P211 POTENTIAL ALTERNATIVE ANALYSIS

This attachment summarises the P211 potential Alternative (with the second set of rules) data. This new analysis has not been assessed by the P211 Modification Group.

The analysis for the potential Alternative displayed on pages 13 to 18 of Attachment 1 to the P211 Assessment Consultation reflects the original potential Alternative solution with the first set of rules, which was revised at the last meeting of the P211 Modification Group (see Section 2.3 of the P211 Assessment Procedure Consultation document). This new analysis is for the potential potential Alternative (with the second set of rules) and where the term potential Alternative is used in this document this refers to the potential Alternative with the second set of rules applied.

POTENTIAL POTENTIAL ALTERNATIVE MODIFICATION P211

1. EPUS Margin over NIV

For the 5 month period from 2 November 2006 to 31 March 2007 the potential Alternative EPUS stack was compared to the level of NIV. This is intended to show the amount of DAOV and DABV that would have appeared in the potential Alternative EPUS stack historically. Figure 1 shows the MWh volumes of the NIV, total DAOV (EPUS offers) and total DABV (EPUS bids). Table 1 provides the average differences between NIV and total DAOV when the system is short and between NIV and DABV when the system is long.

Figure 1. potential Alternative EPUS vs NIV – 1 March 2006 to 31 March 2007

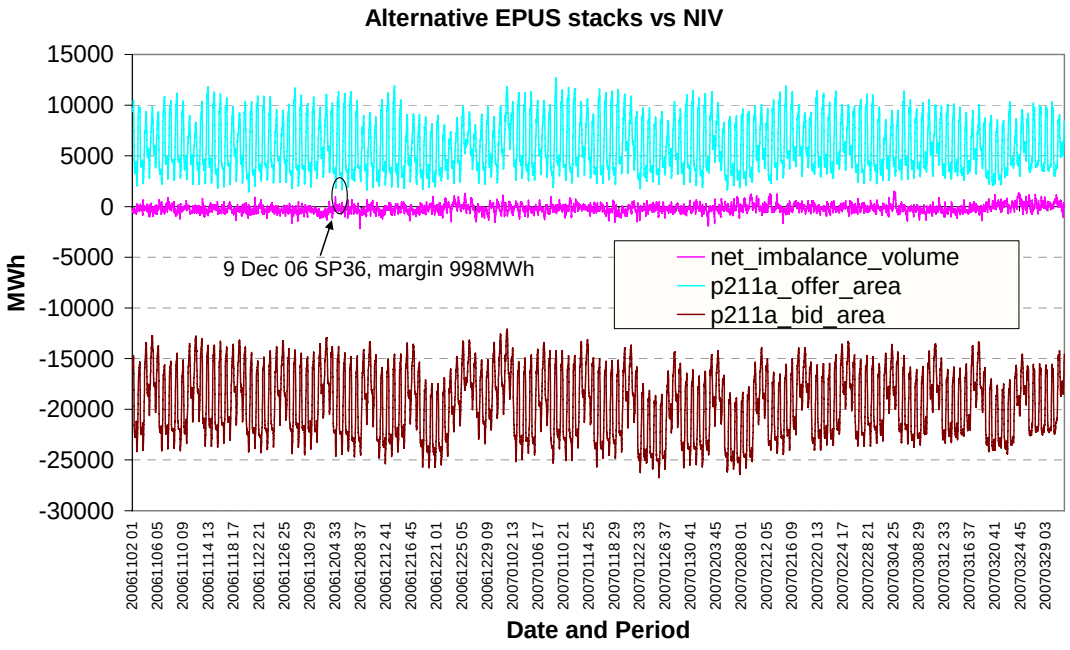


Table 1. potential Alternative EPUS Margin vs NIV – 2 November 2006 to 31 March 2007

	P211 Proposed		P211 potential Alternative	
	When Short (NIV> 0)	**When Long (NIV< 0)**	**When Short (NIV> 0)**	**When Long (NIV< 0)**
Average	7,010 MWh	21,183 MWh	4,452 MWh	18,610 MWh
Minimum	2,071 MWh	13,781 MWh	998 MWh	11,456 MWh
Maximum	15,507 MWh	29,523 MWh	12,102 MWh	26,486 MWh

The P211 potential Alternative therefore removes on average 2,558MWh of DAOV when the system is short and 2,573MWh of DABV when the system is long. The largest reduction of

DAOV from the P211 Proposed Modification to the P211 potential Alternative was 5,130MWh in SP 46 on 1 January 2007 where the DAOV of the Proposed Modification was 13,672MWh and for the potential Alternative the DAOV was 8,541MWh.

