However, the ALP term (in either year referenced) is a dimensionless entity which expresses the shape of a profile of demand under seasonal normal conditions. Thus, there is an error in this formula in that the first ALP term referenced should be to gas year 2006/07. Accordingly, the appropriate formula to use (albeit simplified) would be:

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

When this correction is applied, the **unscaled** over allocations of demand for each EUC is as set out in Table 1 in Attachment 3 (note this is for the specific circumstances of aggregate NDM SND over gas year 2006/07 being on average 6.38% lower than in gas year 2005/06, leading to a corresponding WCF bias). For information, Attachment 3 also provides the percentages computed by BGT (Table 2 of Attachment 3).

As also acknowledged in BGT's representation, the actual allocations to EUCs depend also on the scaling factor. Using current levels of NDM EUC AQs (the aggregate NDM EUC AQ values that applied on 1st July 2006 on the Gemini system have been used here - see Table 3 in Attachment 3) it is possible to assess the corresponding overall scaling that would apply in each LDZ. It must be noted here that this would be an overall average SF corresponding to the stated overall average WCF bias.

This estimate of scaling factor in each LDZ would be computed as follows:

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

Estimated scaling factor = 100 / (100 + overall unscaled % over-allocation)

When these computations are undertaken *and the corrected formula is applied in the first instance to compute the unscaled percentage over-allocations*, the following estimates of scaling factor ensue:

LDZ	Estimated scaling factor
SC	0.935676
NO	0.936456
NW	0.932580
NE	0.934952
EM	0.944554
WM	0.926555
WN	0.931505
WS	0.939915
EA	0.939425
NT	0.936708
SE	0.936940
SO	0.935531
SW	0.941108

The overall scaled allocations of NDM demand may then be assessed in terms of over or under allocation, for this specific case of WCF bias (+6.38%). 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	0.48%	-1.13%
NO	-0.19%	0.55%
NW	-0.18%	0.53%
NE	-0.72%	1.77%
EM	-0.65%	1.72%
WM	-0.46%	1.02%
WN	0.03%	-0.07%
WS	-0.29%	0.91%
EA	-0.39%	1.03%
NT	-0.15%	0.31%
SE	-0.04%	0.14%
SO	-0.11%	0.28%
SW	-0.36%	0.97%
Overall	-0.24%	0.63%

It is clear that 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 very different from the unscaled values. Moreover, the results are LDZ dependent and, as may be seen, produce a mixture of over and under allocations in different LDZs.

EUC model errors on their own could lead to similar levels of allocation error in the 01B EUCs dependent on the individual LDZ. For example, the best estimate strand of NDM sample analysis which provides an indicative measure of EUC model error, is presented in Appendix 13 of the NDM proposals for 2006/07. The best estimate analysis indicates a winter 2005/06 error for the 01B EUCs that ranges **from -0.6% to +1.1%** in the various LDZs. In the best estimate analysis, for other "non-domestic" EUCs, larger percentage errors apply (see Table A13.24 in Appendix 13 of NDM report).

In addition any relative AQ error (e.g. some EUCs having AQs that are too high or too low relative to other EUCs) will lead to a over allocation to those EUCs with AQs that are too high and an under allocation to those EUCs with AQs that are too low, and this will tend to be in direct proportion to the AQ error. It would be optimistic to suppose that all NDM EUC AQs are within (say) ±1% of their true values. Thus, these allocation errors due to potential WCF bias (on account of the proposed aggregate NDM SNDs for 2006/07) must be seen in the overall context of various potential sources of error (i.e. EUC model error, AQ error and WCF bias) that may affect NDM demand attribution.

Extension of the Analysis to a LDZ Specific Basis:

In BGT's representation, the assessment of potential SND error and hence WCF bias (of 0.06/0.94=6.38%) was based on overall aggregate NDM SND in all LDZs.

In reality the NDM demand attribution formula is applied separately to each LDZ. It would therefore be illuminating to extend the analysis to a LDZ specific basis. The ratio of the sums over the year of aggregate NDM SND in the LDZ for 2005/06 and 2006/07 provides the potential WCF bias in an equivalent manner to the BGT analysis.

i.e. potential WCF bias in each LDZ (if 2006/07 NDM SNDs are wrong) = (1 – X) / X , where for each LDZ

X = annual aggregate NDM SND for 2006/07 / annual aggregate NDM SND for 2005/06

These potential WCF bias values are as follows:

LDZ	Potential WCF bias
SC	4.2%
NO	4.9%
NW	6.0%
NE	4.6%
EM	5.5%
WM	7.9%
WN	5.0%
WS	6.3%
EA	6.7%
NT	8.7%
SE	8.1%
SO	7.1%
SW	7.0%

The corrected formula:

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

can then be used to compute the resultant **unscaled** percentage over-allocation for every EUC.

Thereafter, using current levels of NDM EUC AQs (the aggregate NDM EUC AQ values that applied on 1st July 2006 on the Gemini system have again been used) it is possible to assess the corresponding overall average scaling that would apply in each LDZ.

Finally, the overall scaled allocations of NDM demand may be assessed in terms of over or under allocation, for these LDZ specific levels of potential WCF bias. The results are again 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).

LDZ	Estimated scaling factor (LDZ Specific Analysis)
SC	0.955836
NO	0.950123
NW	0.935859
NE	0.950927
EM	0.952109
WM	0.913320
WN	0.943558
WS	0.941081
EA	0.936775
NT	0.917737
SE	0.922422
SO	0.929314
SW	0.936175

SCALED % Over (+) or Under (-) Allocations LDZ Specific Analysis		
LDZ	01B EUCs	All "Non-Domestic" EUCs
SC	0.29%	-0.69%
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	-0.13%	0.29%
WS	-0.30%	0.93%
EA	-0.37%	0.98%
NT	0.09%	-0.18%
SE	0.08%	-0.28%
SO	-0.05%	0.13%
SW	-0.32%	0.87%
Wtd. Overall	-0.22%	0.57%

These over/under allocations are once again very small for the 01B EUCs and not particularly large for the other "non-domestic" EUCs in aggregate. The predominant effect in most LDZs as well as the overall weighted effect is a very small under allocation to the 01B EUCs **after scaling**.

