

**Proposed Revisions to the
Balancing Services Adjustment Data Methodology Statement**

**Incorporation of Revised Standing Reserve Weighting Factors and
Clarification of the Treatment of Supplemental Standing Reserve**

**Consultation by National Grid
December 2006**

Overview

National Grid pays option fees for the availability of Standing Reserve (SR) and Supplemental Standing Reserve (SSR). The option costs are allocated to each Settlement Period according to the weighting factors derived from historical utilisation of the Standing Reserve. These costs feed into imbalance prices via the BSAD variable BPA.

The current Standing Reserve weighting factors correspond to the historical utilisation of Standing Reserve in 2002-03. Since then, the Standing Reserve utilisation pattern has continued to develop in line with changes in the market and the weighting factors could be changed to better reflect current utilisation patterns.

The current BSAD Methodology Statement describes how the weighting factors are applied to the Standing Reserve availability costs and how the weighted costs are used in the calculation BPA. However, it does not explicitly state how the availability fees associated with SSR are treated in the BPA.

Both of the points described above have become more material to the calculation of BPA due to the increased volume of SSR procured for this winter, 2006/07, compared to winter 2005/06. Therefore, National Grid is proposing to:

- Update the weighting factors applied to both SR and SSR to use the latest values, and;
- Clarify the treatment of SSR within the calculation of BPA.

The changes proposed in the consultation are intended as an interim arrangement to cover the period up to the end of March 2007. National Grid will be bringing forward enduring proposals for the management of weighting factors in January 2007.

National Grid believes that there is benefit in making these interim proposed improvements for the remainder of winter 2006/07 as it will improve the cost reflectivity of the System Buy Price (SBP).

Subject to Ofgem's approval, National Grid's intends to implement these proposed changes as soon as possible so that the benefits of this change can be realised during the current winter. If Ofgem approves the proposed

changes, it is National Grid's intention to implement the changes on 22nd January 2007.

Consultation Process

This consultation seeks views on proposed amendments to the Balancing Services Adjustment Data (BSAD) Methodology Statement. It is being carried out in accordance with the provisions contained within Standard Condition 16 of National Grid's Transmission Licence.

The proposed changes replace the current weighting factors with those based on more recent utilisation of Standing Reserve, and clarify the treatment of the Supplementary Standing Reserve in the calculation of BPA. This document contains the background to the changes, and the proposed amendments to the current version of the BSAD Methodology Statement.

A copy of the BSAD Methodology Statement containing the proposed changes is attached to this consultation as Appendix 8. Following receipt of responses to this consultation, National Grid will prepare and submit a report (in accordance with Transmission Licence Standard Condition C16 paragraph 8) to the Authority. The consultation document, consultation report, and all responses, will be published on National Grid's website:

<http://www.nationalgrid.com/uk/Electricity/Balancing/consultations/>

The current version of the BSAD Methodology Statement can be found at the following link:

<http://www.nationalgrid.com/uk/Electricity/Balancing/transmissionlicensestatements/>

Consultation Timescales

In accordance with the provisions of Standard Condition C16 of National Grid's Transmission Licence, the consultation period will be 28 days. Therefore the consultation timetable is as follows:

Consultation published	Monday 11 December 2006
Closing date for responses	Monday 5pm, 8 January 2007
Consultation Report to the Authority	Thursday 11 January 2007

Document Structure

The remainder of this document is structured as follows:

- Current Standing Reserve Weighting Factors and Treatment of Supplementary Standing Reserve

- Proposed Standing Reserve Weighting Factors and Treatment of Supplementary Standing Reserve
- Proposed Implementation date
- Summary of changes
- Appendices

Current Standing Reserve Weighting Factors and Treatment of Supplementary Standing Reserve

National Grid pays option fees for the availability of Standing Reserve (SR) and Supplemental Standing Reserve (SSR). Historically, these costs have been aggregated and allocated to each Settlement Period according to the weighting factors derived from historical utilisation of the Standing Reserve.

These costs feed into imbalance prices via the BSAD variable BPA.

There are two issues to consider within the current calculation of BPA:

- The current SR weighting factors correspond to the historical utilisation of Standing Reserve in 2002-03. Since then, in line with changes in market behaviour, there has been a change to the SR availability windows which were originally used in the derivation of the weighting factors. Consequently, the current weighting factors do not align precisely with the current availability windows.
- Since the SSR has been procured at a different time, its availability windows are not exactly the same as the SR availability windows. The current BSAD Methodology Statement does not explicitly state how the availability fees associated with Supplementary Standing Reserve are treated in the BPA.

The current methodology for calculation of BPA is well established and works well for the majority of the situations. However, the increased volume of SSR procured for winter 2006/07 and the difference in window times means that the use of more up to date weighting factors would improve the cost reflectivity of BPA..

