

Evaluation of algorithm performance - 2009/10 gas year

Introduction

In accordance with customary practice, three sources of information have been examined in this review:

- i) daily values of scaling factor (SF) and weather correction factor (WCF) (this was presented separately at the DESC meeting of 10th November 2010)
- ii) reconciliation variance (RV) data for each EUC
- iii) daily consumption data collected from the NDM sample

This note presents the results of the review in respect of RV data and NDM sample derived daily consumption data, with brief explanatory notes.

1. Scaling Factor (SF) and Weather Correction Factor (WCF)

This material was discussed at the meeting of DESC on 10th November 2010.

It incorporated SF and WCF graphs and tables, for the two previous gas years, 2008/09 and 2009/10. In addition figures for the mean square deviation of SF from 1 were provided.

2.0 Reconciliation Variance (RV) analysis

2.1 Overview

Reconciliation variances (RVs) are calculated at individual meter point level, usually on receipt of a validated meter read. Reconciliation variance is the difference between the measured consumption (based on the start and end meter reads) and the deemed consumption (given by the algorithm). A positive reconciliation variance indicates under estimation by the NDM profiling algorithm.

In interpreting RV data it must be recognised that reconciliation variances occur due to any of a number of factors. One of these is imperfections in the profiling parameters themselves, but errors in meter point annual quantities (AQs) and in meter reads can lead to large reconciliation variances.

The reconciliation variance (RV) data presented is based on the complete set of reconciliation variances that have been calculated for meter points in "B" EUCs. RVs for WAR band EUCs have not been included in the analysis. The object of this analysis is to try to assess the EUC profiles applied over the gas year from available RV data.

Therefore, prior to analysis the data has been screened to eliminate RVs which are greater than 50% of either the actual or allocated consumption (i.e. both: allocated > 2 x actual and allocated < 0.5 x actual). Additional checks have also been made to ensure removal of inappropriate or erroneous data (e.g. actual consumptions should be positive, very low AQs are filtered out).

Over gas year 2009/10, this screening process reduced the available data set by an extent ranging from 18% in April 2010 to 50% at the end of the gas year in September 2010. The "raw" input data to this analysis is all RV data relating to the period in question (i.e. both standard and suppressed reconciliation).

The remaining validated RV data is then used to establish, for each EUC, an average profile of actual and allocated demand. On this basis the profiles have been categorised as "peaky", "flat" or "ok".

The generation of this average profile for an EUC involves taking each meter in turn and apportioning the total actual and allocated energy values evenly to all dates in the meter's reconciliation period. The ensuing aggregate values for each date are then divided by the number of contributing meters, and subsequently graphed against time.

The objective with this approach is not to establish a realistic profile resembling an ALP (annual load profile), but rather to highlight any seasonal patterns in the average reconciliation variance.

The RV profile that is thus derived for an EUC can be categorised according to two dimensions, its annual level and its peakiness. The categorisation procedure is undertaken through the calculation of full year, winter and summer average errors expressed as a percentage of the full year average actual figure. The difference between the winter and summer errors is taken to reflect the peakiness of the profile, whereas the size of the full year error indicates whether the average AQ for the meters contributing to each EUC sample is too high or too low. The winter/summer error differences have been classified as acceptable if the absolute value is less than 5% (which is approximately equivalent to a one percentage point change in load factor).

It must be noted that, since gas year 2009/10 ended only a few months previously, RV data relating to meter points that are not monthly read has not fully flowed through to the analysis. Therefore, when this study is revised in spring 2011, the information relating to the lower consumption bands in the analysis will be further refined.

Graphs illustrating the profiles established from the RV data, for NO, NW, EA, SE, SO, WM and EM LDZs in consumption bands 02, 03, 04, 05, 06, 07 and 08 respectively, are attached as Figures 2.1, 2.3, 2.5, 2.7, 2.9, 2.11 and 2.13. Prior to its being classified as too "peaky" etc., the deemed profile is scaled so that over the year as a whole the level of demand matches the actual level. Figures 2.2, 2.4, 2.6, 2.8, 2.10, 2.12 and 2.14 show each of the revised profiles for the EUC and consumption band combinations stated above. Note again that the uniform apportionment of each reconciliation variance quantity across all applicable days together with fluctuations in the numbers of contributing meters during the period mean that these RV profiles are not comparable to ALP profiles and therefore the various apparent "spikes" in these figures must be seen in this context.

2.2 Analysis

Table 2.1 shows the classification of the EUC profiles as regards their peakiness. Tables 2.2 and 2.3 show the percentage errors [(actual-allocated)/actual as a %] over the winter and summer periods respectively, on which the classification is based.

Where the average number of contributing meters across the full year or across the winter or summer six month periods was 2 or less no attempt has been made to derive a classification. Thus, no assessment has been possible for LDZs SC, WN and EA in consumption band 08 and for LDZs SC, NO, NE, EM, WM, WN, WS, EA, NT, SE, SO and SW in consumption band 09.

It should be noted that not all reconciliation variance data applicable to the period under review (gas year 2009/10) has yet been processed (particularly in those consumption bands with non-monthly read meters). Subject to this caveat, Table 2.1 suggests that during 2009/10 for consumption bands 02 and 03 the profiles have in most cases been too-peaky at the 5% level or the 10% level, the only exceptions are for band 02 in LDZs SC and WM where the profiles were good. Both these bands are the two most likely to contain non-monthly read meter points. Therefore, when this analysis is revised in spring 2011, the information relating to these lower consumption bands will be further refined.

The profiles for consumption band 04 appear in most cases to be either good (in 8 LDZs) or too peaky at the 5% level (in 3 LDZs: SC, NO and WS). In two LDZs namely WN and NE the profile appears to be too peaky at the 10% level.

The profiles for consumption band 05 appear in most cases to be either good (in 9 LDZs) or too peaky at the 5% level (in 2 LDZs: NE and WN) or the 10% level (in 2 LDZs: NW and EA).

The profiles for consumption bands 06 are a mixture of those that are good (4 LDZs: SC, NE, WS and NT), too peaky at the 5% level (2 LDZs: NW and WM), too peaky at the 10% level (4 LDZs: NO, EM, WN and EA) and too flat at the 5% level (3 LDZs: SE, SO and SW).

The profiles for consumption band 07 are again a mixture of those that are good (2 LDZs: SE and SO), too peaky at either the 5% level (2 LDZs: SC and NT) or the 10% level (8 LDZs: NO, NW, NE, EM, WM, WS, EA and SW) and too flat at the 10% level (1 LDZ: WN).

The profiles for consumption band 08 are also a mixture, comprised of cases that are good (3 LDZs: EM, SE and SO), too peaky at either the 5% level (2 LDZs: WM and WS) or the 10% level (4 LDZs: NW, NE, NT and SW) and too flat at the 10% level (1 LDZ: NO). Assessment was not carried out in 3 LDZs (SC, WN and EA) due to sample size being too small.

For consumption band 09, assessment was only possible in 1 LDZ (i.e. NW and the profile was good).

Considering the overall results, there is a preponderance of cases with profiles that are too peaky at the 5% level or good. Overall there are no occurrences of profiles that are too flat in consumption bands 02 to 05. Instances of profiles that are too flat are not common in most bands.

When each consumption band (excluding band 09) is assessed in aggregate across all available LDZs, bands 02, 03, 04, 05, 06 and 08 are good (winter/summer error differences within the 5% level), while band 07 has a winter/summer error difference that is too peaky at the 5% level.

The winter and summer period fractional errors are shown in Tables 2.2 and 2.3. The profile assessments (e.g. the 5% and 10% levels) are based on the sum of the differences in the winter and summer errors - e.g. a winter error of -3% and a summer error of +3% for consumption band 03 in SC LDZ means an overall difference of 6% and the profile is too peaky at the 5% assessment level. Note here that the error is defined as "actual - allocated". So, a negative winter % error indicates a profile that is too peaky and a positive winter % error indicates a profile that is too flat.

Table 2.4 shows the extent of the scaling that was applied in this RV analysis to the deemed demands in each EUC in order to match the annual demands. Most of the scaling applied is seen to be an uplift (>1). Interpreted simplistically, this might indicate a deficit in the level of AQ in these EUCs. In direct contrast, there was a further reduction in aggregate NDM AQs in each LDZ at the start of gas year 2010/11. The percentage AQ changes in each LDZ and overall were reported to DESC in November 2010 as part of the WCF and SF strand of performance evaluation.

However, this RV analysis does not actually reflect the overall population for a number of reasons. Most significantly, there is no reconciliation of consumption band 01 (which makes up 74% of overall NDM load in AQ terms). Moreover, RV data validation results in a significant proportion of the raw data having to be discarded (thus the ensuing results for annual scaling do not necessarily represent the overall population). The largest rejection category when RV data is validated is where “allocated > 2 actual” (which are all likely to be cases where the AQ is too high). So, it could be argued that the data cleaning has removed more of the cases of “too high AQs”. In addition, the results cover the recently concluded gas year (2009/10) pertaining to which all RV data in all consumption bands has not yet become available.

If the assumption is made that the RV results indicate correctly that “non-domestic” NDM EUC AQs were too low in 2009/10, since it also appears clear from the AQ changes in aggregate for NDM load that took place at the start of gas year 2010/11 that overall aggregate NDM AQs in gas year 2009/10 were too high, that would suggest that “domestic” (consumption band 01) AQs were notably too high. The more plausible viewpoint is to discount the annual scaling from the RV analysis as being unrepresentative for the reasons stated.

3.0 Analysis of NDM sample daily consumption data

3.1 Overview

The performance of the NDM profiling algorithms has been evaluated by comparing actual daily demands for supply points in the NDM sample with estimates of their daily demands (as per the NDM profiling formula) across the range of EUCs. This evaluation covers the period of the gas year 2009/10.