2. Recalculated Energy Imbalance Prices (potential Alternative)

Prices for the P211 potential potential Alternative solution were modelled and recalculated for the 5 month period 2 November 2006 to 31 March 2007. The results of the recalculation are shown below in Figures 2 to 12. It should be noted that this period was used because PAR500 was introduced on 2 November 2006 and this can therefore be used for comparison against the P211 Proposed Modification and the current baseline.

Prices were also recalculated for system stress days and Cheviot constraint days. These days include the PAR500 rule in order to compare to the current baseline (as these days preceded the PAR500 rules). These are shown in Figures 7 to 9.

Table 2 provides some key price figures. From 2 November 2006 to 31 March 2007 the P211 Proposed solution produced a SBP that was on average 16% lower than the current arrangements when the system was short and a SSP that was on average a 7% increase over the current arrangements when the system was long. This compares to the P211 potential Alternative solution that produced a SBP that was on average 13.5% lower than the current arrangements when the system was short and a SSP that was on average a 4% increase over the current arrangements when the system was long.

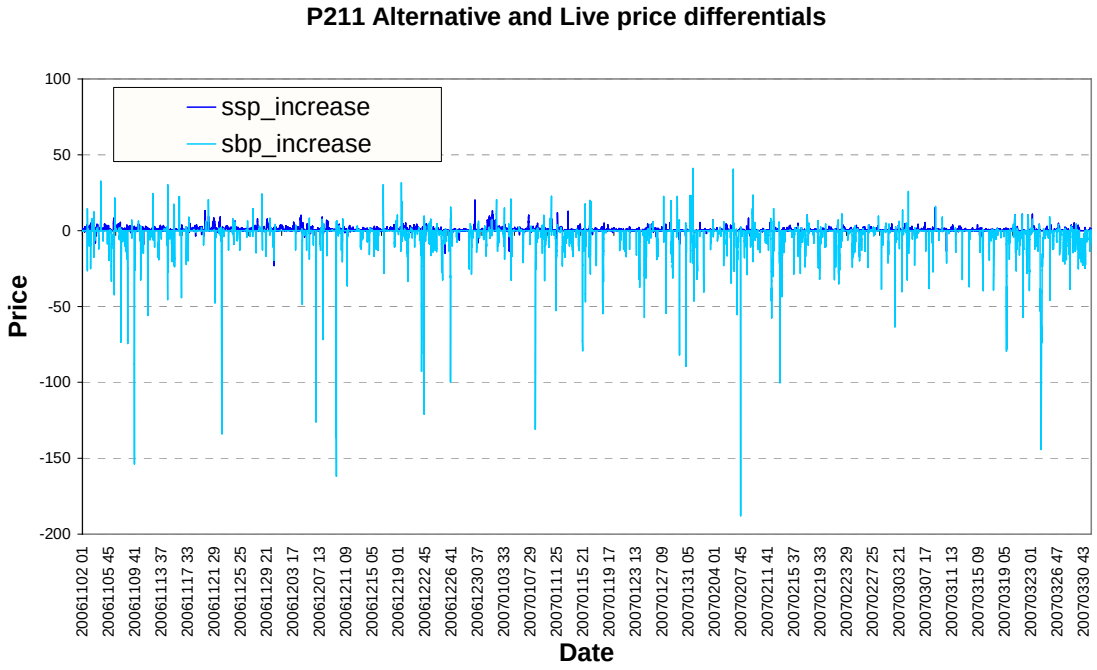
Table 2. Energy Imbalance Prices – 2 November 2006 to 31 March 2007

	P211 Proposed		**P211 potential Alternative**		**P211 Proposed**		**P211 potential Alternative**	
	SBP (£/MWh)	**SSP (£/MWh**	**SBP (£/MWh)**	**SSP (£/MWh**	**SBP when short (£MWh)**	**SSP when long (£/MWh)**	**SBP when short (£MWh)**	**SSP when long (£/MWh)**
Live Average	35.81	21.20	35.81	21.20	64.13	17.54	64.13	17.54
Recalculated Average	32.92	22.06	**33.35**	**21.72**	53.88	18.74	**55.51**	**18.25**
Average Difference	2.89	0.86	**2.46**	**0.52**	10.25	1.20	**8.62**	**0.71**
% difference	8% decrease	4% increase	**6.9% decrease**	**2.5% increase**	16% decrease	7% increase	**13.5% decrease**	**4% increase**
Max difference	193 (P211 lower than Live)	21 (P211 higher than Live)	**187** (Alt lower than Live)	**20** (Alt higher than Live)				
Min difference	33 (P211 higher than Live)	25 (P211 lower than Live)	**40** (Alt higher than Live)	**24** (Alt lower than Live)				

The P211 SBP and SSP prices are shown in Figures 2 and 3 (for when the system is short and long respectively).