Appendix 1 demonstrates the issue. It shows that, in one settlement period (no. 31), the BPA could better reflect the cost of availability fees.

Proposed Standing Reserve Weighting Factors and Treatment of Supplementary Standing Reserve

National Grid is proposing to improve the current methodology for the BPA calculation in two respects:

1. Replace the current SR weighting factors with those derived from more recent (2005-06) historical utilisation of Standing Reserve;
2. Clarify the treatment of Supplementary Standing Reserve in the BPA calculation.

National Grid believes that to avoid weighting factors becoming out-dated, a better enduring solution may be to remove the weighting factors from the BSAD Methodology Statement, and periodically update and publish the weighting factors, calculated to an agreed methodology, on National Grid's Industry Information Website. We will be bringing forward proposals for this approach in January 2007.

However, we believe that, in order to realise the benefit of the proposed changes during this winter, it is preferable to also propose a more straight forward interim solution that could be implemented relatively quickly. It is therefore proposed that the current weighting factors in the BSAD Methodology Statement be replaced with the 2005-06 weighting factors.

The current and revised weighting factors are tabulated in Appendices 2 and 3. The two tables reflect the recent changes in the SR utilisation patterns, and it can be observed that:

- The widths of the SR availability windows have somewhat changed;
- The duration of some of the 'season' periods (e.g. the revised first period being 1 April – 5 June rather than 1 April – 2 June) has changed.

In addition to the above changes, the last period (5 February – 1 April) has been split into two periods (5 February – 25 March and 25 March – 1 April) and this split allows pre- and post -clock change SR requirements to be considered separately. Since the post-clock change SR requirements and associated SR availability windows in the period 25 March – 1 April are the same as for the period 1 April – 5 June, these two periods are considered together in calculating the weighting factors. Consequently, the weighting factors for working days during these two periods are the same, as are the weighting factors for the non-working days during these periods.

With respect to the treatment of Supplementary Standing Reserve, National Grid is proposing that the SR weighting factors should be applied to the aggregate option costs of SR and SSR.

Appendix 4 shows the effect of the proposed changes on the BPA which was previously calculated using the current methodology in Appendix 1. The figure in Appendix 4 shows that the proposed changes remove the artificial impact on the BPA profile.

The revised weighting factors, combined with the above proposed treatment of the Supplementary Standing Reserve, have been used to determine the indicative profiles of BPA for the remaining seasons (up to 1 April 2007). These profiles are based on the assumption that full capacity of the relevant BMUs is available. Appendices 5, 6 and 7 show the BPA profiles for seasons 4 (29/10/06 – 05/02/07), 5 (05/02/07 – 25/03/07) and 6 (25/03/07 – 01/04/07) respectively. It should be noted that these indicative BPA profiles could change as a result of changes to the declared capacity.

Proposed Implementation Date

In accordance with the provisions of Standard Condition C16 of National Grid's Transmission Licence, the consultation period will be 28 days. Therefore the consultation timetable is as follows:

Consultation published	Monday 11 December 2006
Closing date for responses	Monday 5pm, 8 January 2007

Consultation Report to the Authority

Thursday 11 January 2007

Subject to Ofgem approval of the proposed changes by Thursday 18th January 2007, it is National Grid's intention to implement the proposed changes on Monday 22nd January 2007.

Summary of Proposed Changes

The changes proposed for the BSAD Methodology Statement are summarised in the section below:

Proposed changes to the BSAD Methodology Statement		
Section	Change	Comment
Version Control Table	Insert "Revisions to update the Standing Reserve Weighting Factors and to clarify the treatment of Supplemental Standing Reserve in the BPA Calculation"	Changes required to update the weighting factors and to clarify the treatment of Supplemental Standing Reserve.
Part B, Section 1.2	Insert references to Supplemental Standing Reserve.	Changes required to update the weighting factors and to clarify the treatment of Supplemental Standing Reserve.
Part C, Section 1	Amend the BPA formula to explicitly incorporate Supplemental Standing Reserve	Changes required to update the weighting factors and to clarify the treatment of Supplemental Standing Reserve.
Part C, Section 2.1, 2.2, 2.3 and 2.4	Amend the BPA formula in examples 1 to 4 to explicitly incorporate Supplemental Standing Reserve	Changes required to update the weighting factors and to clarify the treatment of Supplemental Standing Reserve.

Appendix 8 shows the above changes marked-up in the BSAD Methodology Statement.