The performance of the algorithms has been evaluated on three bases:

- i) As used - gas year 2009/10 ALPs and DAFs, real system WCF and SF.
- ii) Best estimate 09 - gas year 2009/10 ALPs, DAFs, estimated weather correction factor (EWCF) consistent with DAFs and SF = 1.
- iii) Best estimate 10 - as (ii) above but with ALPs, DAFs, EWCFs based on 2010/11 models adjusted to apply to pattern of days/holidays in 2009/10.

Tables showing the error (“actual-allocated”) expressed as a percentage of full year demand, for the whole year and for winter and summer separately, for each of the three bases, are attached as Tables 3.1 to 3.9. The layout of these tables and the basis of the calculations are similar to that published on previous occasions (e.g. the June 2010 NDM report).

It is worth noting at the outset that results for band 09 are unreliable and are disregarded in this assessment. Only supply points that are NDM and have passed data validation can be used to assess this band and therefore the band is represented by a very small number of supply points distributed in only some of the 13 LDZs.

Figures 3.1, 3.2 and 3.3 are bar charts showing a simple summary of the overall picture given by these three sets of tables. The overall error and apparent winter/summer bias for EUCs in each consumption band is shown averaged across all LDZs.

The bar chart in Figure 3.1 shows that for the “as used” analysis the percentage errors for all consumption bands over the 12 month period as a whole, are positive and lie within a range of 2.33% to 5.03%. Full year, winter and summer errors are all positive for bands 01 to 08.

3.2 Analysis

The positive errors over 12 months across all consumption bands indicate under allocation by the models. This under allocation in most consumption bands in the “as used” analysis is a clear indication of population AQs being higher than the sample AQs used in this analysis. Moreover, since allocated consumption is a direct function of AQ, the extent of the AQ excess (in percentage terms) would broadly tend to be of the same order as that noted for this “as used” analysis. The full year errors in the “as used” analysis, across all applicable consumption bands for each LDZ (excluding WN LDZ for which there is no data for band 01) were also computed and are set out in Table 3.10. These errors range from 1.9% to 6.5% for the individual LDZs (and 3.4% overall across all LDZs excluding WN) suggesting an AQ excess of the same extent.

The “as used” analysis uses real (i.e. Gemini system) SFs that have taken population AQs into account (i.e. if population AQ was too high then this would have led to a decrease of the real SFs from the values that would have otherwise applied).

However, the AQs used in the analysis are not system AQs but are computed from sample data itself. These AQs based on the consumption data of the sample itself would be expected to be lower than the equivalent system AQs. Thus, the resultant “as used” allocations using the real SFs with sample derived AQs, end up being lower than they should be and this gives the positive errors shown in Figure 3.1.

The percentage changes in aggregate NDM AQs at the start of gas year 2010/11 as observed on the Gemini system indicated that a significant reduction in aggregate NDM AQs had taken place for gas year 2010/11. The reduction was 9.0% overall across all LDZs and reductions ranged from 7.7% in NT LDZ to 10.1% in WS LDZ. Degree day analysis presented at the DESC meeting on December 22nd 2009 suggests that around half (4 to 5%) of these AQ reductions were caused by the new EP2 seasonal normal weather basis that came in to effect on 1st October 2010. The rest of the Gemini aggregate NDM AQ changes were caused by year on year demand reductions (due to energy efficiency etc.) - these reductions are of similar magnitude to the AQ excess from the “as used” NDM sample analysis, which was 3.4% overall across all LDZs (WN excluded).

The “best estimate” analysis is potentially more helpful in assessing the performance of the algorithms themselves, as opposed to the performance of the demand attribution process. For each “best estimate” analysis, a scaling factor of one is used and EWCF is applied instead of WCF. The EWCF is calculated directly from the models of aggregate NDM demand in the LDZ for the period in question, using the relevant aggregate NDM seasonal normal demands and weather sensitivities (the same values used originally to compute the EUC DAF profiles) along with the actual CWV. Use of the EWCF (computed using the same values as applied in part to computing EUC DAF profiles) avoids bias which might be introduced in the WCF by any excess or deficiency in EUC AQs in the relevant LDZ, used to compute the sum across all EUCs of ALP weighted daily average demand $[\sum_{EUC} ALP * (AQ / 365)]$ for each day. (Note that EWCF = (WSENS/SND) * (CWV – SNCWV)).

The “best estimate 09” analysis is based on the algorithms for 2009/10, while the “best estimate 10” analysis is based on algorithms derived for 2010/11 and applied with appropriate adjustment for the pattern of days of the week and holidays in 2009/10.

On the evidence of the bar chart in Figure 3.2 (“best estimate 09”), there was little overall error in the algorithms for any of the consumption bands over the whole of gas year 2009/10 (full year errors range between +0.08% and +0.29% for all bands). Overall consumption band winter period errors range from -1.00% to +1.89% and overall consumption band summer period errors range from -5.75% to +3.21%. Actual summer demands are lower and hence percentage errors can be somewhat greater in the summer. The signs of the winter and summer period errors suggest that for consumption bands 01, 05, 06 and 07 the profiles in 2009/10 were a little too flat, while for consumption bands 02, 03, 04 and 08 the profiles were a little too peaky. There are (of course) exceptions to this broad generalisation in some individual LDZs (see Tables 3.5 and 3.6).

The bar chart in Figure 3.3 (“best estimate 10”) shows that the algorithms derived for 2010/11 would (if applied to gas year 2009/10) have resulted in a similar though somewhat mixed outcome for each overall consumption band considered. Whole year errors are very small overall for all the consumption bands, but for this “best estimate 10” case they range between 0.0% and +0.26%. Winter and summer period errors are slightly improved in bands 01, 02, 03 and 04. However, the winter and summer period errors are worse for bands 05, 06, 07 and 08.

The reconciliation variance analysis for gas year 2009/10 indicated profiles (excluding band 09) that were within the 5% level of winter/summer error differences for all bands except band 07 for which the profiles overall were at the 5% level, albeit that for all these bands the error differences were of negative sign (i.e. slightly peaky but within or at the 5% level).

It must be borne in mind that the two analyses are based on different data sets, neither of which are necessarily representative of the population as a whole. The RV analysis cannot assess consumption band 01 and is based on a validated sub-set of available reconciliation data relating to gas year 2009/10. Moreover, not all RV data pertaining to the period has been received at the time of this analysis (i.e. RVs resulting from non-monthly meter reads have not all come in). On the other hand, the “best estimate” analyses are based on validated NDM sample data. Moreover, both analyses suffer from small numbers of contributing meter/supply points at the higher consumption bands.

A selection of monthly charts is also presented: Figures 3.4 to 3.11 are monthly bar charts comparing actual and allocated demands, across all LDZs for consumption bands 01 to 08 respectively. These show for each month, actual demand, and allocated demand on the “as used”, “best estimate 09” and “best estimate 10” bases.

In interpreting these monthly charts it is relevant to recall the weather conditions that prevailed during gas year 2009/10. Over the winter 6-month period, October 2009 was the 10th warmest in the last 50 years and much warmer than October 2008 had been. This was followed by a similarly very warm November 2009 which was the second warmest in the last 50 years. However, generally colder weather took hold from around mid-December, with December 2009 being the 11th coldest in the last 50 years and January 2010 continued these very cold weather conditions being the 5th coldest in the last 50 years and the coldest since 1987. The following month, February 2010, was the coldest since 1996, although the coldest day in February 2010 was less cold than the coldest day in February 2009. Taken as a whole, the month of March 2010 was average; it was cold in the first half of the month and warm in the second but with sharply colder weather returning on the last two days of the month. Nationally, the month of April 2010 was not as warm as April 2009 but was still the 7th warmest April in the past 50 years. May 2010 was around seasonal normal overall but had a notable warm spell that occurred in all LDZs in the second half of the month. Nationally the month of June 2010 was much warmer than seasonal normal (the 6th warmest June in the past 50 years) and July 2010 was also warm (nationally the 8th warmest July in the past 50 years). This was followed by August 2010 which was colder than seasonal normal (nationally the coldest since 1993). Finally September 2010 was close to the 17 year seasonal normal basis.

Consideration of these monthly bar charts focuses on the actual consumption compared to the allocations arising from the “best estimate” analyses, which better reflect the performance of the profiles themselves.

The monthly chart for band 01, in Figure 3.4, indicates winter under allocation, excepting October and especially so during December, January and February (a period that was generally colder than normal) as well as summer over allocation, most notably during April (which was generally warmer than normal).

Table 3.11 shows the percentage errors for band 01 over the months of April, May and the rest of the summer months (June to September). For band 01 during April and May over allocation occurred in all LDZs, and this was also the case for most LDZs over the rest of the summer with the exception of NT and SW.

Table 3.12 shows the percentage errors overall across all LDZs for each band (except band 09) over the months of April, May and the rest of the summer months (June to September). For bands 01, 02 and 05 over allocations occurred in April. Over allocations also occurred in bands 01, 02, 04 and 05 in May. Over the rest of the summer period over allocations occurred in bands 01, 06, 07 and 08.

The monthly chart for band 02, in Figure 3.5, indicates small winter over allocation overall (except in November and March) with modest summer under allocation overall (most notably in June and July).