It must be borne in mind that, these computations are based on the premise that the aggregate NDM SNDs proposed for 2006/07 will lead to WCF bias. It may be that such WCF bias will not arise. It is possible even that the WCF bias may be of opposite sign (i.e. if the reduced aggregate NDM SNDs proposed for 2006/07 turn out to be still too large).

What these results show is that any WCF bias such as it may be, will only affect the scaled allocations to a small extent. EUC model error and AQ error are likely to be equal or greater sources of allocation error.

Details of the NDM demand attribution formula (Attachment 1) and the means of computing ALPs and DAFs (Attachment 2) are provided for information as attachments to this response.

COMMENTS ON AGGREGATE NDM SND PROPOSED FOR 2006/07

The aggregate NDM SNDs proposed for use in NDM demand attribution (i.e. used to compute DAFs and also intended to be used over the next gas year to compute WCFs) need to be considered in the light of the experience of the current gas year (2005/06) to date.

Some relevant figures are as follows:

Quantity (October 2005 to June 2006)	Value (GWh)
Σ Actual aggregate NDM demand	505041
Σ aggregate NDM SND (2005 basis)	522424
Σ aggregate NDM SND (2006 basis)	499692
Σ weather corrected aggregate NDM demand (2005 basis)	503596
Σ weather corrected aggregate NDM demand (2006 basis)	503957

For gas year 2005/06 to end June 2006, weather corrected aggregate NDM demand is only 96.4% of aggregate NDM SND on the 2005 modelling basis (i.e. aggregate NDM models from a year ago). However, the same ratio on the revised 2006 model basis is 100.9% which is much closer to the ideal value of 100% which would hold if SND was a perfect expression of underlying weather corrected load.

Attachment 4 to this response provides these same quantities (and percentages) on a LDZ specific basis. The inference that may be drawn from these figures is that the revised aggregate NDM models more closely reflect the underlying level of demand most recently experienced. In other words, the aggregate NDM SND values proposed for 2006/07 are based on underlying models that provide a better representation of recent weather/demand behaviour than the corresponding models derived a year ago.

Appendix 13 of the NDM report presented tables of WCF bias (as expressed by the term WCF-EWCF) for gas year 2005/06 to the end of May 2005. Attachment 5 to this response reproduces the relevant tables. The term WCF-EWCF has been more negative during the current gas year to date (than the previous gas year) and this has been so for all days of the week and most LDZs. The position was summarised in Appendix 13 as follows:

> *Examination of the average weekday and weekend day values of WCF-EWCF in Tables A13.3 and A13.4, indicates that WCF bias, as measured by the deviation of WCF from EWCF, appears to be worse in most instances to that over the equivalent periods of the previous gas year. Weekday (Monday to Thursday) WCF bias is a little better in only 2 LDZs (i.e. NO and NW) and worse in 11 LDZs. WCF bias over the winter as a whole has improved in only one LDZ, namely NW. Weekend WCF bias is also generally worse except in NO LDZ, where it is better on all three days: Friday, Saturday and Sunday, and in NW and NE LDZs, where it is better on Friday.*
>
> *Over gas year 2005/06 to date WCF bias is consistently negative over all days of the week, which is most likely to be because aggregate NDM seasonal normal demand (SND) has been too high. On the whole, gas year 2005/06 to date has been colder than recent years (although not particularly cold in comparison with long term weather extremes). Additionally the gas supply situation has generally been tight during the winter. Against this background, indications are that weather corrected aggregate NDM demand has been depressed (in other words the aggregate NDM SND estimates, made in spring 2005, have tended to be high in comparison with the underlying level of demand experienced). The observed WCF bias is consistent with these circumstances.*
>
> *Tables A13.11 and A13.12 provide monthly values of weather corrected aggregate NDM demand as a percentage of aggregate NDM SND, for the previous gas year and for gas year 2005/06 to date respectively. Table A13.12 reveals that in the current gas year to date this measure has been less than 100% for most months and LDZs (94 of 104 cases), which is again consistent with a lower underlying level of NDM demand during the current gas year to date (i.e. aggregate NDM SND estimates have been too high).*

In addition, based on the underlying models from which the proposed aggregate NDM SNDs for 2006/07 were derived it is possible to compute revised values of aggregate NDM SND for gas year 2005/06 to date. As part of the general validation of aggregate NDM SNDs these revised NDM SNDs for 2005/06 were

applied to a recalculation of NDM demand attribution replicated rigorously offline (at the time this was done to the end of April 2006).

The results from this analysis are presented as Attachment 6 and shows that the revised SNDs give rise to much smaller and, in the main, slightly positive WCF bias values in contrast to the largely negative WCF bias values previously observed across most LDZs and days of the week (i.e. these being the result of the currently used values of aggregate NDM SND which have appeared too high in the current gas year).

In the light of all of this information, it does not appear unreasonable to have proposed, for use in NDM demand attribution, the lower aggregate NDM SNDs for 2006/07 that form part of the NDM proposals for 2006/07.

CONCLUSIONS:

This response (to the representation received) has shown specifically that the reduced aggregate NDM SND estimates that form part of the proposals for 2006/07 do not lead to significant allocation bias (on a scaled basis) to any greater material extent than may be expected from other potential sources of error.

Moreover, the aggregate NDM SND values proposed for 2006/07 appear reasonable in the light of observed aggregate NDM demand behaviour in gas year 2005/06 to date.

Therefore, it seems appropriate to confirm and implement the initial proposals for 2006/07 dated 20th June 2006.