Consultation Responses

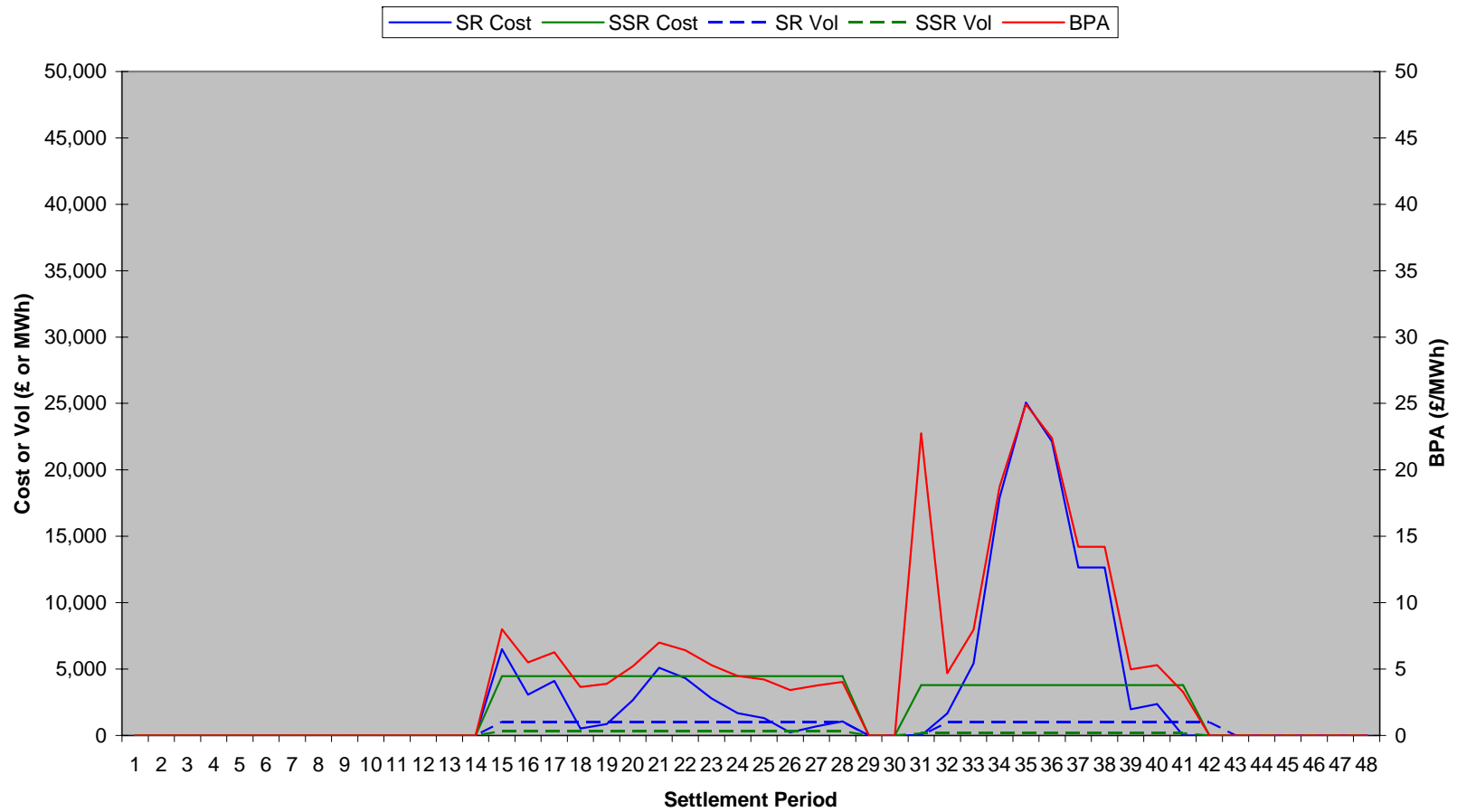
Consultation responses should be forwarded to the Balancing Services e-mail address BalancingServices@uk.ngrid.com by **5.00pm on 8 January 2007**. Comments will be reviewed, and National Grid will then prepare a report to the Authority.

A full copy of all responses will be provided to the Authority and will be made publicly available on the Industry Information web site.

Appendix 1 Current Calculation of BPA



BPA (exc. warming) for 6 November 2006 (02-03 WFs for SR, no WF for SSR)