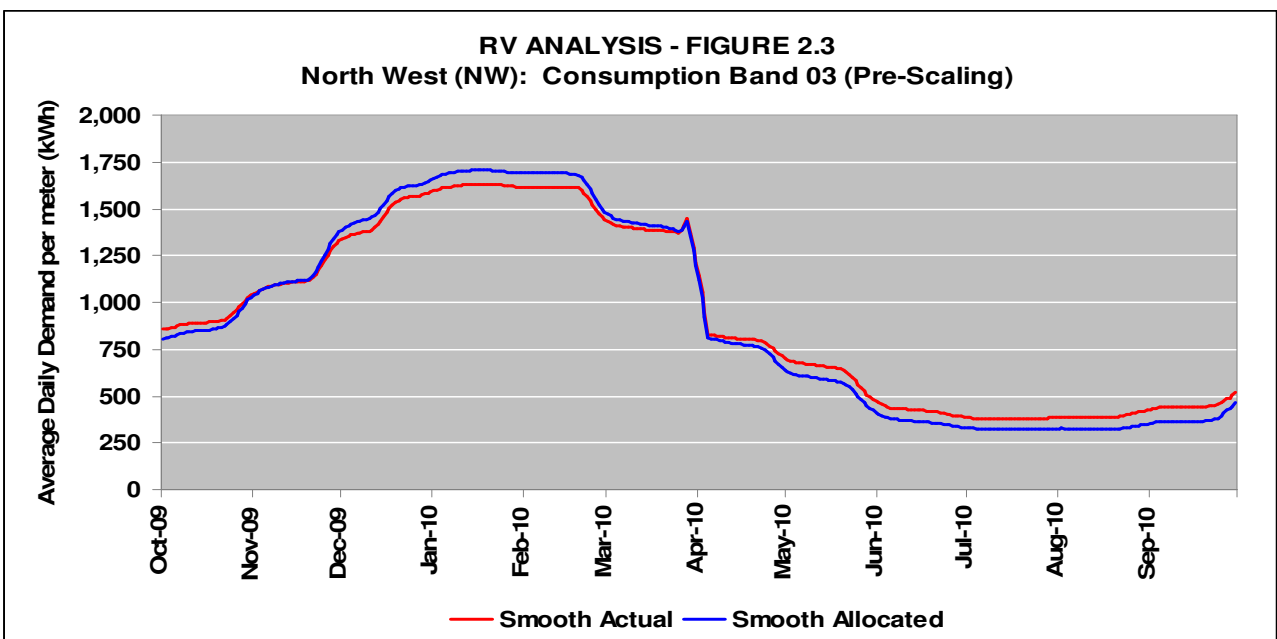
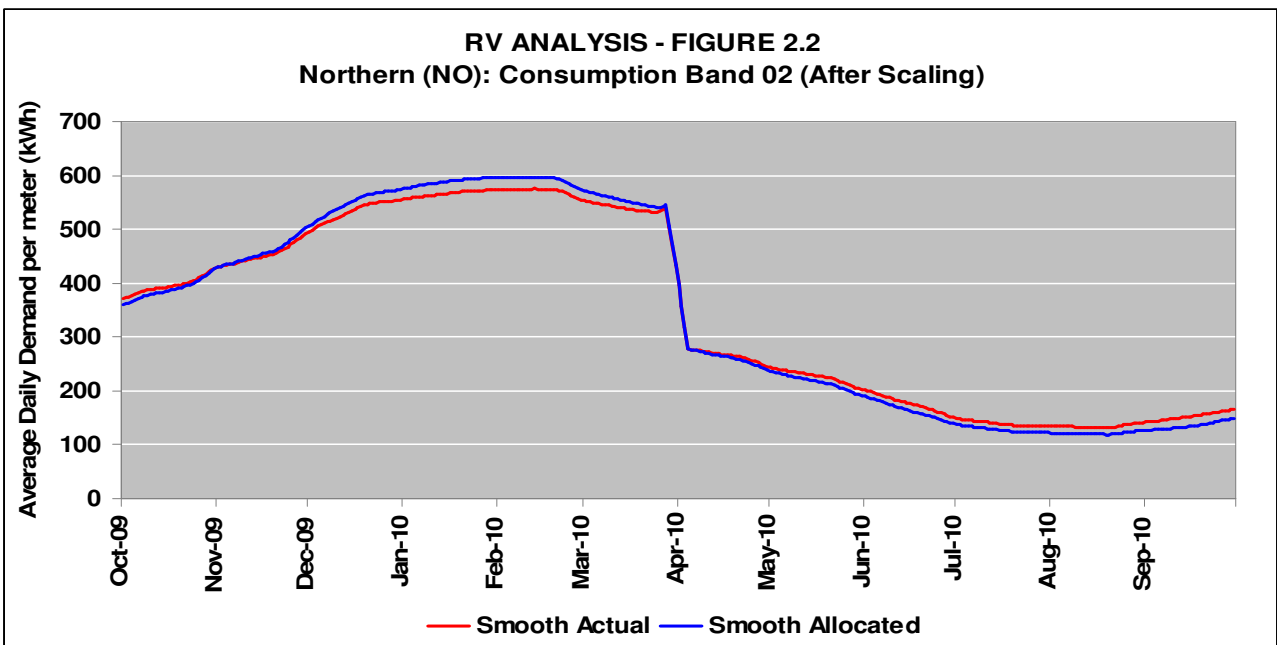
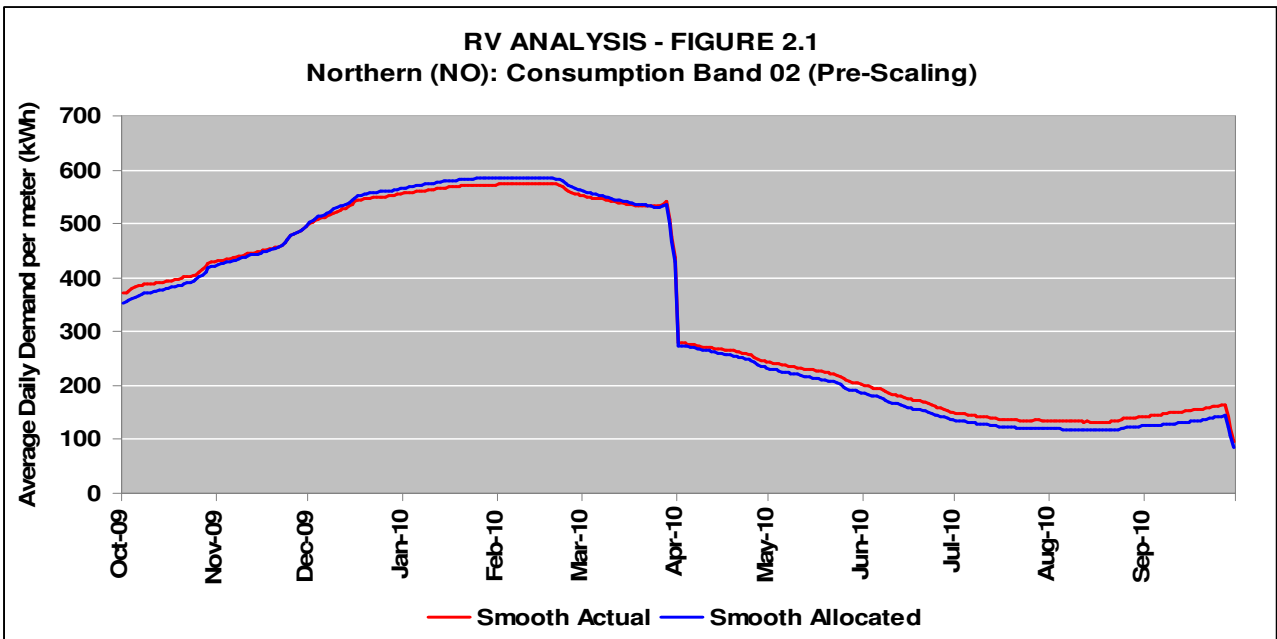
Figure 3.6 is the monthly chart for band 03, which shows small winter over allocation in December, January and February but also shows modest under allocation in October, November and March and mostly small summer under allocation (most evident in June and July 2010, but also showing some small over allocation September 2010).