However, should the Demand Estimation Sub-Committee (DESC) wish to consider alternatives, the following options are technically feasible:

1. The fall-back case:

   The fall-back position (which is defined in UNC Section H1.9.2 for application in the event of a successful application to Ofgem for disapproval of the final proposals made) would be to use the underlying EUC models from 2005/06 along with aggregate NDM demand models for 2006/07 from one year ago, to derive ALPs, DAFs, EUC load factors and aggregate SND (and weather sensitivity).

   These aggregate NDM demand models would give even higher levels of aggregate NDM SND than apply currently to 2005/06. Thus, with this approach, the strongly negative WCF bias shown during 2005/06 to date may well be further exacerbated in 2006/07.

   Additionally, for WS LDZ there will be a weather station change taking effect on 1st October 2006. However, the weather sensitivities and aggregate NDM SND for WS LDZ would be based on the old weather variable and would therefore result in incorrect EWCF values (and thence incorrect weather adjusted ALP values) which would get used in the 2007 AQ review, affecting this LDZ only.

   Also, with this approach all NDM EUC load factors would revert to the values that currently apply in 2005/06.

2. Use a different set of individual network forecasts for aggregate NDM demand:

   This approach would be to use SND and weather sensitivity values for aggregate NDM demand, supplied by the individual networks. These quantities and related derived values would change in six LDZs (SC, SE, SO, WN, WS and SW) from those in the original proposals for 2006/07.

   The alternative approach is to scale the underlying demand models for aggregate NDM for 2006/07 (i.e. those which led to the originally proposed aggregate NDM SND values for 2006/07) so that they equate over the gas year as a whole to the annual aggregate NDM SND forecasts provided by the networks (Note that only the same six LDZs will be affected).

   Scaling the underlying models in this manner to a different assumed level of underlying load, requires scaling of both the constant (i.e. SND) and the slope (i.e. WSENS) terms of the model.

Thus, the ensuing DAFs for all EUCs will not change neither will the ALPs. The daily values of aggregate NDM SND will add up to the annual aggregate NDM SND forecast provided by the network.

In addition, large NDM EUC load factors will also change

The original proposals remain reasonable. This alternative provides consistency with the long term forecasts used by each Network.

Attachment 1

NDM Profiling Formula

The NDM profiling formula is : NDM demand = (AQ/365) * ALP * [1 + (DAF * WCF)] * SF

The formula is applied to each day and to each particular end user category within a local distribution zone (LDZ). For each end user category there is a separate value of ALP and DAF for each day.

AQ is annual quantity, which is the annual seasonal normal demand for a supply point or aggregation of supply points assigned to a particular end user category. AQ is defined to relate to a standard 365-day year.

ALP is the annual load profile, which is the daily seasonal normal demand for the end user category for the day, relative to the average daily seasonal normal demand for the end user category.

DAF is the daily adjustment factor, which on the day is the ratio *of*: the weather sensitivity of demand in the end user category per unit seasonal normal demand of the end user category *to* the weather sensitivity of aggregate NDM demand in the LDZ per unit seasonal normal aggregate NDM demand in the LDZ.

WCF is the weather correction factor, which is defined as follows :

$$WCF = \frac{\text{forecast or actual aggregate NDM demand in the LDZ} \_ \text{seasonal normal aggregate NDM demand in the LDZ}}{\text{seasonal normal aggregate NDM demand in the LDZ}}$$

SF is the scaling factor defined as follows :

$$SF = \frac{\text{aggregate forecast or actual NDM demand in the LDZ}}{\text{aggregate NDM demand (from formula with SF=1)}}$$

For the purposes of daily balancing, the NDM profiling formula is applied to each individual LDZ. Thus, values of SF and WCF are required for each LDZ. After the day, both WCF and SF are based on actual measured overall demand as well as actual measured aggregate DM demand in the LDZ. Ahead of and during the day, both WCF and SF are based on forecast overall LDZ demand and the aggregated sum of nominated DM demand in the LDZ.

i.e. aggregate actual NDM demand =
actual LDZ demand - LDZ shrinkage - aggregate actual DM demand in the LDZ

and

aggregate forecast NDM demand =
forecast LDZ demand - LDZ shrinkage - aggregate sum of DM nominations in the LDZ

In the application of the formula, the value of [1 + (DAF * WCF)] is constrained to be not less than 0.3, in order to ensure that deemed consumptions always remain within a reasonable bandwidth, even when unusual values of ALP, DAF and WCF coincide.

Attachment 2

Calculation of ALPs, DAFs

The calculation of ALPs and DAFs for each end user category (EUC) is as follows :

$ALP_t = SND_t / [\Sigma SND_t/ndays]$ where

ALP_t is the ALP on day t
SND_t is Seasonal Normal Demand on day t
ndays is the number of days in the year

$$DAF_t = \frac{WSENS_t/SND_t \text{ (for EUC)}}{WSENS_t/SND_t \text{ (for aggregate NDM in LDZ)}}$$ where

DAF_t is the DAF on day t
$WSENS_t$ is the daily weather sensitivity term.

SND_t for the EUC is derived from the applicable smoothed EUC demand model.

The weather sensitivity term $WSENS_t$ for all EUCs is $P_t * C_2$ from the smoothed demand model, as described in detail in Appendices 3 and 4 of the annual NDM report.

For EUC demand models exhibiting a summer cut-off, a procedure is applied so as to avoid a sudden step-change in the DAF value to zero when the seasonal normal CWV (SNCWV) reaches the CWV cut-off applied to the EUC. This procedure has been in use since the spring 1997 NDM analysis and was agreed by the Demand Estimation Sub-Committee (DESC) prior to that first application. In these cases, the change in weather sensitivity is phased in over the SNCWV values ranging from cut-off -1.5° to cut-off +1.5°. That is, for non-holiday weekdays the weather sensitivity at a SNCWV value of cut-off -1.5° is the weather sensitivity given by the slope of the Monday to Thursday regression. The weather sensitivity is thence reduced linearly, reaching zero when the SNCWV reaches cut-off +1.5°, provided this is below the maximum value of SNCWV (applicable to that LDZ). Alternatively, if cut-off +1.5° is greater than the maximum value of SNCWV, the applicable weather sensitivity takes on a minimum (and in this case non-zero) value when SNCWV reaches its maximum value. This phasing in of the reduction in DAF due to summer cut-off in the applicable EUC demand model is illustrated in the DAF profiles depicted in Figures A9.4 and A9.7.