Figure 2 shows the price difference between the P211 potential Alternative price and the live price. The calculation is **P211 potential Alternative** main Energy Imbalance Price less the **live** main Energy Imbalance Price.

Figure 2. P211 potential Alternative and Live Price differences – All Settlement Periods - 1 March 2006 to 31 March 2007



Daily average prices are presented in Figures 3 and 4.

Figure 3. Daily average SBP when short – 2 November March 2006 to 31 March 2007

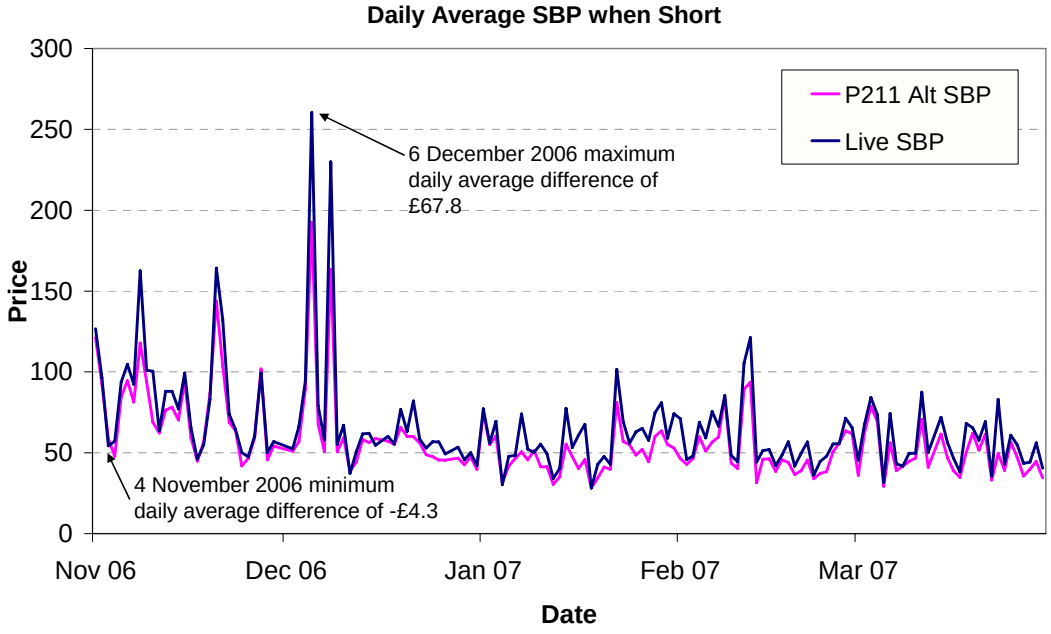
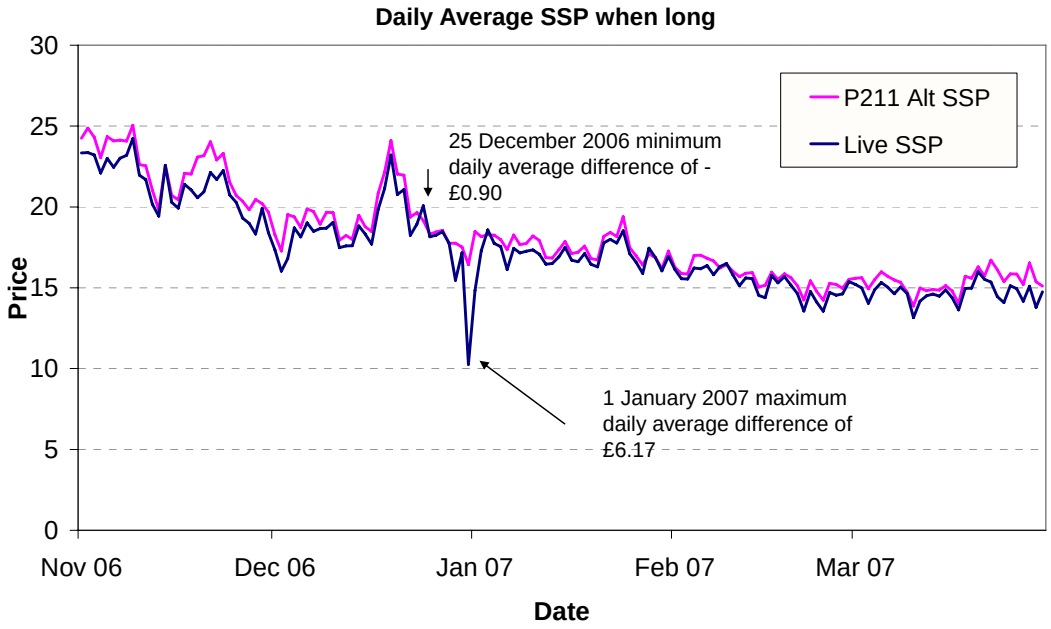


Figure 4. Daily average SSP when system is long – 2 November 2006 to 31 March 2007



Figures 5 and 6 show the period averages for the period 2 November 2006 to 31 March 2007 in which PAR500 was the live price.