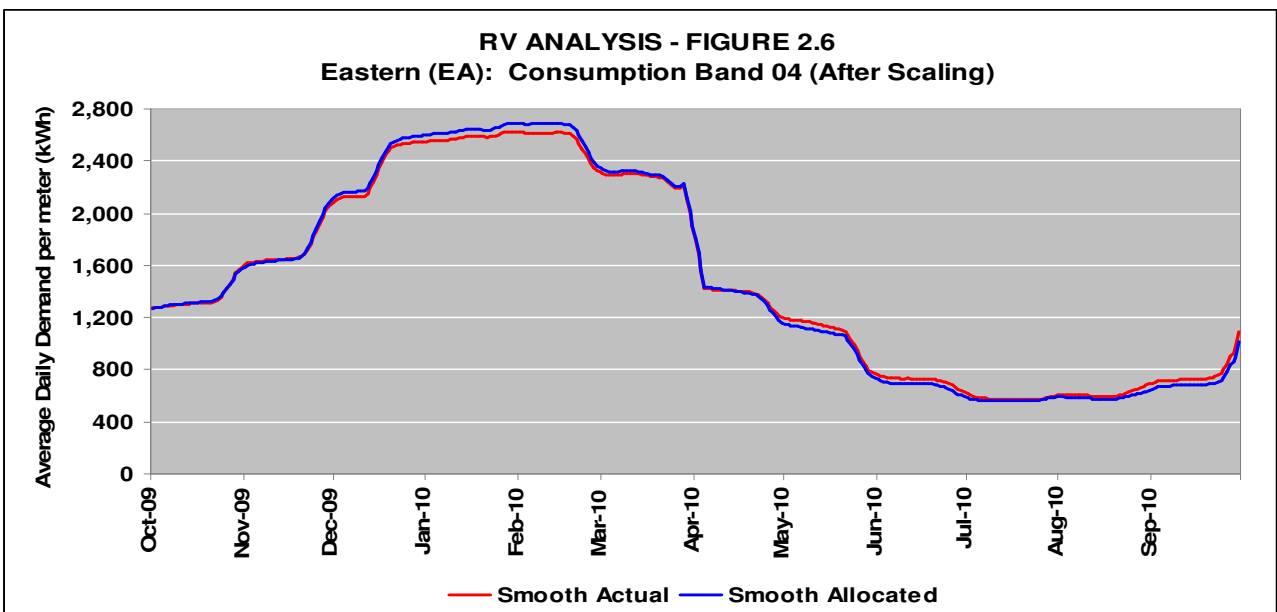
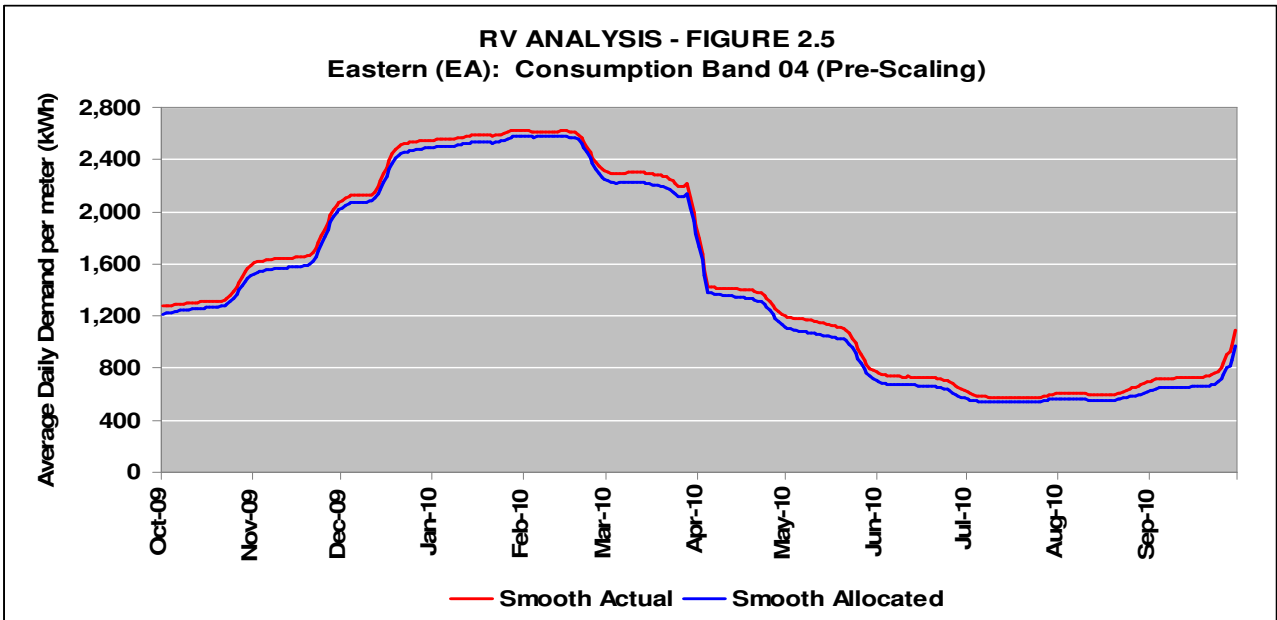
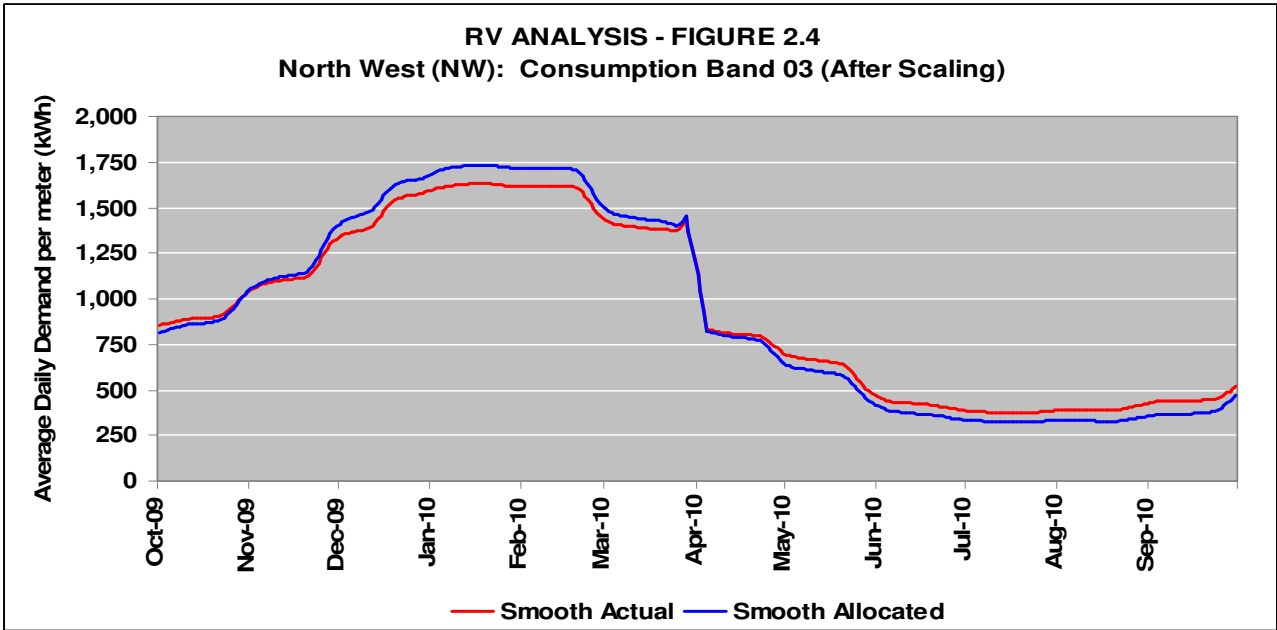
Figure 3.7 is the monthly chart for band 04, which shows slight winter over allocation for the majority of months but with some under allocation in November and March and mainly small summer under allocation (with the exception of September 2010 which shows slight over allocation).

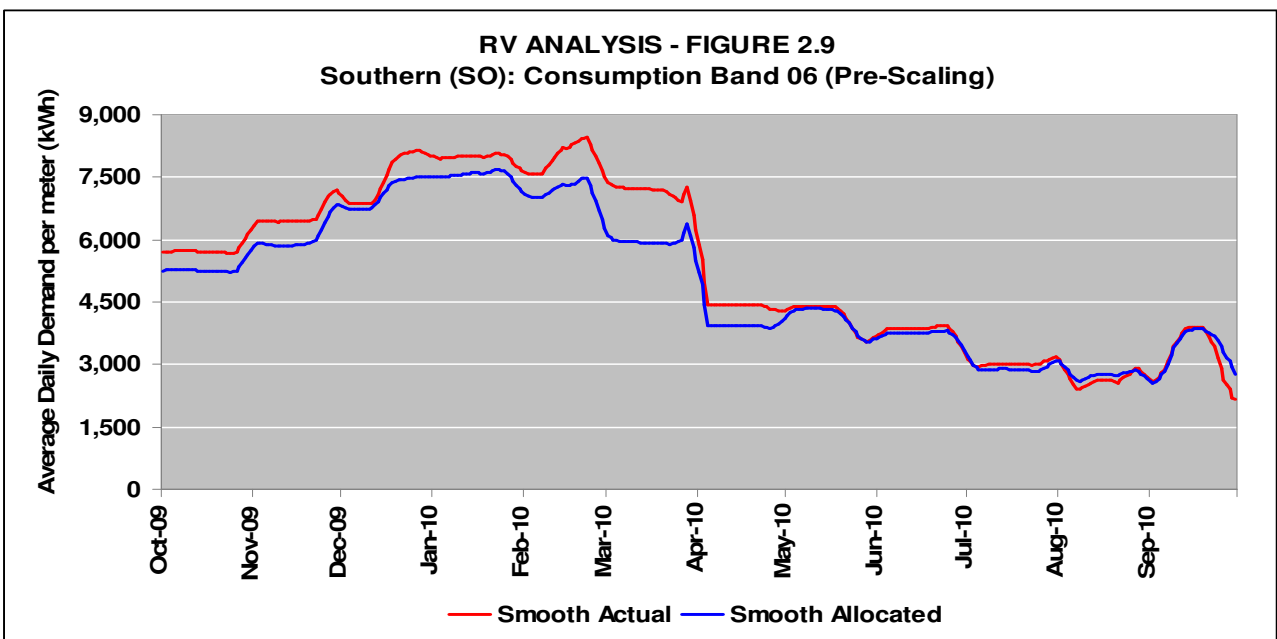
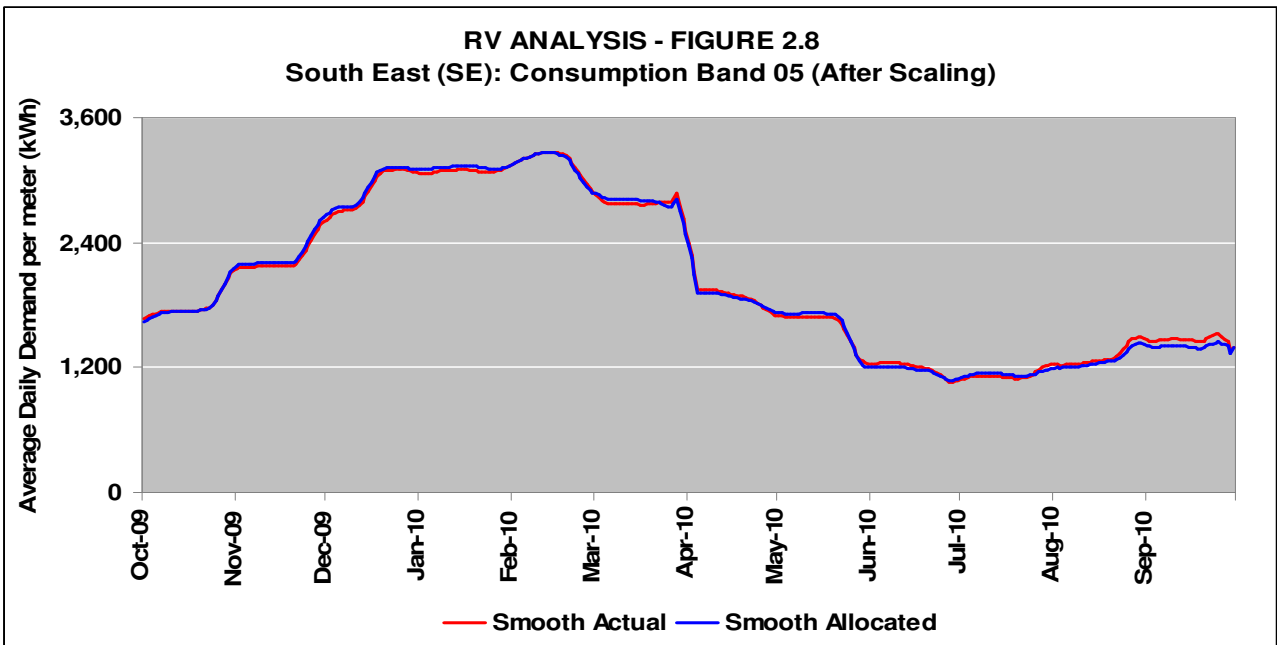
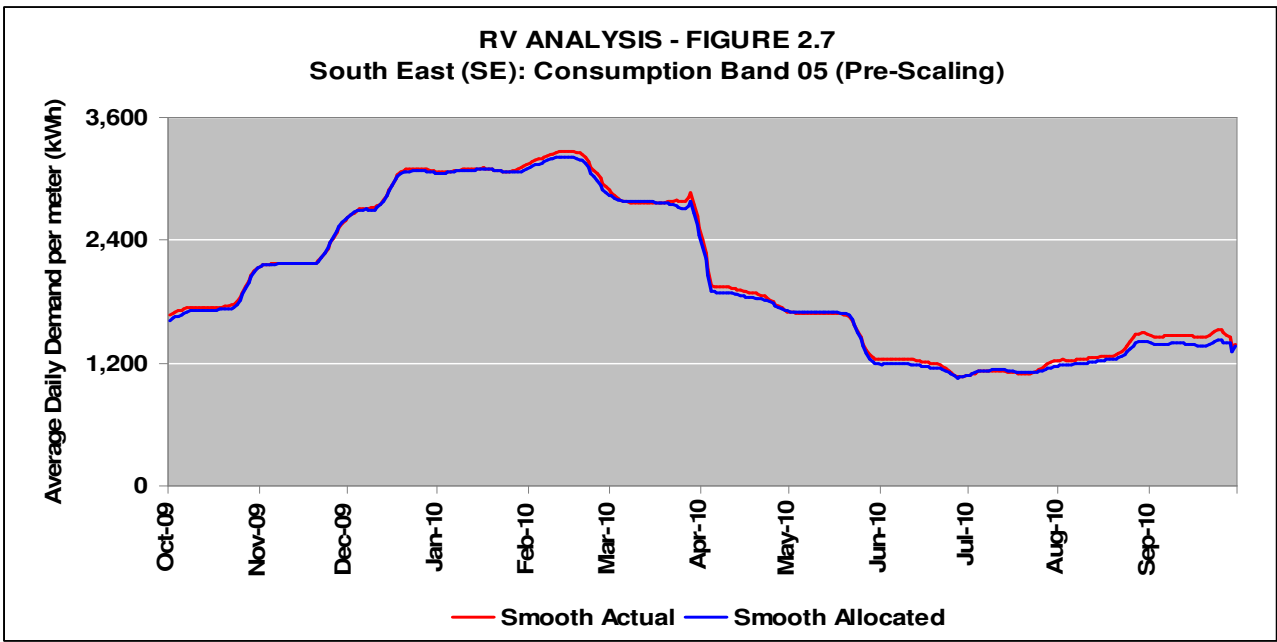
The monthly charts for bands 05 to 08 are in Figures 3.8 to 3.11. Overall, bands 05 to 07 show a small winter under allocation and a modest summer over allocation (with exceptions for some months in some bands). For example, under allocation is evident in March 2010 and over allocation is evident in September 2010 in these bands. Overall, band 08 shows a small over allocation in winter (most marked in December) and under allocation in summer (most marked in July).