In order to help alleviate summer scaling factor volatility in very warm weather, the approach to modelling cut-offs was changed for the spring 2004 NDM analysis. The changed approach, retained each year since spring 2004 (see also Appendix 3), is that models for EUCs in the consumption range 0-293 MWh pa have been developed without applying any warm weather cut-offs. Since there is a theoretical possibility that this might result in negative values of the ensuing summer ALPs a bottom-stop constraint was agreed in discussions with DESC during autumn/winter 2003/04. The constraint agreed was that no ALP value would be allowed to go below 1% of its maximum value. In practice, for this year's analysis, there were no cases where this constraint had to be invoked.

Attachment 3

Percentage Unscaled Over Allocations

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

Table 1 Percentage Unscaled Over-Allocations (for WCF Bias of +6.38%)

EUC (where xx denotes LDZ)	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
xx:E0601B	7.4%	6.6%	7.0%	6.2%	5.2%	7.4%	7.4%	6.1%	6.0%	6.6%	6.7%	6.8%	5.9%
xx:E0602B	7.6%	9.8%	8.8%	12.4%	10.1%	10.4%	9.1%	10.7%	8.8%	8.2%	7.4%	7.4%	9.9%
xx:E0603B	6.5%	10.1%	7.5%	8.7%	6.8%	11.6%	7.8%	9.3%	6.8%	7.6%	6.6%	8.4%	8.2%
xx:E0603W01	3.3%	3.1%	5.4%	6.2%	5.5%	6.9%	5.4%	4.4%	4.0%	2.5%	2.3%	2.8%	3.3%
xx:E0603W02	3.9%	4.4%	5.6%	4.8%	4.4%	6.8%	5.8%	3.9%	5.9%	4.7%	4.3%	5.0%	4.5%
xx:E0603W03	7.9%	11.6%	13.7%	10.8%	9.0%	12.8%	14.1%	8.5%	12.8%	12.3%	11.8%	12.7%	9.0%
xx:E0603W04	9.6%	12.6%	14.3%	17.6%	13.0%	19.3%	14.9%	14.2%	20.1%	22.2%	22.2%	20.2%	14.9%
xx:E0604B	6.9%	8.1%	8.8%	8.1%	8.2%	9.9%	9.1%	7.2%	7.6%	5.6%	5.6%	7.0%	5.7%
xx:E0604W01	3.3%	3.1%	5.4%	6.2%	5.5%	6.9%	5.4%	4.4%	4.0%	2.5%	2.3%	2.8%	3.3%
xx:E0604W02	3.9%	4.4%	5.6%	4.8%	4.4%	6.8%	5.8%	3.9%	5.9%	4.7%	4.3%	5.0%	4.5%
xx:E0604W03	7.9%	11.6%	13.7%	10.8%	9.0%	12.8%	14.1%	8.5%	12.8%	12.3%	11.8%	12.7%	9.0%
xx:E0604W04	9.6%	12.6%	14.3%	17.6%	13.0%	19.3%	14.9%	14.2%	20.1%	22.2%	22.2%	20.2%	14.9%
xx:E0605B	5.9%	6.6%	6.8%	7.5%	7.1%	7.1%	7.0%	5.7%	5.3%	4.4%	4.7%	4.7%	6.1%
xx:E0605W01	5.9%	6.2%	6.6%	8.1%	9.4%	7.9%	6.7%	6.7%	5.3%	3.0%	3.3%	4.1%	6.9%
xx:E0605W02	3.2%	4.7%	4.8%	4.7%	4.2%	4.5%	5.0%	3.7%	3.9%	3.8%	3.3%	3.6%	3.8%
xx:E0605W03	6.5%	9.0%	7.4%	6.0%	6.0%	8.1%	7.7%	6.6%	7.3%	6.1%	5.8%	7.0%	5.8%
xx:E0605W04	7.5%	12.0%	13.0%	13.7%	9.4%	14.6%	13.7%	8.9%	12.9%	12.3%	13.3%	12.7%	13.4%
xx:E0606B	5.1%	6.1%	6.5%	7.0%	8.0%	7.5%	6.7%	7.7%	5.4%	3.7%	3.8%	4.3%	5.1%
xx:E0606W01	6.2%	6.1%	6.1%	9.2%	9.2%	9.2%	6.1%	7.2%	4.6%	4.6%	4.6%	7.2%	7.2%
xx:E0606W02	4.8%	4.6%	4.5%	8.3%	8.3%	8.2%	4.6%	4.6%	3.1%	3.1%	3.0%	4.5%	4.5%
xx:E0606W03	6.3%	5.1%	4.9%	6.1%	6.0%	5.6%	5.1%	6.0%	4.8%	5.0%	4.7%	4.5%	4.6%
xx:E0606W04	9.8%	10.2%	10.0%	11.0%	10.8%	11.6%	10.6%	11.9%	12.0%	12.5%	10.3%	11.5%	12.0%
xx:E0607B	4.7%	5.4%	5.4%	6.2%	6.1%	6.1%	5.5%	5.1%	3.6%	3.7%	3.5%	4.3%	4.9%
xx:E0607W01	6.7%	6.7%	6.6%	6.6%	6.6%	6.6%	6.6%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
xx:E0607W02	5.2%	5.1%	5.1%	5.1%	5.0%	5.0%	5.1%	4.2%	4.1%	4.1%	4.1%	4.1%	4.1%
xx:E0607W03	4.6%	4.6%	4.6%	4.5%	4.7%	4.7%	4.8%	4.3%	4.3%	4.4%	4.2%	4.5%	4.4%
xx:E0607W04	8.5%	8.9%	9.3%	8.7%	8.7%	7.8%	9.7%	11.8%	8.2%	8.5%	7.9%	8.1%	8.4%
xx:E0608B	2.5%	2.4%	2.3%	3.7%	3.6%	3.6%	2.4%	2.7%	2.7%	2.7%	2.6%	2.7%	2.8%
xx:E0608W01	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
xx:E0608W02	2.2%	2.2%	2.1%	2.1%	2.1%	2.1%	2.2%	2.1%	2.0%	2.1%	2.0%	2.0%	2.0%
xx:E0608W03	3.7%	3.6%	3.6%	3.6%	3.5%	3.5%	3.7%	3.5%	3.4%	3.5%	3.4%	3.4%	3.4%
xx:E0608W04	5.3%	5.4%	5.5%	5.4%	5.8%	6.3%	5.7%	5.9%	5.0%	5.1%	4.8%	4.8%	5.1%
xx:E0609B	2.1%	2.0%	1.9%	1.9%	1.9%	1.8%	2.0%	1.9%	1.8%	1.8%	1.8%	1.7%	1.8%