**Appendix 2
Current Weighting Factors**



Settlement Period 'j'	<i>W_j - Standing Reserve Weighting Factor</i>									
	1 st April – 2 nd June		2 nd June – 1 st September		1 st September – 25 th October		25 th October – 2 nd February		2 nd February – 1 st April	
	WD	NWD	WD	NWD	WD	NWD	WD	NWD	WD	NWD
1	0	0	0	0	0	0	0.007337	0.039644556	0.020004	0
2	0	0	0	0	0	0	0.004389	0	0.008887	0
3	0	0	0	0	0	0	0.000939	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0.000143	0.000714612	0.000538	0
6	0	0	0	0	0	0	0.001618	0.024118919	0.013999	0
7	0	0	0	0	0	0	0	0.022851966	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
15	0.043172	0	0.039276	0	0.098584	0	0.046292	0	0.030396	0
16	0.062776	0	0.024366	0	0.068312	0	0.021918	0	2.94E-05	0
17	0.058649	0	0.045625	0	0.053409	0	0.029349	0	0	0
18	0.018862	0	0.042776	0	0.027776	0	0.003675	0	0.023745	0
19	0.046908	0	0.054513	0	0.026396	0	0.006116	0	0.053517	0
20	0.056349	0	0.043483	0	0.023419	0	0.019042	0	0.047803	0
21	0.044234	0.039064582	0.038447	0	0.022225	0	0.036411	0.001202981	0.058674	0
22	0.051299	0.107320727	0.061277	0	0.019521	0	0.030806	0.003562656	0.038594	0
23	0.061083	0.164195155	0.092258	0	0.012168	0	0.019961	0.047464715	0.030186	0
24	0.081057	0.151824565	0.103204	0.1498869	0.011101	0	0.011944	0.172607287	0.038937	0
25	0.082464	0.18716449	0.096822	0.1450518	0.005519	0	0.009296	0.266269504	0.059232	0
26	0.044365	0.119570055	0.068244	0.1391949	0.000986	0	0.001531	0.233151109	0.04753	0
27	0.017033	0	0.044916	0	0	0	0.004899	0	0.045686	0
28	0	0	0.016166	0	0	0	0.007507	0	0.037962	0
29	0	0	0.010654	0	0	0	0.005751	0	0	0
30	0	0	0.008543	0	0	0	0.000435	0	0	0
31	0	0	0.007015	0	0	0	0.003531	0	0	0
32	0	0	0.020126	0	0	0	0.011751	0	0	0
33	0.032555	0	0.027232	0	0	0	0.038808	0	0	0

34	0.04321	0	0.031834	0	0.052616	0	0.127923	0	0.000909	0
35	0.032884	0	0.024401	0	0.060223	0	0.178985	0	0.034208	0
36	0.014964	0	0.015856	0	0.041537	0	0.158056	0	0.106411	0
37	0.009044	0	0	0	0.061291	0.0375659	0.090332	0.031233828	0.134475	0.3910555
38	0.009044	0	0	0	0.061291	0.0375659	0.090332	0.031233828	0.134475	0.3910555
39	0.002047	0	0	0	0.089139	0.3372521	0.014125	0.069978879	0.010949	0.217889
40	0.008382	0.018336135	0	0.0338454	0.099555	0.2942657	0.016802	0.05596516	0.022854	0
41	0.041362	0.212524291	0.022154	0.532021	0.115	0.2933504	0	0	0	0
42	0.067465	0	0.020295	0	0.049932	0	0	0	0	0
43	0.070793	0	0.022368	0	0	0	0	0	0	0
44	0	0	0.007461	0	0	0	0	0	0	0
45	0	0	0.010688	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
SUM	1	1	1	1	1	1	1	1	1	1