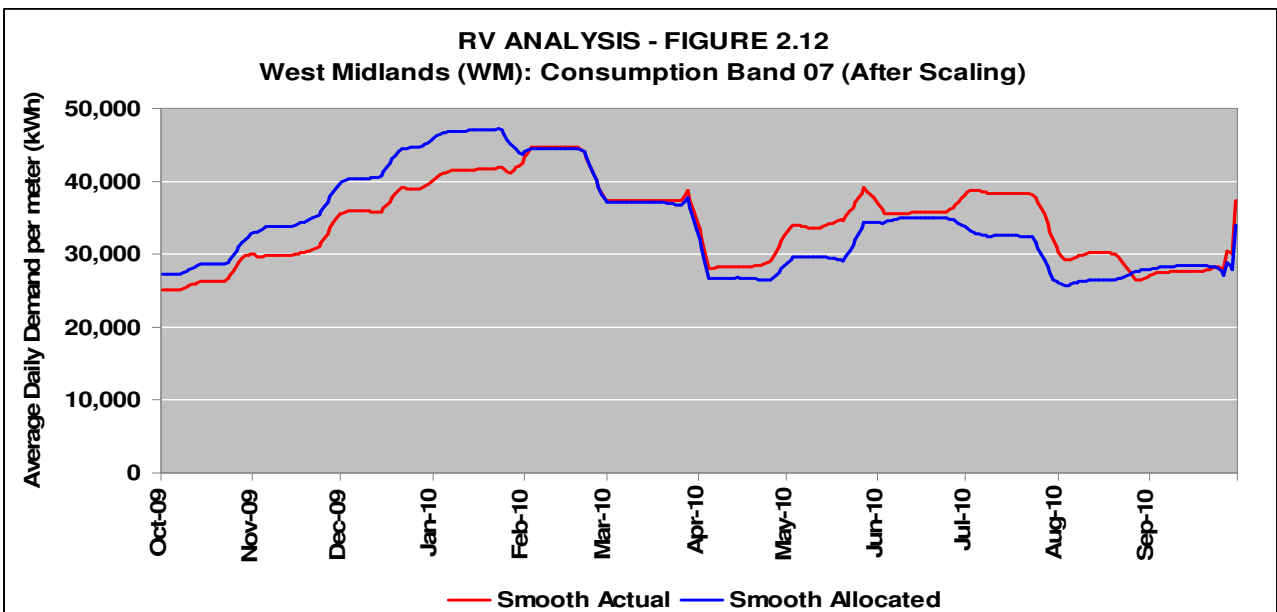
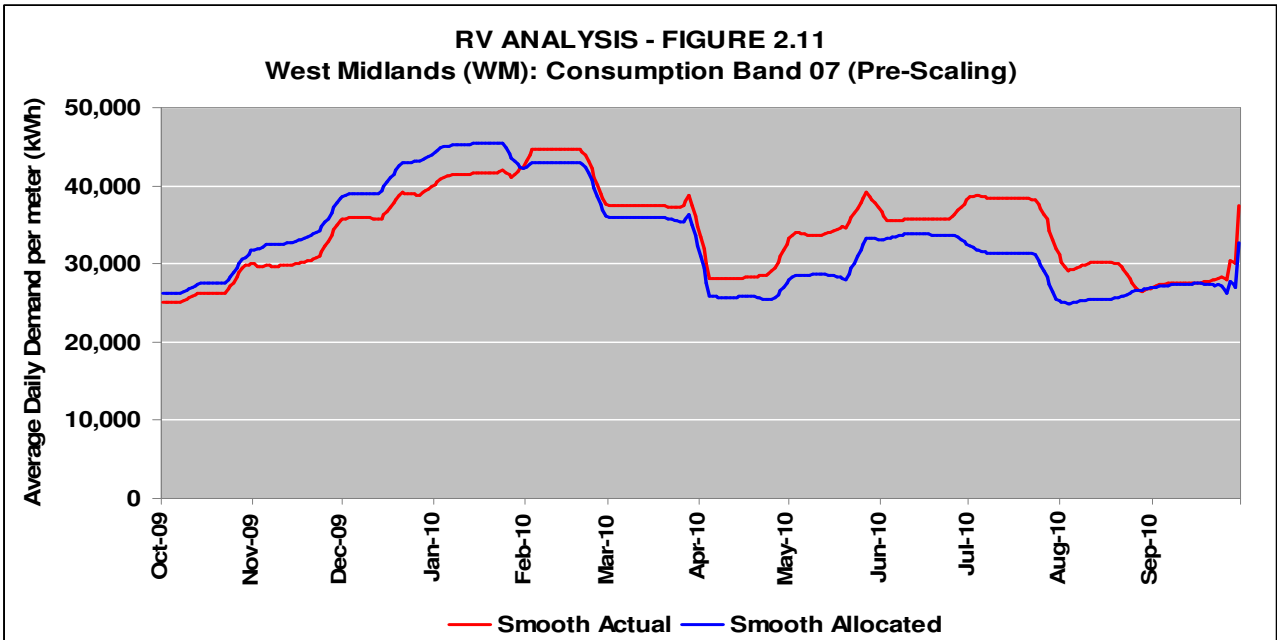
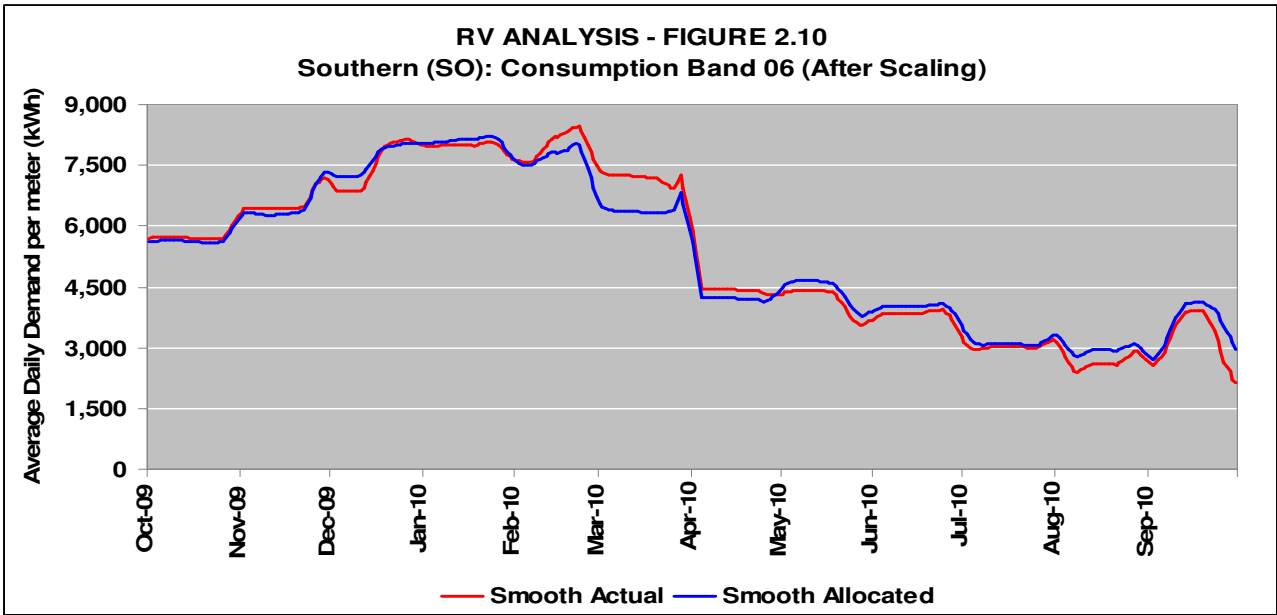
Additionally examples of monthly bar charts for individual EUCs, for some of the EUC bands (namely WM:E0902B, EM:E0903B, NE:E0904B, NT:E0905B, NW:E0906B, SW:E0907B and NO:E0908B) are shown in Figures 3.12 to 3.18 respectively. There is no consistent monthly pattern across all these examples, but in a majority of the examples January 2010 shows a small over allocation and July 2010 a modest under allocation.