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

Table 2 Percentage Unscaled Over-Allocations (for WCF Bias of +6.38%) : BGT Figures

EUC (where xx denotes LDZ)	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
xx:E0601B	6.1%	5.2%	4.5%	4.9%	8.3%	5.9%	4.3%	7.8%	6.9%	6.7%	7.8%	5.1%	6.2%
xx:E0602B	5.7%	5.3%	5.2%	5.1%	6.4%	5.4%	4.2%	6.4%	6.2%	7.3%	7.4%	4.7%	6.8%
xx:E0603B	5.6%	5.1%	4.4%	4.7%	7.1%	5.1%	3.8%	6.7%	5.8%	6.2%	7.5%	4.4%	5.6%
xx:E0603W01	1.6%	1.6%	1.5%	1.7%	2.4%	2.0%	1.9%	2.2%	1.9%	2.0%	2.3%	1.8%	1.8%
xx:E0603W02	3.7%	3.6%	3.0%	3.5%	4.8%	4.0%	3.2%	4.3%	3.9%	3.8%	5.0%	3.5%	4.1%
xx:E0603W03	5.5%	5.5%	4.6%	4.8%	7.3%	6.1%	4.6%	6.4%	5.8%	6.1%	7.6%	5.2%	5.7%
xx:E0603W04	7.9%	7.1%	5.8%	6.5%	10.2%	8.1%	5.9%	9.2%	8.4%	8.4%	10.1%	6.8%	8.0%
xx:E0604B	5.2%	5.0%	4.0%	4.2%	6.5%	5.0%	3.6%	5.9%	5.5%	5.3%	6.9%	4.4%	5.4%
xx:E0604W01	1.6%	1.6%	1.5%	1.7%	2.4%	2.0%	1.9%	2.2%	1.9%	2.0%	2.3%	1.8%	1.8%
xx:E0604W02	3.7%	3.6%	3.0%	3.5%	4.8%	4.0%	3.2%	4.3%	3.9%	3.8%	5.0%	3.5%	4.1%
xx:E0604W03	5.5%	5.5%	4.6%	4.8%	7.3%	6.1%	4.6%	6.4%	5.8%	6.1%	7.6%	5.2%	5.7%
xx:E0604W04	7.9%	7.1%	5.8%	6.5%	10.2%	8.1%	5.9%	9.2%	8.4%	8.4%	10.1%	6.8%	8.0%
xx:E0605B	4.6%	3.7%	3.4%	3.7%	5.5%	4.1%	3.2%	5.4%	4.8%	4.5%	5.9%	3.6%	4.6%
xx:E0605W01	1.2%	1.0%	0.8%	1.0%	1.8%	1.3%	1.1%	1.5%	1.2%	1.1%	1.5%	1.1%	0.9%
xx:E0605W02	3.3%	3.2%	2.7%	3.0%	4.1%	3.5%	2.7%	3.6%	3.3%	3.7%	4.6%	3.1%	3.5%
xx:E0605W03	4.7%	4.6%	3.9%	4.4%	6.0%	5.2%	3.9%	5.5%	5.1%	5.2%	6.3%	4.4%	5.5%
xx:E0605W04	7.3%	6.8%	5.8%	6.3%	9.4%	7.7%	5.6%	8.6%	7.9%	8.0%	9.7%	6.6%	7.6%
xx:E0606B	3.9%	2.7%	2.4%	3.0%	4.9%	3.0%	2.6%	4.1%	4.0%	3.4%	3.9%	2.6%	3.1%
xx:E0606W01	0.2%	0.2%	0.2%	0.3%	0.3%	0.4%	0.3%	0.3%	0.2%	0.2%	0.4%	0.4%	0.2%
xx:E0606W02	2.1%	1.7%	1.4%	1.8%	2.8%	2.1%	1.7%	2.5%	2.0%	2.1%	2.4%	1.9%	2.0%
xx:E0606W03	4.0%	4.1%	3.5%	3.4%	5.3%	4.0%	3.5%	4.6%	4.1%	4.2%	5.4%	3.5%	4.6%
xx:E0606W04	6.7%	6.3%	5.3%	6.0%	8.7%	7.1%	5.4%	7.7%	6.7%	7.0%	8.9%	6.2%	7.0%
xx:E0607B	3.0%	2.1%	1.7%	2.1%	3.9%	2.5%	1.9%	3.5%	3.2%	3.6%	3.0%	2.2%	3.5%
xx:E0607W01	0.3%	0.2%	0.2%	0.2%	0.4%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.2%	0.3%
xx:E0607W02	1.3%	1.2%	1.0%	1.1%	1.8%	1.3%	1.0%	1.6%	1.4%	1.4%	1.6%	1.1%	1.4%
xx:E0607W03	3.6%	3.1%	2.6%	2.9%	4.8%	3.4%	2.6%	4.3%	3.8%	3.8%	4.4%	3.0%	3.6%
xx:E0607W04	5.7%	5.5%	4.6%	5.1%	7.5%	6.2%	4.6%	6.6%	5.9%	6.1%	7.5%	5.3%	6.6%
xx:E0608B	1.9%	1.5%	1.2%	1.3%	2.5%	1.5%	1.2%	2.2%	2.0%	2.0%	2.1%	1.3%	1.9%
xx:E0608W01	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
xx:E0608W02	0.7%	0.6%	0.5%	0.6%	0.9%	0.7%	0.5%	0.8%	0.7%	0.7%	0.8%	0.6%	0.7%
xx:E0608W03	1.8%	1.6%	1.4%	1.5%	2.4%	1.8%	1.4%	2.2%	1.9%	1.9%	2.3%	1.6%	1.9%
xx:E0608W04	4.7%	4.6%	3.8%	4.2%	6.1%	5.0%	3.8%	5.4%	4.8%	5.0%	6.4%	4.3%	5.3%
xx:E0609B	1.3%	1.2%	1.0%	1.1%	1.7%	1.3%	1.0%	1.5%	1.4%	1.4%	1.6%	1.1%	1.4%