Appendix 3 Revised Weighting Factors



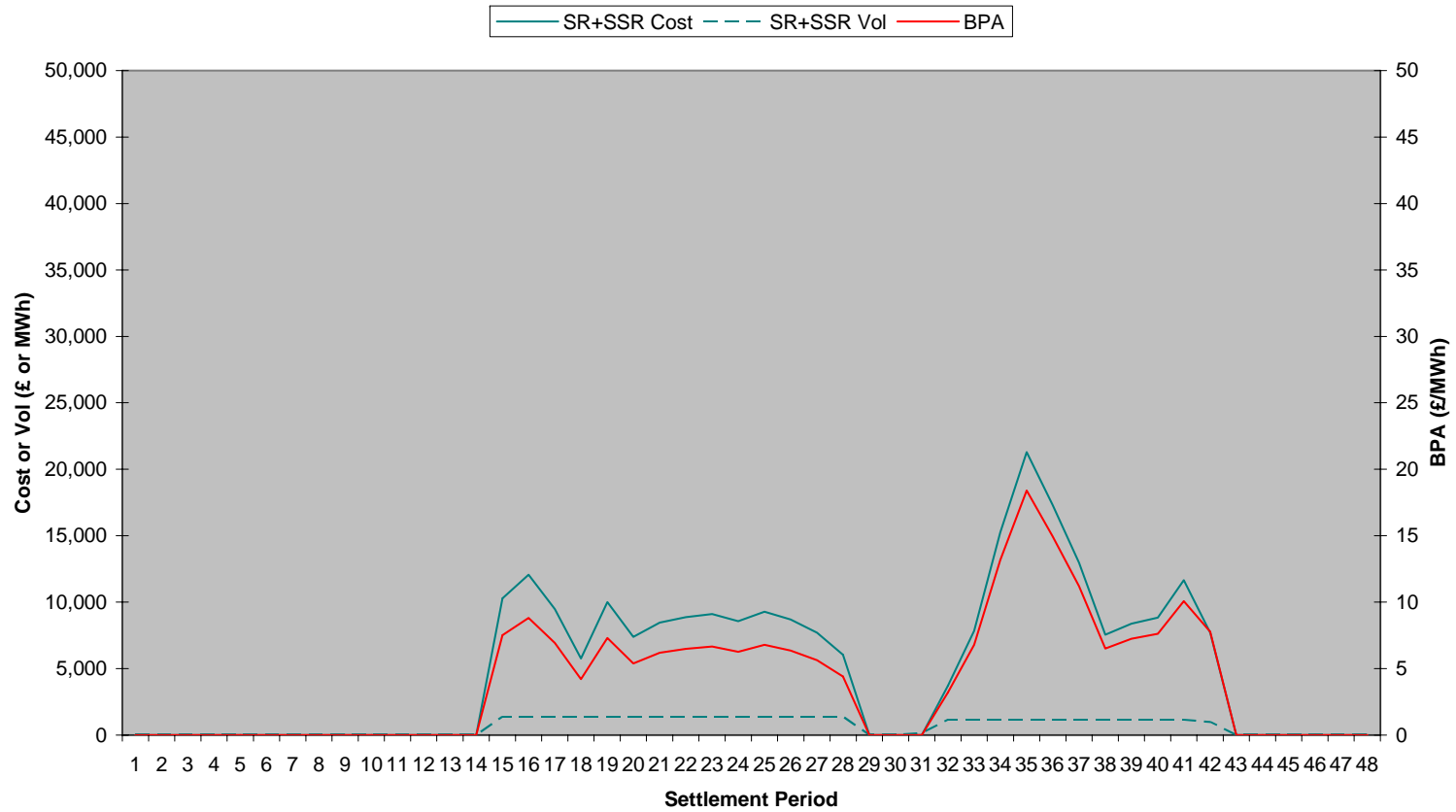
Settlement Period 'j'	1 st Apr – 5 th Jun		5 th Jun – 4 th Sep		4 th Sep – 29 th Oct		29 th Oct – 5 th Feb		5 th Feb – 25 th Mar		25 th Mar – 1 st Apr	
	WD1	NWD1	WD2	NWD2	WD3	NWD3	WD4	NWD4	WD5	NWD5	WD6	NWD6
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	0.0658	0.0000	0.0153	0.0000	0.0247	0.0000	0.0421	0.0000	0.0475	0.0000	0.0658	0.0000
16	0.0767	0.0000	0.0127	0.0000	0.0348	0.0000	0.0494	0.0000	0.0236	0.0000	0.0767	0.0000
17	0.0549	0.0000	0.0347	0.0000	0.0332	0.0000	0.0388	0.0000	0.0317	0.0000	0.0549	0.0000
18	0.0272	0.0000	0.0246	0.0000	0.0230	0.0000	0.0236	0.0000	0.0382	0.0000	0.0272	0.0000
19	0.0396	0.0000	0.0391	0.0023	0.0369	0.0000	0.0410	0.0000	0.0682	0.0000	0.0396	0.0000
20	0.0429	0.0000	0.0439	0.0146	0.0419	0.0000	0.0302	0.0000	0.0733	0.0000	0.0429	0.0000
21	0.0365	0.0163	0.0560	0.0305	0.0421	0.0064	0.0347	0.0000	0.0574	0.1390	0.0365	0.0163
22	0.0541	0.0644	0.0610	0.0171	0.0452	0.0100	0.0364	0.0000	0.0519	0.0908	0.0541	0.0644
23	0.0673	0.0768	0.0628	0.0479	0.0463	0.0137	0.0373	0.0741	0.0555	0.0663	0.0673	0.0768
24	0.0496	0.0686	0.0696	0.0745	0.0529	0.0332	0.0351	0.0765	0.0358	0.0589	0.0496	0.0686
25	0.0525	0.1100	0.0783	0.1378	0.0450	0.0520	0.0380	0.0959	0.0329	0.0865	0.0525	0.1100
26	0.0361	0.0921	0.0662	0.1046	0.0304	0.0566	0.0356	0.0868	0.0299	0.1189	0.0361	0.0921
27	0.0000	0.0791	0.0703	0.1357	0.0332	0.0000	0.0315	0.0806	0.0282	0.0000	0.0000	0.0791
28	0.0000	0.0378	0.0677	0.0000	0.0201	0.0000	0.0247	0.0000	0.0294	0.0000	0.0000	0.0378
29	0.0000	0.0326	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0326
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0322	0.0000	0.0000	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000
33	0.0187	0.0000	0.0225	0.0000	0.0283	0.0000	0.0322	0.0465	0.0000	0.0000	0.0187	0.0000
34	0.0431	0.0199	0.0319	0.0000	0.0472	0.0000	0.0624	0.0967	0.0191	0.0000	0.0431	0.0199
35	0.0447	0.0209	0.0222	0.0000	0.0444	0.0000	0.0872	0.1425	0.0360	0.0602	0.0447	0.0209
36	0.0325	0.0375	0.0213	0.0000	0.0452	0.0110	0.0709	0.1078	0.0532	0.0643	0.0325	0.0375
37	0.0115	0.0352	0.0000	0.0082	0.0591	0.0627	0.0531	0.0776	0.0845	0.1082	0.0115	0.0352
38	0.0069	0.0000	0.0000	0.0105	0.0771	0.1275	0.0309	0.0310	0.0826	0.0697	0.0069	0.0000