In response to feedback received some additional daily graphs have been included (as Figures 3.19 to 3.26) showing actual demand and allocated demand on the “best estimate 09” and “best estimate 10” basis for each consumption band. In general, the allocated demand for both bases was close to the actual demand for each consumption band on most days. For band 01, the most notable exceptions occurred in the warm weather in April and late May 2010. For the other bands 02 to 08, the most notable exceptions occurred during the unseasonably cold weather in January and around the Christmas holiday period. Note that changes to the Christmas holiday period and holiday codes were agreed at the DESC meeting on 10th November 2010.









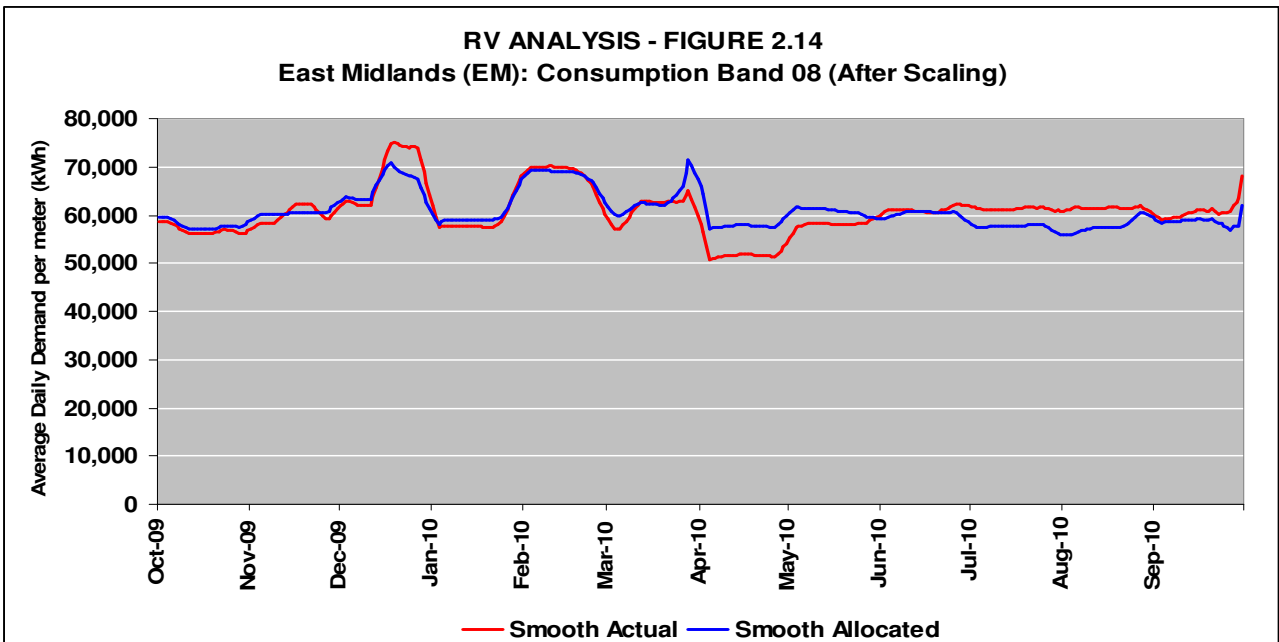
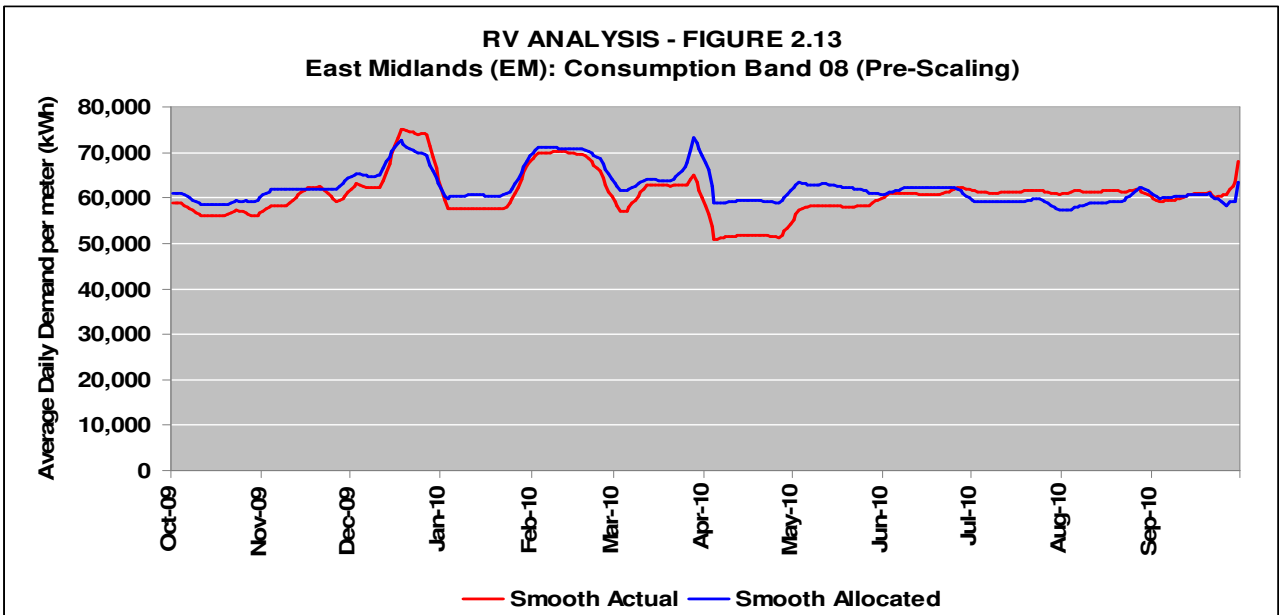


Table 2.1 – RV Categorisations: Profile (Gas Year 2009/10)

Based on average errors (after scaling) over the period as a percentage of average actual over the full year

EUC	Band	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
02	B	~	↑	↑	↑	↑	~	↑	↑	↑	↑	↑	↑	↑
03	B	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
04	B	↑	↑	~	↑	~	~	↑	↑	~	~	~	~	~
05	B	~	~	↑	↑	~	~	↑	~	↑	~	~	~	~
06	B	~	↑	↑	~	↑	↑	↑	~	↑	~	↓	↓	↓
07	B	↑	↑	↑	↑	↑	↑	↓	↑	↑	↑	~	~	↑
08	B		↓	↑	↑	~	↑		↑		↑	~	~	↑
09	B			~										

<u>Good</u>	~	<u>5% Level</u>	↑	Too Peaky	↓	Too Flat	<u>10% Level</u>	↑	Too Peaky	↓	Too Flat
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Table 2.2 – RV Categorisations: Winter (Gas Year 2009/10)

Based on average errors (after scaling) over the period as a percentage of average actual over the full year

EUC	Band	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
02	B	-0.02	-0.03	-0.03	-0.04	-0.03	-0.02	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03
03	B	-0.03	-0.04	-0.06	-0.04	-0.04	-0.04	-0.08	-0.05	-0.03	-0.04	-0.03	-0.03	-0.05
04	B	-0.04	-0.03	0.00	-0.06	-0.01	-0.02	-0.07	-0.03	-0.02	-0.01	-0.02	-0.02	-0.02
05	B	-0.02	-0.02	-0.05	-0.03	-0.02	-0.02	-0.03	0.02	-0.05	-0.01	-0.01	0.00	0.01
06	B	0.01	-0.12	-0.04	0.02	-0.05	-0.04	-0.13	0.01	-0.05	-0.01	0.03	0.03	0.04
07	B	-0.03	-0.17	-0.07	-0.10	-0.06	-0.08	0.12	-0.06	-0.08	-0.04	0.01	0.00	-0.09
08	B		0.23	-0.10	-0.09	0.00	-0.05		-0.05		-0.11	-0.01	0.00	-0.19
09	B			0.00										

Table 2.3 – RV Categorisations: Summer (Gas Year 2009/10)