Table 3 Aggregate NDM EUC AQs (TWh) as of 1st July 2006 (from Gemini)

EUC (where xx denotes LDZ)	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
xx:E0601B	35.6632	23.7008	52.8705	26.4472	43.8145	37.8824	4.2778	16.0154	33.6740	42.5223	46.5154	29.1955	24.3870
xx:E0602B	3.2625	1.8022	4.9561	2.8600	3.9300	3.8340	0.4221	1.2269	3.2741	5.3133	4.5710	2.8345	2.3300
xx:E0603B	0.6929	0.3934	0.9724	0.5564	0.9351	0.7562	0.0755	0.2306	0.7502	1.3420	1.1050	0.7152	0.5222
xx:E0603W01	0.3970	0.1767	0.4864	0.2319	0.3082	0.2962	0.0584	0.1119	0.1589	0.3478	0.2071	0.2088	0.2360
xx:E0603W02	0.6887	0.3495	0.7636	0.3473	0.4984	0.4739	0.0603	0.1809	0.4272	0.6282	0.5074	0.3572	0.2938
xx:E0603W03	0.4078	0.2075	0.4346	0.2543	0.3788	0.4156	0.0306	0.1201	0.2729	0.4632	0.3051	0.2167	0.1659
xx:E0603W04	0.1801	0.1745	0.3690	0.2305	0.3395	0.4304	0.0268	0.1137	0.3346	0.4297	0.3346	0.2527	0.2103
xx:E0604B	0.7070	0.3762	0.9806	0.5624	0.9047	0.7850	0.0646	0.2482	0.7649	1.4374	1.1047	0.8664	0.5498
xx:E0604W01	0.7872	0.2581	0.7199	0.3568	0.4663	0.5088	0.0951	0.1535	0.3310	0.5377	0.3412	0.3134	0.3573
xx:E0604W02	0.8960	0.3510	0.8088	0.4082	0.5238	0.5469	0.1089	0.1730	0.4603	1.1105	0.6214	0.4215	0.3415
xx:E0604W03	0.5172	0.2869	0.6252	0.3200	0.4802	0.6271	0.0323	0.1409	0.3999	0.6472	0.3743	0.3489	0.2235
xx:E0604W04	0.1935	0.2316	0.4721	0.2172	0.4272	0.5270	0.0224	0.1056	0.4039	0.4972	0.3497	0.3403	0.2280
xx:E0605B	0.7257	0.3730	0.8973	0.4892	0.8556	0.7332	0.0754	0.2707	0.6936	1.4831	0.9401	0.7529	0.4767
xx:E0605W01	0.4748	0.2515	0.7126	0.2783	0.4899	0.4539	0.0868	0.1294	0.2834	0.3521	0.2140	0.2123	0.2945
xx:E0605W02	0.6670	0.2650	0.5183	0.3006	0.3554	0.4532	0.0522	0.1474	0.2239	0.5596	0.2346	0.2354	0.2065
xx:E0605W03	0.4522	0.2178	0.3527	0.2177	0.3475	0.3646	0.0410	0.0731	0.2151	0.6610	0.2788	0.2863	0.1728
xx:E0605W04	0.1957	0.1668	0.3638	0.1930	0.2986	0.4088	0.0246	0.0716	0.2867	0.3742	0.1789	0.2044	0.1156
xx:E0606B	0.5724	0.2962	0.7124	0.4178	0.7128	0.6581	0.1063	0.2549	0.6491	1.0498	0.7159	0.7129	0.4402
xx:E0606W01	0.1965	0.1557	0.4229	0.1822	0.4020	0.3455	0.0553	0.0465	0.1540	0.0772	0.1349	0.0876	0.2102
xx:E0606W02	0.4211	0.2061	0.5956	0.2186	0.3696	0.4577	0.0578	0.1704	0.2499	0.3949	0.1444	0.1332	0.2025
xx:E0606W03	0.2425	0.2060	0.3239	0.2014	0.2866	0.3074	0.0064	0.0531	0.2119	0.5015	0.1949	0.1784	0.1565
xx:E0606W04	0.1035	0.1735	0.1693	0.1482	0.2131	0.3663	0.0248	0.1361	0.1444	0.2029	0.0663	0.1388	0.0940
xx:E0607B	0.3022	0.2377	0.3612	0.4467	0.5359	0.5365	0.0857	0.2017	0.6139	0.5004	0.3354	0.4992	0.3776
xx:E0607W01	0.1457	0.0547	0.2999	0.2431	0.2552	0.2355	0.0466	0.0719	0.0814	0.0915	0.0761	0.0339	0.1272
xx:E0607W02	0.1241	0.0710	0.2985	0.1525	0.3881	0.2551	0.0156	0.0730	0.1164	0.1163	0.0875	0.0519	0.1898
xx:E0607W03	0.2579	0.0544	0.0866	0.1210	0.2554	0.2474	0.0227	0.1064	0.1026	0.0602	0.0801	0.0375	0.0219
xx:E0607W04	0.0634	0.0891	0.0756	0.0849	0.0864	0.2967	0.0000	0.0181	0.1094	0.1098	0.0157	0.1948	0.1288
xx:E0608B	0.1407	0.4108	0.3672	0.2755	0.4730	0.4686	0.0000	0.2143	0.4660	0.2631	0.1297	0.1260	0.2088
xx:E0608W01	0.0715	0.0418	0.0000	0.0732	0.0786	0.2654	0.0000	0.0527	0.0000	0.0000	0.0393	0.0000	0.0309
xx:E0608W02	0.2787	0.1605	0.0361	0.1371	0.3075	0.2187	0.0326	0.0826	0.0633	0.0323	0.0795	0.1054	0.0000
xx:E0608W03	0.0000	0.0891	0.1111	0.1841	0.3424	0.2448	0.0500	0.1156	0.1656	0.0536	0.0325	0.0348	0.0000
xx:E0608W04	0.0301	0.0312	0.0718	0.0306	0.0729	0.3513	0.0000	0.0000	0.0739	0.1123	0.0000	0.0764	0.0372
xx:E0609B	0.8278	0.0825	0.0586	0.0662	0.1585	0.1807	0.0654	0.0000	0.2710	0.1448	0.0000	0.0730	0.0000