Figure 5. Period average – SSP when system is long – 2 November 2006 to 31 March 2007

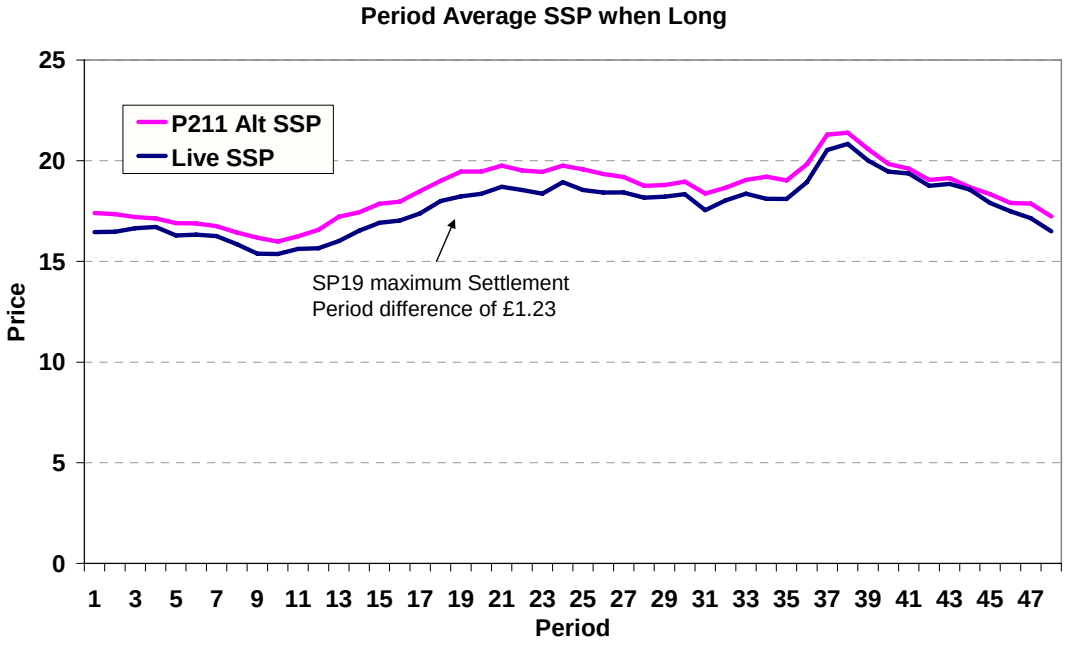
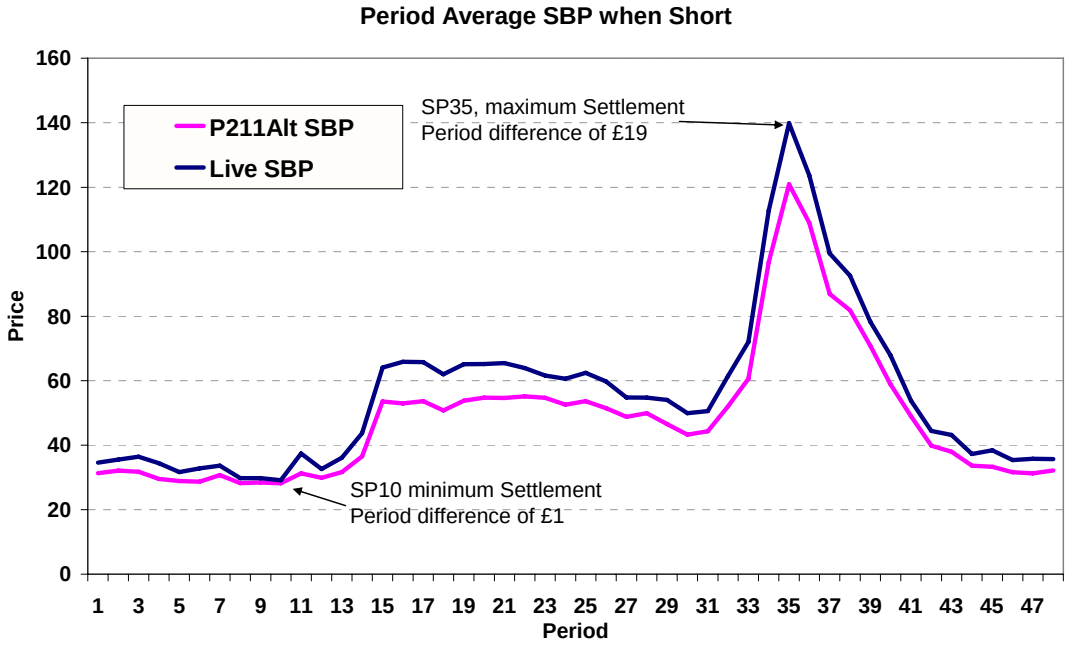


Figure 6. Period average – SBP when system is short – 2 November 2006 to 31 March 2007



Figures 7 to 12 look at individual days. First, 18-20 October 2005 in which the Cheviot Constraint was binding. Then 29 December 2005, 13 March 2006 and 18 July 2006 which were days of system stress.