Statistics are average errors (after scaling) over the period as a fraction of average actual over the full year

EUC	Band	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
02	B	0.02	0.03	0.03	0.04	0.03	0.02	0.04	0.04	0.03	0.03	0.03	0.03	0.03
03	B	0.03	0.04	0.06	0.04	0.04	0.04	0.08	0.05	0.03	0.04	0.03	0.03	0.05
04	B	0.04	0.03	0.00	0.06	0.01	0.02	0.07	0.03	0.02	0.01	0.02	0.02	0.02
05	B	0.02	0.02	0.05	0.03	0.02	0.02	0.03	-0.02	0.05	0.01	0.01	0.00	-0.01
06	B	-0.01	0.11	0.04	-0.02	0.05	0.04	0.12	-0.01	0.05	0.01	-0.03	-0.03	-0.04
07	B	0.03	0.17	0.07	0.10	0.06	0.08	-0.13	0.06	0.08	0.04	-0.01	0.00	0.09
08	B		-0.23	0.10	0.09	0.00	0.05		0.05		0.11	0.01	0.00	0.19
09	B			0.00										

Table 2.4 – RV Categorisations: Annual Scaling (Gas Year 2009/10)

Statistics are total actual over the full year divided by the total allocated over the full year

EUC	Band	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW
02	B	1.06	1.02	1.02	1.01	1.02	1.03	1.02	1.02	1.03	1.02	1.02	1.06	1.03
03	B	1.07	1.02	1.01	1.02	1.02	1.04	1.00	1.03	1.03	1.03	1.05	1.06	1.04
04	B	1.07	1.01	1.04	1.06	1.02	1.05	1.00	1.02	1.04	1.04	1.04	1.07	1.05
05	B	1.05	1.03	1.02	1.06	1.04	1.08	1.05	1.01	1.03	1.03	1.01	1.07	1.06
06	B	1.08	1.06	1.02	1.05	1.00	0.99	1.08	1.12	1.04	1.01	1.01	1.07	1.08
07	B	1.22	1.09	1.04	1.00	1.01	1.04	1.02	0.94	1.12	1.03	1.00	1.03	1.09
08	B		0.91	0.96	0.98	0.97	0.96		1.00		1.03	1.36	1.09	0.93
09	B			0.87										

Table 3.1 – Oct 09 to Sep 10: Actual WCF and SF, ALPs and DAFs ‘As Used’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	9.11%	4.02%	4.65%	2.71%	3.69%	6.01%	-	5.83%	3.58%	3.11%	4.38%	8.19%	4.76%	5.03%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	8.63%	4.42%	4.95%	3.52%	3.90%	6.33%	3.31%	6.54%	3.78%	2.91%	4.40%	7.48%	4.79%	4.78%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	8.42%	3.82%	4.40%	2.48%	3.31%	6.07%	2.65%	5.86%	3.28%	2.88%	4.30%	7.83%	4.60%	4.69%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	8.33%	3.92%	4.35%	2.68%	3.26%	5.21%	2.76%	5.29%	3.49%	2.45%	3.80%	7.09%	4.14%	4.47%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	7.63%	3.33%	4.00%	2.50%	3.22%	4.62%	2.53%	4.22%	2.96%	2.08%	3.41%	6.12%	3.33%	4.03%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	6.54%	2.68%	3.50%	2.28%	2.89%	3.35%	2.16%	3.14%	2.46%	1.87%	2.93%	5.58%	2.76%	3.36%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	5.55%	2.11%	3.35%	1.97%	2.61%	2.59%	2.10%	3.49%	2.17%	1.59%	2.79%	4.17%	2.76%	2.82%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	4.31%	1.70%	2.91%	1.74%	2.41%	2.03%	1.73%	2.69%	1.84%	1.22%	2.41%	3.79%	2.29%	2.33%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.2 – Oct 09 to Mar 10: Actual WCF and SF, ALPs and DAFs ‘As Used’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	8.26%	3.83%	3.82%	2.59%	3.50%	6.08%	-	6.55%	3.95%	3.01%	5.00%	7.83%	4.25%	4.91%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	6.91%	1.53%	2.47%	-1.83%	-1.50%	3.82%	12.93%	2.34%	1.60%	3.62%	2.81%	6.98%	3.97%	2.59%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	2.61%	4.44%	1.30%	0.40%	-0.45%	2.65%	-2.16%	5.72%	3.66%	0.17%	3.67%	2.98%	1.29%	2.11%

Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	5.40%	2.62%	1.83%	-0.75%	-0.73%	1.50%	-2.02%	4.13%	2.27%	2.23%	1.51%	6.27%	4.69%	2.40%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	5.47%	2.63%	2.45%	0.53%	1.43%	3.13%	1.77%	6.66%	3.34%	3.29%	-0.07%	5.11%	2.38%	2.90%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	4.11%	1.51%	1.41%	1.97%	-0.81%	1.77%	-2.29%	-0.05%	0.86%	2.09%	4.93%	7.78%	3.64%	2.42%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	3.48%	-7.78%	2.75%	0.21%	-1.89%	7.46%	-1.26%	-1.02%	-6.97%	5.16%	3.13%	7.98%	3.15%	1.97%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	9.95%	-1.44%	4.37%	-6.16%	-6.36%	1.59%	-15.28%	-5.05%	-2.73%	6.99%	11.24%	10.53%	-5.29%	1.02%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.3 – Apr 10 to Sep 10: Actual WCF and SF, ALPs and DAFs ‘As Used’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	11.63%	4.60%	7.30%	3.10%	4.34%	5.77%	-	3.46%	2.35%	3.40%	2.37%	9.40%	6.53%	5.41%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	12.97%	12.50%	11.70%	19.98%	18.74%	14.02%	-43.64%	19.39%	9.86%	1.00%	8.64%	8.82%	7.35%	10.94%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	21.47%	2.07%	13.05%	8.46%	13.71%	16.40%	15.12%	6.34%	2.18%	9.53%	6.00%	20.06%	14.33%	11.67%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	14.99%	7.40%	10.46%	10.82%	13.42%	14.27%	13.36%	8.60%	6.72%	3.01%	9.30%	9.32%	2.68%	9.60%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	12.16%	4.81%	7.16%	6.68%	6.79%	7.71%	4.11%	-1.19%	2.11%	-0.66%	10.53%	8.39%	5.15%	6.42%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	10.72%	4.63%	6.90%	2.80%	8.48%	5.85%	8.91%	7.98%	5.34%	1.46%	-0.86%	0.88%	1.21%	4.98%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	8.59%	13.96%	4.28%	4.36%	8.42%	-5.22%	6.79%	10.49%	14.74%	-5.10%	2.19%	-3.17%	2.08%	4.11%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	-4.56%	5.53%	0.87%	10.23%	11.75%	2.59%	17.83%	12.66%	8.07%	-8.88%	-14.84%	-8.57%	11.93%	4.05%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.4 – Oct 09 to Sep 10: EWCF, with SF=1: 2009/10 ALPs and DAFs ‘Best Estimate 09’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	0.13%	0.28%	0.04%	0.18%	0.10%	-0.08%	-	0.09%	0.08%	0.08%	0.17%	-0.14%	0.00%	0.08%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	0.27%	0.62%	0.32%	0.35%	0.33%	0.22%	0.32%	0.30%	0.28%	0.18%	0.35%	0.00%	0.20%	0.29%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	0.18%	0.55%	0.14%	0.08%	0.06%	0.16%	0.14%	0.06%	0.10%	0.08%	0.30%	-0.13%	-0.01%	0.14%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	0.32%	0.64%	0.26%	0.32%	0.13%	0.17%	0.27%	-0.08%	0.23%	0.04%	0.15%	-0.11%	0.17%	0.19%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	0.27%	0.50%	0.26%	0.30%	0.30%	0.26%	0.27%	0.21%	0.21%	0.01%	0.11%	-0.08%	0.19%	0.20%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	0.32%	0.44%	0.22%	0.28%	0.27%	0.26%	0.23%	0.17%	0.17%	0.09%	0.16%	0.05%	0.16%	0.22%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	0.32%	0.32%	0.20%	0.22%	0.21%	0.18%	0.20%	0.17%	0.12%	0.12%	0.16%	-0.02%	0.13%	0.18%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	0.19%	0.21%	0.13%	0.16%	0.15%	0.13%	0.13%	0.01%	0.11%	0.12%	0.15%	0.04%	0.10%	0.13%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.5 – Oct 09 to Mar 10: EWCF, with SF=1: 2009/10 ALPs and DAFs ‘Best Estimate 09’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	1.93%	1.67%	2.74%	1.95%	2.21%	2.22%	-	3.45%	1.90%	0.42%	1.55%	1.39%	1.17%	1.89%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	0.87%	-0.69%	1.21%	-2.90%	-2.83%	-0.17%	12.97%	-1.09%	-0.55%	1.20%	-0.61%	0.96%	0.99%	-0.17%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	-3.91%	2.41%	-0.04%	-0.55%	-1.80%	-1.66%	-2.07%	2.45%	1.64%	-2.45%	0.31%	-3.71%	-1.83%	-1.00%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	-0.53%	0.54%	0.64%	-1.66%	-2.05%	-2.37%	-1.98%	0.93%	0.26%	-0.02%	-1.66%	0.40%	2.01%	-0.46%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	0.01%	0.87%	1.38%	-0.30%	0.34%	0.04%	1.69%	4.33%	1.61%	1.31%	-3.01%	-0.14%	0.10%	0.35%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	-0.56%	0.06%	0.49%	1.26%	-1.78%	-0.51%	-2.49%	-1.95%	-0.63%	0.26%	2.58%	3.10%	1.73%	0.32%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	-0.35%	-9.12%	1.93%	-0.42%	-2.77%	5.84%	-1.53%	-3.17%	-8.41%	3.61%	0.87%	4.40%	1.20%	0.38%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	7.36%	-2.41%	3.73%	-6.73%	-7.19%	0.31%	-	-6.95%	-3.88%	5.76%	9.49%	7.36%	-7.09%	-0.20%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.6 – Apr 10 to Sep 10: EWCF, with SF=1: 2009/10 ALPs and DAFs ‘Best Estimate 09’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	-5.24%	-3.95%	-8.47%	-5.32%	-6.88%	-7.92%	-	-	-5.91%	-0.98%	-4.38%	-5.22%	-4.05%	-5.75%
Num S.pts	194	192	196	246	239	204	-	10.99%	235	199	199	246	227	2603
02B	-1.22%	4.27%	-2.11%	10.33%	9.04%	1.41%	-	4.57%	2.59%	-2.51%	2.90%	-2.62%	-2.26%	1.58%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	9.39%	-4.76%	0.62%	1.88%	5.22%	5.67%	5.85%	-8.02%	-4.34%	6.29%	0.26%	8.91%	5.34%	3.21%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	2.25%	0.92%	-0.67%	5.01%	5.69%	6.36%	5.27%	-2.97%	0.16%	0.17%	4.50%	-1.48%	-4.74%	1.81%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	0.83%	-0.28%	-2.02%	1.56%	0.20%	0.71%	-2.67%	-8.91%	-2.98%	-2.91%	6.50%	0.07%	0.37%	-0.11%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	1.84%	1.07%	-0.22%	-1.36%	3.38%	1.47%	4.34%	3.40%	1.61%	-0.24%	-4.44%	-6.50%	-2.58%	0.04%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	1.32%	11.64%	-2.44%	1.09%	4.04%	-8.88%	2.63%	5.33%	11.86%	-6.42%	-1.06%	-8.52%	-1.73%	-0.13%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	-11.09%	3.42%	-4.93%	7.56%	7.97%	-0.08%	15.07%	8.98%	5.56%	-9.75%	-	-	9.26%	0.57%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144
											18.10%	13.40%		