Attachment 4

NDM Demand for Gas Year 2005/06 to end-June 2006

Aggregate NDM Demand (GWh) - Gas Year 2005/06 to end-June 2006							
LDZ	Sum of Actual Demand	Sum of WC Demand (05 basis)	Sum of WC Demand (06 basis)	Sum of SND (05 basis)	Sum of SND (06 basis)	WCD as % of SND	
						05 basis	06 basis
SC	43247	43825	43824	44616	43591	98.2%	100.5%
NO	27512	28127	28114	28564	27752	98.5%	101.3%
NW	62509	63138	63119	64627	62024	97.7%	101.8%
NE	32293	32738	32735	33474	32550	97.8%	100.6%
EM	52280	52941	52932	54497	52540	97.1%	100.7%
WM	47275	47311	47317	49880	47170	94.9%	100.3%
WN	5528	5582	5582	5821	5639	95.9%	99.0%
WS	18767	18407	18551	19084	18243	96.5%	101.7%
EA	40723	39955	39996	41961	40067	95.2%	99.8%
NT	55072	54007	54085	56901	53489	94.9%	101.1%
SE	53682	52622	52684	54838	51952	96.0%	101.4%
SO	36651	35773	35825	37649	35692	95.0%	100.4%
SW	29503	29168	29191	30513	28983	95.6%	100.7%
Total	505041	503596	503957	522424	499692	96.4%	100.9%

Attachment 5

WCF Bias – Extracts from Appendix 13

Table A13.3

Average Values of WCF - EWCF, Gas Year 2004/05

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	-0.017	-0.017	-0.013	-0.009	-0.002	-0.028
NO	-0.036	-0.032	-0.032	-0.044	-0.002	-0.070
NW	-0.037	-0.025	-0.017	-0.018	0.019	-0.078
NE	0.010	0.008	0.008	-0.004	0.017	-0.002
EM	-0.008	-0.010	-0.018	-0.026	0.018	-0.043
WM	-0.045	-0.043	-0.040	-0.041	-0.007	-0.079
WN	-0.032	-0.019	-0.036	-0.031	-0.008	-0.053
WS	-0.035	-0.020	-0.028	-0.027	0.011	-0.072
EA	-0.019	-0.014	-0.011	-0.015	0.010	-0.043
NT	-0.039	-0.030	-0.027	-0.035	-0.002	-0.069
SE	-0.028	-0.026	-0.019	-0.023	0.019	-0.070
SO	-0.032	-0.038	-0.025	-0.021	0.006	-0.066
SW	-0.037	-0.034	-0.033	-0.028	0.000	-0.069
AVG	**-0.027**	**-0.023**	**-0.022**	**-0.025**	**0.006**	**-0.057**

Table A13.4

Average Values of WCF - EWCF, Gas Year 2005/06

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	-0.019	-0.021	-0.019	-0.019	-0.012	-0.041
NO	-0.014	-0.008	-0.011	-0.019	0.002	-0.060
NW	-0.018	-0.022	-0.034	-0.028	-0.017	-0.037
NE	-0.018	-0.003	-0.024	-0.028	-0.019	-0.017
EM	-0.026	-0.026	-0.035	-0.036	-0.022	-0.049
WM	-0.053	-0.046	-0.051	-0.053	-0.041	-0.082
WN	-0.037	-0.032	-0.049	-0.042	-0.033	-0.057
WS	-0.036	-0.035	-0.042	-0.035	-0.023	-0.077
EA	-0.048	-0.046	-0.052	-0.056	-0.043	-0.068
NT	-0.052	-0.047	-0.044	-0.054	-0.045	-0.067
SE	-0.046	-0.033	-0.032	-0.046	-0.036	-0.061
SO	-0.050	-0.050	-0.042	-0.043	-0.039	-0.075
SW	-0.048	-0.043	-0.043	-0.042	-0.030	-0.093
AVG	**-0.036**	**-0.032**	**-0.037**	**-0.039**	**-0.027**	**-0.060**

Table A13.11

NDM Weather Corrected Demand as % of NDM Seasonal Normal Demand, Gas Year 2004/05