39	0.0246	0.0000	0.0000	0.0325	0.0794	0.1586	0.0344	0.0468	0.0723	0.0740	0.0246	0.0000
40	0.0518	0.0587	0.0209	0.0276	0.0577	0.2027	0.0361	0.0371	0.0485	0.0630	0.0518	0.0587
41	0.0690	0.0840	0.0265	0.0421	0.0520	0.0889	0.0477	0.0000	0.0000	0.0000	0.0690	0.0840
42	0.0401	0.0513	0.0289	0.0655	0.0000	0.0861	0.0315	0.0000	0.0000	0.0000	0.0401	0.0513
43	0.0537	0.0624	0.0404	0.1029	0.0000	0.0907	0.0000	0.0000	0.0000	0.0000	0.0537	0.0624
44	0.0000	0.0524	0.0187	0.0441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0524
45	0.0000	0.0000	0.0323	0.0631	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0384	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<i>SUM</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>	<i>1.0000</i>

APPENDIX 4
Revised Calculation of BPA

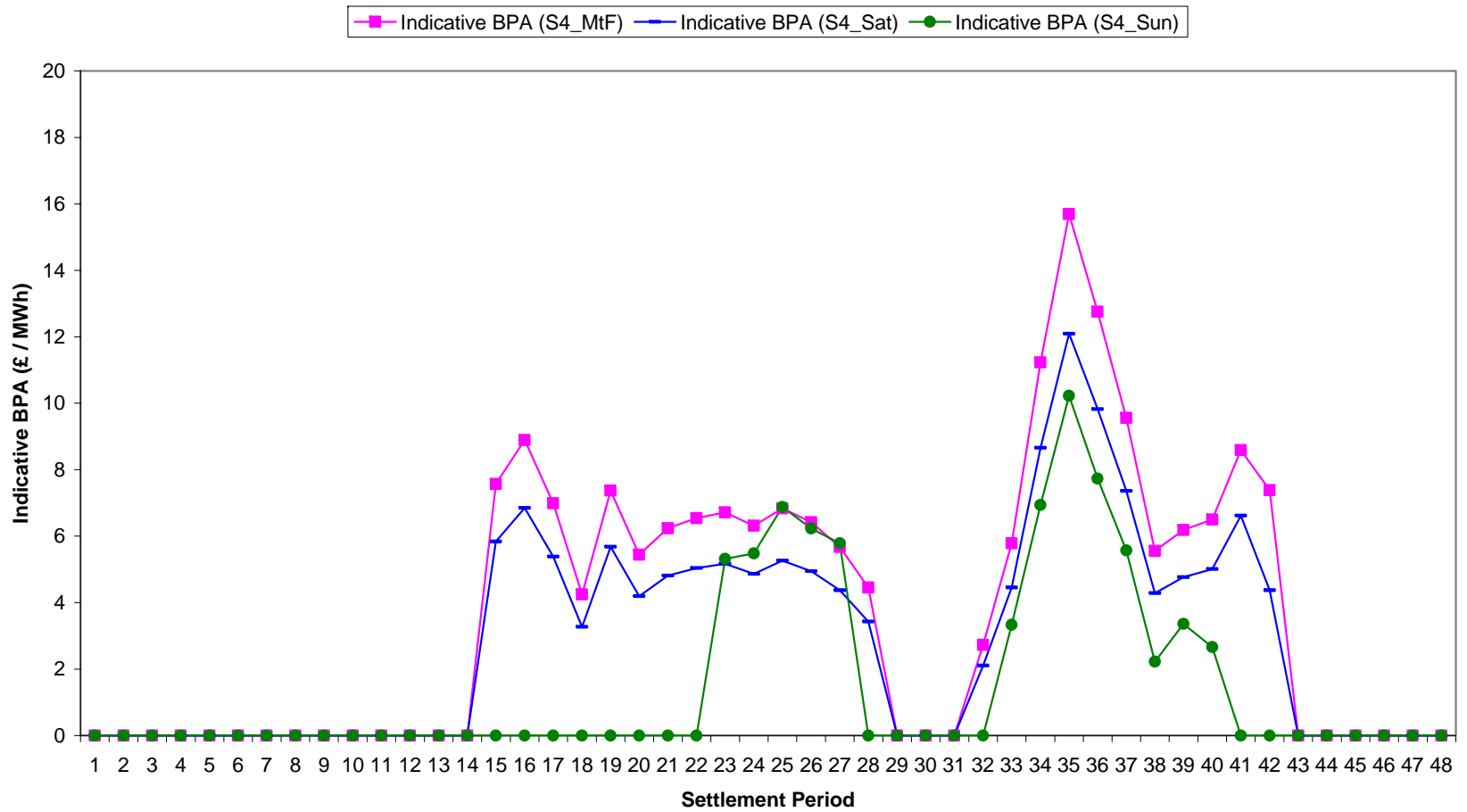


BPA (exc. warming) for 6 November 2006 (05-06 WFs for SR+SSR)

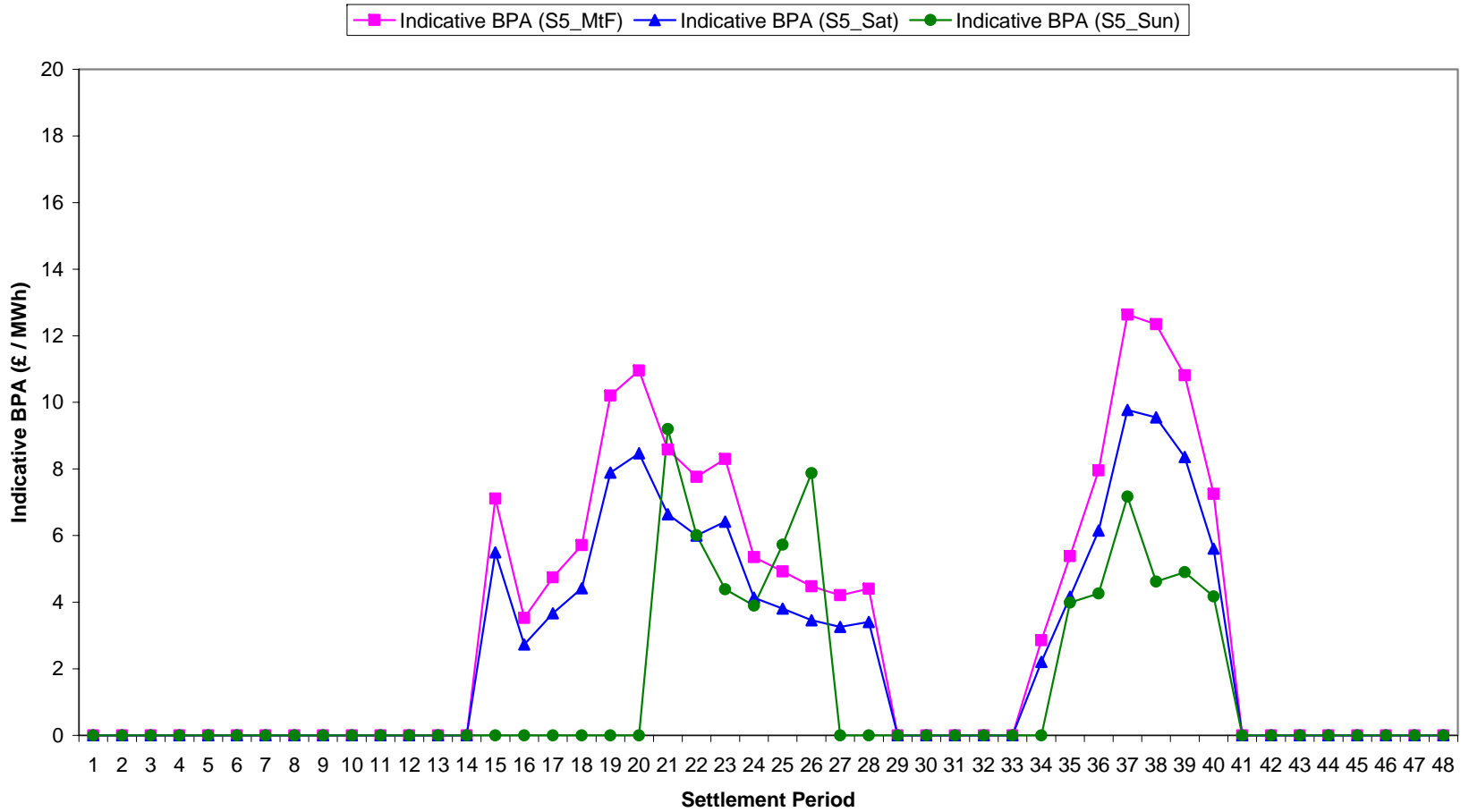


APPENDIX 5

Indicative BPA for Season 4 (29/10/06 - 05/02/07)