Table 3.7 – Oct 09 to Sep 10: EWCF, with SF=1: 2010/11 ALPs and DAFs ‘Best Estimate 10’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	0.01%	0.00%	0.00%	0.01%	0.01%	0.00%	-	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	0.09%	0.26%	0.22%	0.16%	0.16%	0.20%	0.22%	0.15%	0.10%	0.10%	0.10%	-0.02%	0.15%	0.14%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	0.16%	0.18%	0.67%	0.53%	0.33%	0.63%	0.67%	0.27%	0.04%	0.05%	0.12%	0.11%	0.21%	0.26%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	0.15%	0.22%	0.36%	0.18%	0.32%	0.39%	0.36%	0.22%	0.04%	0.00%	0.01%	-0.01%	0.15%	0.17%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	0.12%	0.22%	0.32%	0.27%	0.23%	0.22%	0.32%	0.14%	0.04%	-0.02%	0.00%	0.01%	0.16%	0.14%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	0.17%	0.21%	0.17%	0.16%	0.23%	0.21%	0.17%	0.12%	0.11%	0.03%	0.05%	0.09%	0.13%	0.15%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	0.24%	0.15%	0.13%	0.13%	0.12%	0.15%	0.13%	0.13%	0.05%	0.05%	0.05%	0.07%	0.11%	0.12%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	0.15%	0.12%	0.11%	0.10%	0.09%	0.11%	0.11%	0.08%	0.06%	0.06%	0.06%	0.06%	0.09%	0.10%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.8 – Oct 09 to Mar 10: EWCF, with SF=1: 2010/11 ALPs and DAFs ‘Best Estimate 10’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	1.91%	1.40%	1.96%	1.50%	1.60%	1.50%	-	3.24%	1.80%	0.76%	1.22%	1.28%	0.69%	1.59%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	1.42%	0.53%	1.40%	-1.96%	-2.59%	0.17%	13.16%	-0.65%	-0.07%	1.84%	0.08%	1.75%	1.30%	0.41%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	-2.82%	2.27%	1.86%	-0.30%	-0.67%	-0.78%	-0.11%	2.36%	1.79%	-1.76%	0.16%	-2.05%	-0.69%	-0.25%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	0.22%	0.86%	1.32%	-0.91%	-0.97%	-1.32%	-1.27%	1.57%	0.61%	0.51%	-0.66%	0.62%	1.35%	0.15%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	0.66%	0.84%	1.56%	-0.50%	0.05%	0.76%	1.89%	4.01%	2.23%	1.38%	-2.07%	0.84%	0.45%	0.71%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	0.66%	0.38%	0.73%	1.28%	-2.02%	-0.38%	-2.23%	-0.56%	-0.84%	0.07%	2.91%	3.27%	2.21%	0.55%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	-1.50%	-8.80%	1.91%	-0.07%	-2.35%	6.30%	-1.54%	-4.21%	-8.32%	3.76%	0.90%	4.40%	0.65%	0.44%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	6.15%	-3.98%	2.28%	-6.12%	-6.54%	0.99%	-	-6.78%	-4.15%	5.58%	9.22%	7.30%	-7.48%	-0.38%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.9 – Apr 10 to Sep 10: EWCF, with SF=1: 2010/11 ALPs and DAFs ‘Best Estimate 10’

Analysis of daily percentage error: Statistic is total errors as percentage of full period

EUC	SC	NO	NW	NE	EM	WM	WN	WS	EA	NT	SE	SO	SW	ALL
01B	-5.67%	-4.27%	-6.16%	-4.63%	-5.30%	-5.11%	-	-	-5.92%	-2.35%	-3.98%	-4.25%	-2.40%	-5.10%
Num S.pts	194	192	196	246	239	204	-	226	235	199	199	246	227	2603
02B	-3.25%	-0.51%	-2.99%	6.65%	7.74%	0.27%	-	2.59%	0.57%	-4.53%	0.16%	-4.84%	-3.48%	-0.60%
Num S.pts	71	96	115	100	90	78	5	52	114	128	108	72	86	1115
03B	6.85%	-5.76%	-2.65%	2.91%	3.09%	4.88%	2.68%	-6.79%	-5.03%	4.48%	-0.02%	5.57%	2.86%	1.62%
Num S.pts	141	106	117	94	153	84	18	39	121	147	176	108	88	1392
04B	-0.02%	-1.49%	-1.96%	2.73%	3.63%	4.58%	3.97%	-3.62%	-1.47%	-1.25%	1.63%	-1.71%	-3.07%	0.21%
Num S.pts	341	206	336	259	299	291	28	100	296	370	360	258	196	3340
05B	-0.99%	-1.09%	-2.20%	1.91%	0.59%	-0.92%	-2.91%	-8.41%	-4.93%	-3.18%	4.24%	-1.88%	-0.41%	-1.05%
Num S.pts	269	133	271	151	197	249	33	61	151	270	213	166	128	2292
06B	-0.69%	-0.07%	-0.75%	-1.71%	3.63%	1.14%	3.80%	1.17%	1.83%	-0.03%	-5.40%	-6.71%	-3.50%	-0.55%
Num S.pts	79	54	87	69	95	99	11	30	68	85	63	64	54	858
07B	2.79%	10.88%	-2.57%	0.39%	3.30%	-9.70%	2.48%	6.86%	11.58%	-6.88%	-1.41%	-8.23%	-0.83%	-0.37%
Num S.pts	15	10	31	37	40	36	6	9	15	15	17	18	17	266
08B	-9.29%	5.14%	-2.93%	6.78%	7.16%	-0.99%	16.67%	8.93%	5.80%	-9.57%	-	-	9.72%	0.73%
Num S.pts	7	8	21	11	27	26	2	7	5	15	6	4	5	144

Table 3.10 - Aggregate NDM AQs 2009/10

LDZ	Estimated AQ Excess (+) or Deficit (-) (‘as used’ analysis full year errors)	Observed AQ Reductions in Gemini at start of gas year 2010/11
SC	6.5%	9.2%
NO	2.8%	9.2%
NW	3.6%	9.7%
NE	2.2%	8.8%
EM	2.8%	8.7%
WM	3.4%	9.4%
WN	-	-
WS	3.5%	10.1%
EA	2.7%	8.1%
NT	1.9%	7.7%
SE	3.0%	8.5%
SO	5.7%	10.0%
SW	3.1%	9.6%
Overall	3.4%	9.0%

Table 3.11 - Apr 10 - Sep 10: EWCF, with SF=1: 2009/10 ALPs and DAFs 'Best Estimate 09'

Analysis of Daily Percentage Error: Statistic is Total Errors as Percentage of Actual Demand in Specified Period

Band 01B	Apr 10	May 10	Jun 10 - Sep 10
SC	-1.1%	-1.8%	-2.3%
NO	-0.7%	-1.3%	-2.0%
NW	-2.4%	-2.0%	-4.0%
NE	-1.1%	-1.4%	-2.9%
EM	-1.8%	-2.9%	-2.8%
WM	-1.9%	-2.6%	-3.5%
WN	-	-	-
WS	-3.9%	-2.8%	-4.3%
EA	-1.6%	-1.3%	-3.0%
NT	-2.6%	-0.4%	2.0%
SE	-1.4%	-0.1%	-2.8%
SO	-3.2%	-1.8%	-0.2%
SW	-2.6%	-1.5%	0.1%

Table 3.12 - Apr 10 - Sep 10: EWCF, with SF=1: 2009/10 ALPs and DAFs 'Best Estimate 09'

Analysis of Daily Percentage Error: Statistic is Total Errors as Percentage of Actual Demand in Specified Period

All LDZs	Apr 10	May 10	Jun 10 - Sep 10
01B	-6.5%	-7.0%	-4.8%
02B	-0.2%	-3.2%	4.3%
03B	1.0%	1.0%	4.6%
04B	0.5%	-0.3%	3.3%
05B	-0.4%	-2.1%	0.6%
06B	0.7%	0.7%	-0.7%
07B	2.7%	0.0%	-2.0%
08B	0.1%	0.9%	-0.9%
09B	-	-	-