The graphs plot the P211 potential Alternative SBP and SSP against the live price adjusted to represent a PAR500 price. The level of NIV is also included on the graph to indicate the length of the system and therefore which of SBP or SSP is the main price.

Figure 7. 18 October 2005 – Cheviot constraint

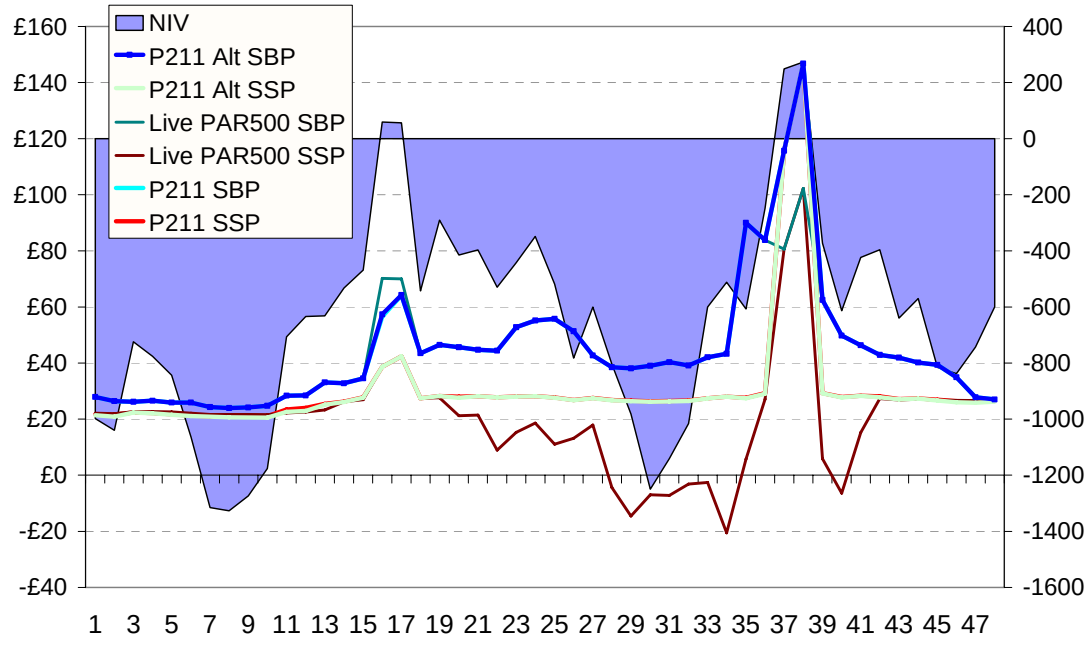


Figure 8. 19 October 2005 – Cheviot constraint

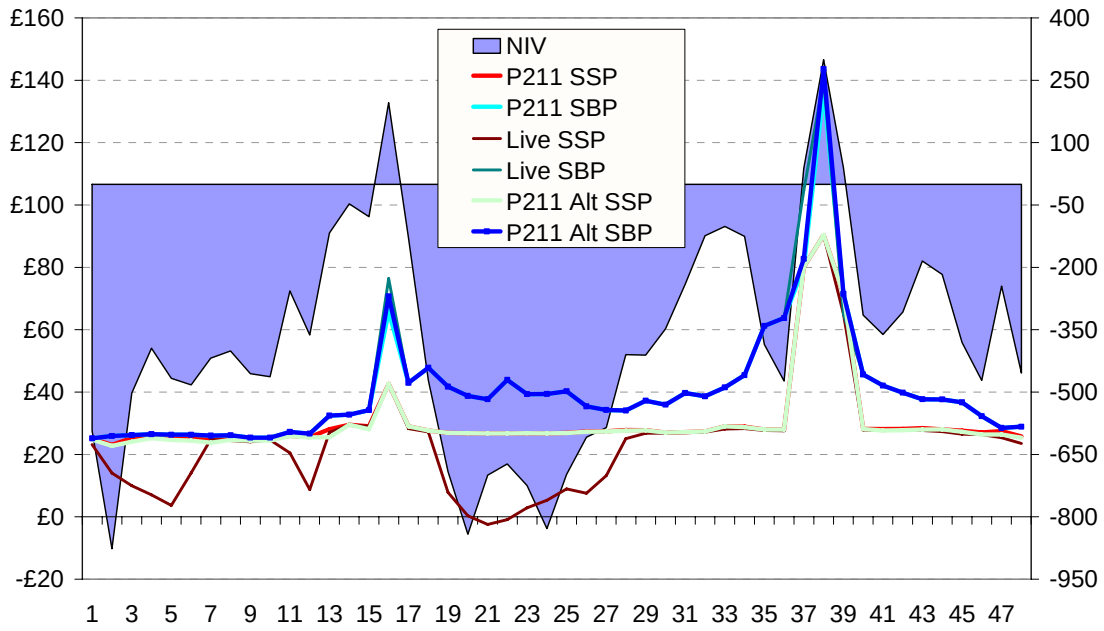


Figure 9. 20 October 2005 – Cheviot constraint

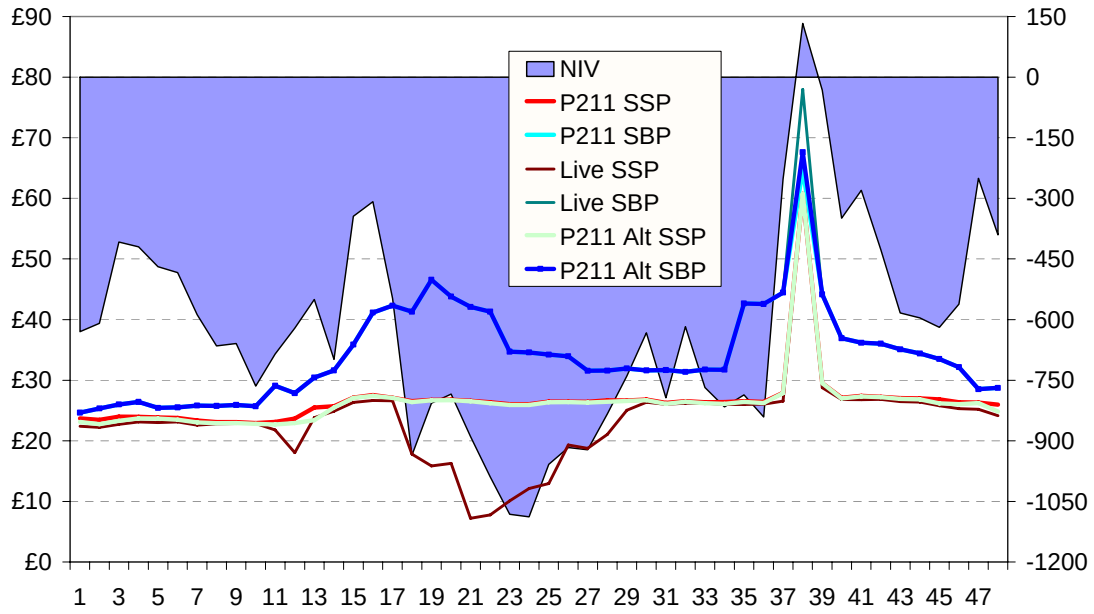


Figure 10. 29 December 2005 – Notice of Inadequate System Margin (NISM)