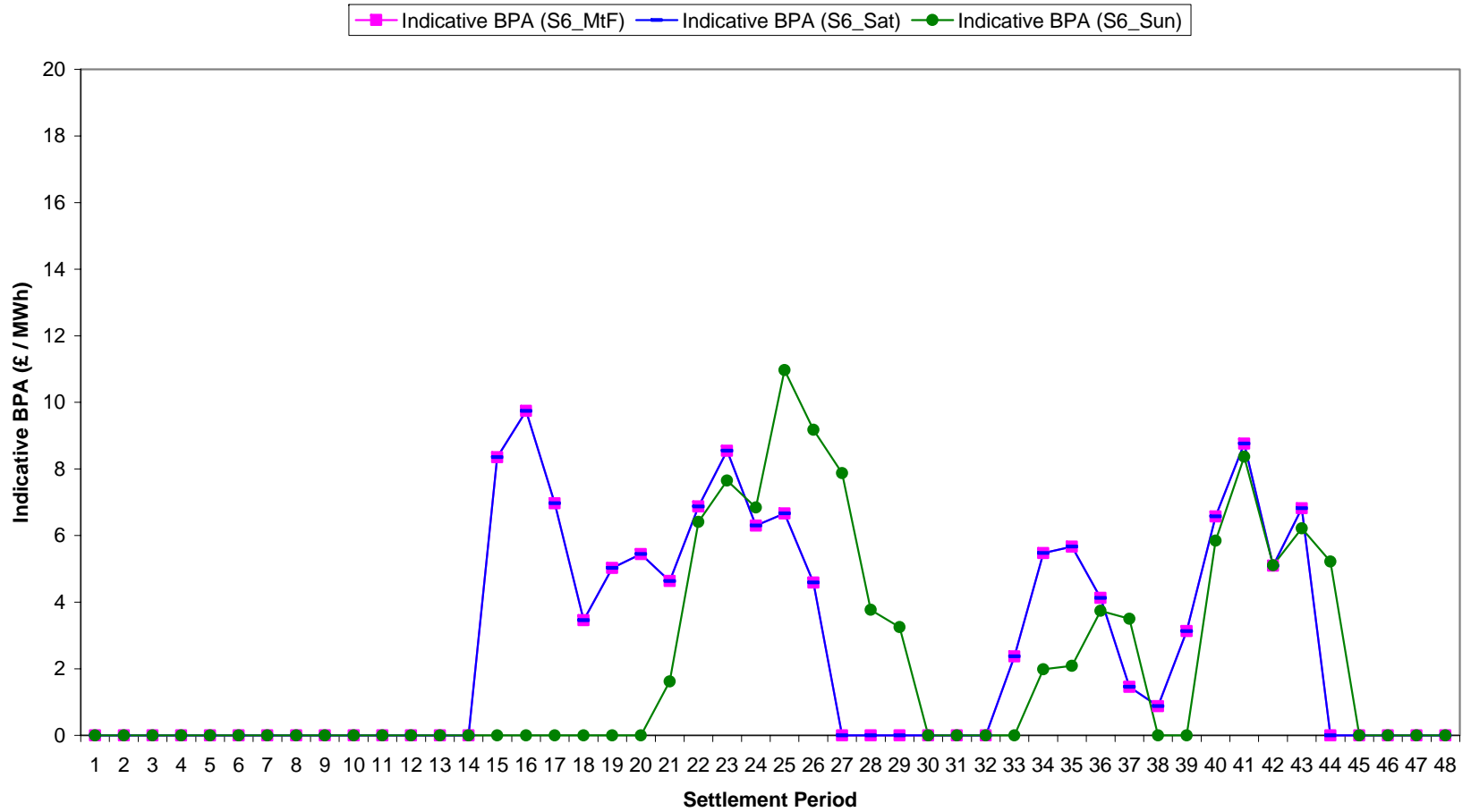


Indicative BPA for Season 5 (05/02/07 - 25/03/07)



APPENDIX 7

Indicative BPA for Season 6 (25/03/07 - 01/04/07)



APPENDIX 8
Proposed Changes to BSAD Methodology Statement

[Please see separate document for
proposed changes to BSAD Methodology Statement]