British Gas Query 1. ALP notably higher Day of Week Shape in May
In a few LDZs, the difference between May 2013 and May 2014 are quite pronounced. In the example below, in NO:E03B, extremes of over 20% difference are depicted .
What makes May 2014 different from 2013?

Xoserve Response

The key trend of note for NO:E1403B is that for 2014/15 the smoothed models have indicated a summer reduction, where none was indicated for 2013/14. This can be identified within file EUCWKxxy (where xx is the Gas Year and y is the indicator S for Small NDM or L for Large NDM – in this case EUCWK14S).

The code for 2014/15 is HXWR (holidays excluded, with summer reductions), compared with HXNR for 2013/14 (holidays excluded, no summer reductions).

Where indicated in the smoothed models, summer reductions apply from the Monday after the late Spring Bank Holiday (i.e. from June 1st in 2015) to the last Sunday in September (i.e. September 27th). Summer reductions introduce a distinctive drop for the summer months, as shown in Figure A9.5 of the 2013/14 NDM Algorithms booklet.

The shifting of the calendar from one year to another will also introduce large swings. E.g. 05/05/14 was a Bank Holiday Monday, with a Holiday code (i.e. reduced demand for Band 2 and upwards) whilst 05/05/15 will be a working Tuesday, i.e. standard demand. Individual days will therefore demonstrate large swings around holiday periods, due to the switch from holiday to non-holiday or vice versa.

In general NO:E1403B displays less weekend effects in its 2014/15 smoothed models than in 2013/14 and this is visible on the graph provided by British Gas, likewise the May holiday periods as defined by the modelling system (Sun 2nd May to Sun 10th May and Sun 24th May to Sat 30th May) also display less reduction in demand compared with standard non-holiday Monday to Thursday – these can be viewed in EUCHOL14S .

Comparative non-holiday weekend reductions are as follows:

Code	2013/14 Factor	2014/15 Factor	Days Impacted in May
0 (M-Th)	1	1	
1 (Fri)	0.923	0.944	3
2 (Sat)	0.746	0.793	2
3 (Sun)	0.791	0.822	1

Comparative May holiday reductions are as follows:

Code	2013/14 Factor	2014/15 Factor	Days Impacted in May
9	0.779	0.842	5
10	0.995	1	4
11	0.798	0.807	3
12	0.942	0.943	4

British Gas Query 2. ALP sudden swings in May
In NE:E01B, sudden swings are observed both in May and September.
Any idea as to why?

Xoserve Response

Like the previous example, the key trend of note for NE:E1401B is the switch to a summer reduction for 2014/15, as indicated by the summer reductions. Please see above for signposting to the files in which the relevant codes can be found.

The code for 2014/15 is HIWR (holidays included, with summer reductions), compared with HINR for 2013/14 (holidays included, no summer reductions).

As the sum of the ALPs for a Gas Year needs to add to 365 in a standard year (366 in a leap year), where a summer reduction is indicated, the October to May ALPs increase slightly to offset the four-month period of reduction. This can be seen in British Gas' graphs, either side of the start and end dates of the reduction period.

British Gas Query 3. DAF losing/gaining its bucket shape
In the 2014/2015 standards, a much smoother shape is typically observed in larger supplier points whereas in 2013/2014 DAFs, a bucket---shaped behaviour is noted (see graph). Similar behaviour is true in WN:E04B, WS:E05B and WM:E06B. In WS:E06B however, the reversed behaviour is observed.
Why is that the case?

Xoserve Response

The key factor influencing the difference in DAF shapes between 2013/14 and 2014/15 is the indication of a CWV cut-off in the smoothed models. Where a CWV cut-off is applied, demand ceases to reduce when a certain CWV is reached, which is before the LDZ maximum CWV value is reached.

This represents itself in a distinctive "flattening" of the ALP shape, and a "bucket" effect in the DAF, which is demonstrated in Figure A9.3 of the 2013/14 NDM Algorithms booklet.

In the case of NW:04B, the models indicated a cut-off value of 16.4 degrees for 2013/14, and no cut-off in 2014/15. Thus the "bucket" effect is visible in the previous year and not in the current year DAF.

Conversely, EUC WS06B indicated a cut-off of 15.7 degrees for 2014/15, and no cut-off the previous year, hence the DAF trend is reversed.

These parameters can be found in the files EUCPARxxy, (where xx is the Gas Year and y is the indicator S for Small NDM or L for Large NDM).

Useful Reference

Appendix 4 of the NDM Report describes in more detail some of the key stages of the EUC model smoothing methodology, particularly how the summer reductions and cut-offs are applied (or not) based on defined criteria.