LDZ	October	November	December	January	February	March	April	May	June	July	August	September
SC	100.58%	101.23%	99.75%	100.49%	98.74%	97.39%	94.53%	92.32%	99.00%	98.51%	99.36%	98.97%
NO	102.84%	101.51%	100.00%	101.18%	97.53%	95.42%	88.53%	85.03%	91.76%	93.53%	96.89%	102.37%
NW	106.69%	103.18%	102.12%	102.58%	98.71%	97.43%	94.69%	90.54%	94.72%	90.60%	89.25%	93.27%
NE	102.95%	102.23%	101.50%	104.27%	99.84%	99.21%	96.98%	94.95%	100.27%	101.08%	102.00%	102.77%
EM	105.42%	103.60%	100.08%	102.40%	99.58%	99.24%	93.21%	92.63%	95.36%	95.60%	98.82%	98.51%
WM	103.17%	101.94%	98.27%	99.61%	96.06%	96.42%	91.90%	90.08%	93.39%	90.81%	91.59%	94.18%
WN	107.27%	99.55%	96.34%	97.89%	97.46%	96.95%	93.68%	90.89%	93.98%	99.18%	96.46%	93.11%
WS	106.83%	102.75%	99.97%	101.15%	97.93%	97.65%	88.82%	84.24%	95.82%	90.33%	100.31%	96.15%
EA	105.64%	101.84%	100.26%	101.58%	98.28%	98.40%	91.14%	92.59%	95.92%	98.53%	100.36%	94.08%
NT	106.59%	99.52%	98.27%	100.83%	96.98%	96.48%	90.79%	92.99%	93.68%	93.90%	93.34%	93.19%
SE	107.20%	102.53%	101.52%	101.80%	98.91%	99.52%	93.32%	94.70%	93.56%	91.75%	92.56%	91.40%
SO	110.73%	102.63%	99.42%	100.42%	97.05%	93.16%	87.59%	87.39%	93.86%	96.68%	98.53%	95.61%
SW	106.28%	100.76%	99.11%	99.07%	97.36%	97.44%	89.95%	89.17%	95.70%	93.81%	95.20%	93.71%

Table A13.12

NDM Weather Corrected Demand as % of NDM Seasonal Normal Demand, Gas Year 2005/06

LDZ	October	November	December	January	February	March	April	May
SC	100.99%	100.47%	95.31%	97.88%	97.89%	100.30%	95.80%	96.33%
NO	102.90%	100.16%	99.15%	97.83%	97.61%	103.53%	94.70%	94.11%
NW	99.95%	99.01%	97.66%	98.19%	95.03%	99.38%	94.77%	98.49%
NE	101.19%	99.21%	97.50%	96.97%	94.53%	99.45%	97.79%	99.30%
EM	97.85%	99.29%	97.68%	97.50%	96.30%	98.23%	96.57%	94.51%
WM	97.62%	97.93%	95.81%	95.05%	93.18%	95.40%	93.58%	90.78%
WN	100.18%	88.14%	96.03%	98.84%	96.60%	99.53%	93.13%	96.26%
WS	96.75%	97.59%	97.40%	97.17%	96.59%	100.70%	93.61%	91.53%
EA	93.99%	96.68%	96.44%	95.62%	93.96%	97.44%	93.80%	93.00%
NT	96.40%	95.26%	95.96%	95.24%	93.86%	95.99%	93.47%	93.51%
SE	94.30%	96.96%	97.47%	96.89%	95.13%	97.66%	94.31%	93.91%
SO	100.65%	96.84%	94.92%	95.47%	94.03%	94.36%	93.74%	91.16%
SW	97.32%	95.63%	97.65%	95.60%	96.14%	99.59%	91.13%	90.68%

Attachment 6

WCF Bias with Current & Revised Aggregate NDM SNDs for 2005/06 (to April 2006)

Table 1

Average Values of WCF- EWCF, System Derived, Gas Year 2005/06

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	-0.016	-0.018	-0.015	-0.016	-0.012	-0.043
NO	-0.002	-0.001	-0.011	-0.017	0.003	-0.055
NW	-0.016	-0.026	-0.035	-0.034	-0.017	-0.055
NE	-0.013	-0.009	-0.033	-0.041	-0.019	-0.026
EM	-0.017	-0.026	-0.035	-0.039	-0.022	-0.035
WM	-0.042	-0.045	-0.051	-0.049	-0.041	-0.064
WN	-0.035	-0.036	-0.051	-0.039	-0.033	-0.070
WS	-0.027	-0.031	-0.037	-0.026	-0.023	-0.064
EA	-0.042	-0.044	-0.052	-0.058	-0.043	-0.062
NT	-0.046	-0.048	-0.048	-0.054	-0.045	-0.065
SE	-0.038	-0.035	-0.038	-0.046	-0.036	-0.057
SO	-0.041	-0.047	-0.044	-0.038	-0.039	-0.060
SW	-0.038	-0.039	-0.037	-0.037	-0.030	-0.088
AVG	**-0.029**	**-0.031**	**-0.038**	**-0.038**	**-0.027**	**-0.057**

Table 2

Average Values of WCF - EWCF, Gas Year 2005/06 Revised SNDs

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	0.003	0.009	0.004	0.003	0.007	-0.011
NO	0.019	0.023	0.016	0.023	0.027	-0.024
NW	0.018	0.015	0.015	0.020	0.021	-0.006
NE	0.007	0.012	0.001	0.005	0.006	0.010
EM	0.012	0.008	0.007	0.010	0.012	0.002
WM	0.008	0.009	-0.003	0.011	0.010	-0.009
WN	-0.008	-0.013	-0.014	-0.005	-0.007	-0.025
WS	0.024	0.014	0.011	0.028	0.024	0.003
EA	0.001	0.000	-0.012	-0.008	-0.003	-0.002
NT	0.013	0.012	0.006	0.011	0.012	0.008
SE	0.014	0.017	0.007	0.009	0.013	0.009
SO	0.009	0.012	0.008	0.019	0.010	0.014
SW	0.011	0.012	0.014	0.009	0.019	-0.035
AVG	**0.010**	**0.010**	**0.005**	**0.010**	**0.012**	**-0.005**