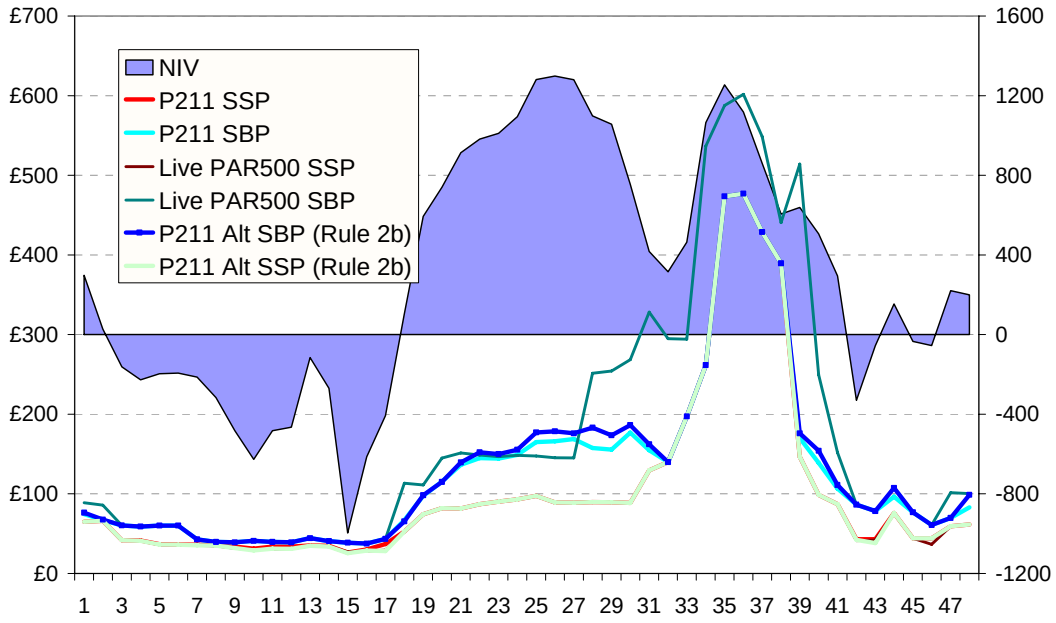


Figure 11. 13 March 2006 – Gas Balancing Alert (GBA)

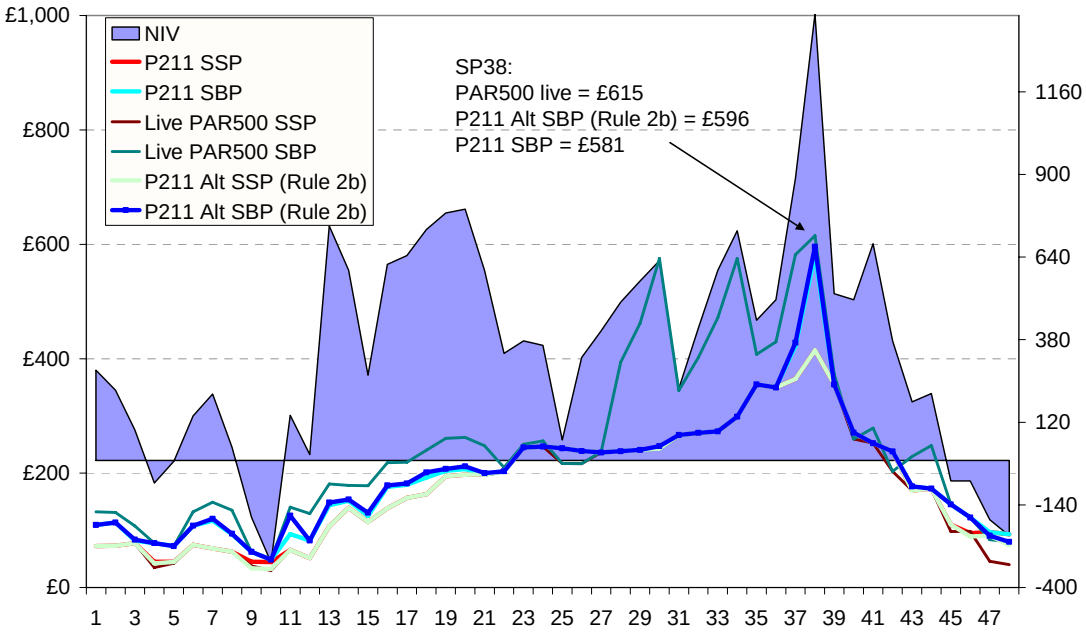
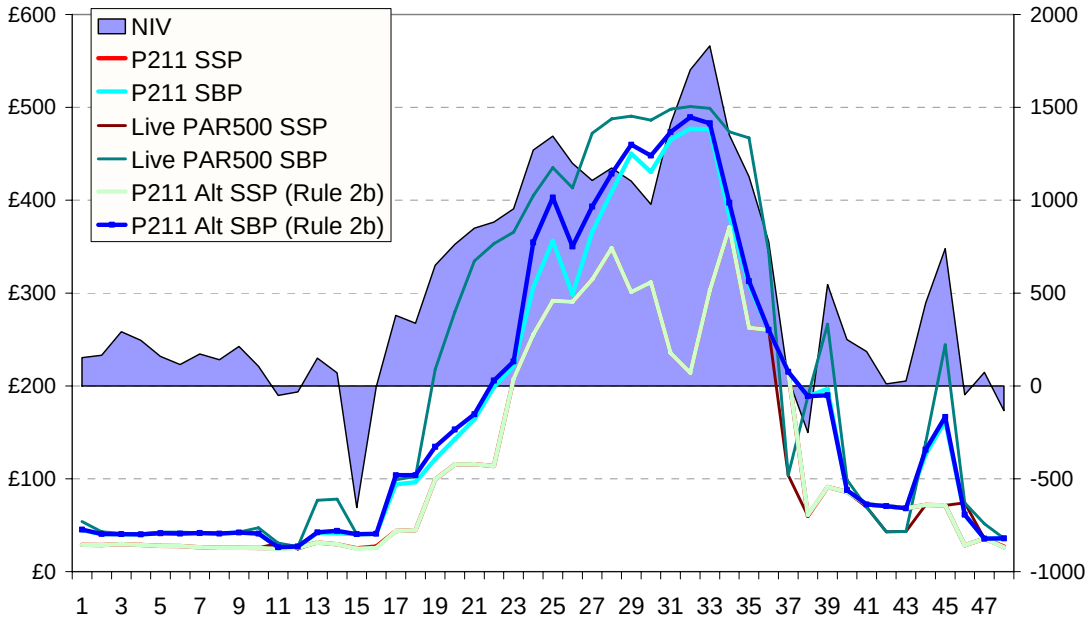


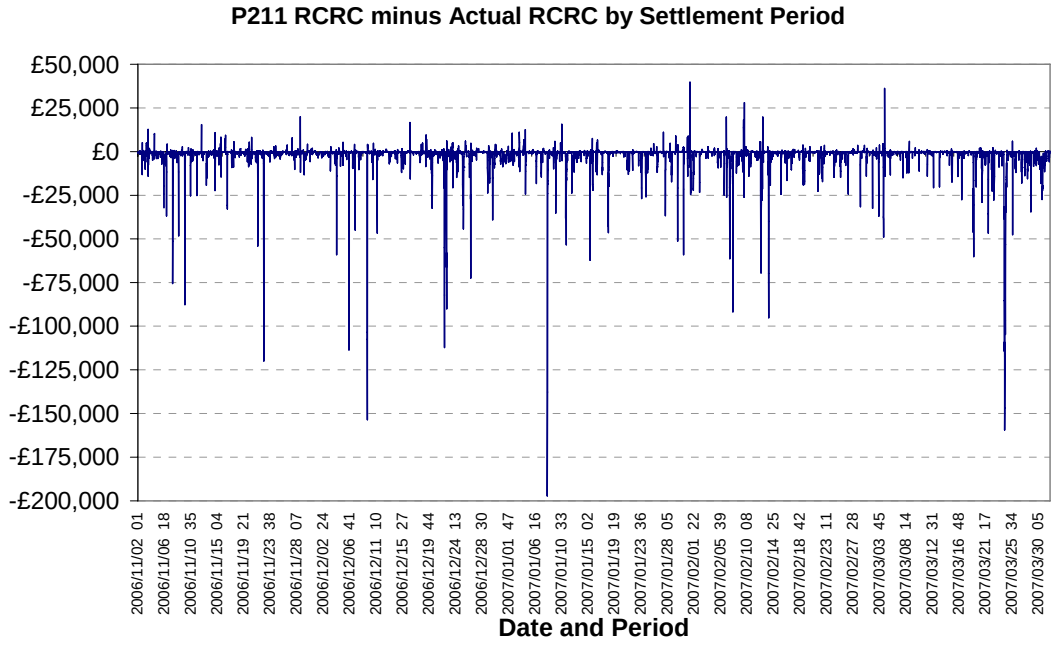
Figure 12. 18 July 2006 – High Risk of Demand Reduction (HRDR)



3. Residual Cashflow Reallocation Cashflow (RCRC)

RCRC was recalculated based on the P211 potential potential Alternative solution prices and these can be seen in Figure 20 below. The graph shows that RCRC under the P211 potential potential Alternative was, on average, significantly lower than the historic RCRC. For the entire period 2 November 2006 to 31 March 2007, the P211 potential potential Alternative recalculated RCRC would have been £15.5m less than the actual historic RCRC. This compares to £19.6m for the same period for P211 Proposed Modification. The largest decrease in an individual Settlement Period was £197,186 (SP16 on 6 January 2007) with the largest increase being £39,635 (SP36 on 31 January 2007). The Settlement Period average is a £2,151 decrease.

Figure 20. RCRC impact – All Settlement Periods – 2 November 2006 to 31 March 2007


P211 RCRC minus Actual RCRC by Settlement Period
£50,000
£25,000
£0
-£25,000
-£50,000
-£75,000
-£100,000
-£125,000
-£150,000
-£175,000
-£200,000
2006/11/02 01
2006/11/06 18
2006/11/10 35
2006/11/15 04
2006/11/19 21
2006/11/23 38
2006/11/28 07
2006/12/02 24
2006/12/06 41
2006/12/11 10
2006/12/15 27
2006/12/19 44
2006/12/24 13
2006/12/28 30
2007/01/01 47
2007/01/06 16
2007/01/10 33
2007/01/15 02
2007/01/19 19
2007/01/23 36
2007/01/28 05
2007/02/01 22
2007/02/05 39
2007/02/10 08
2007/02/14 25
2007/02/18 42
2007/02/23 11
2007/02/27 28
2007/03/03 45
2007/03/08 14
2007/03/12 31
2007/03/16 48
2007/03/21 17
2007/03/25 34
2007/03/30 05
Date and Period