National Grid Reactive Market Report

Twelfth Tender Round for Obligatory and Enhanced Reactive Power Services for Contracts Effective from 1st October 2003

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Executive Summary

12th Tender Round

This report describes the 12th Tender Round evaluation process for Reactive Power Market Agreements that commenced on 1st October 2003. It includes the prices and reactive capability data of the successful tenders. The report also includes metered Mvarh utilisation from all eligible service providers for the period 1st April 2003 to 30th September 2003. Estimates of the reactive contribution of the National Grid Transmission System for the same period are also included.

National Grid evaluated all tenders received against economic purchase and technical performance criteria in accordance with the agreed terms of the market mechanism. On 25th July 2003, tenderers were notified of the results of their respective tenders. The main points are as follows:

- On 30th May 2003 ('Market Day') tenders were received for 56 BM Units over 25 power stations from 14 generating companies.
- All tenders received were in respect of the Grid Code Obligatory Reactive Power Service (ORPS) only.
- No tenders were received from non-BM Unit providers.
- Tenders received were for a duration of 12, 18, 24 or 36 months.
- Tenders were submitted by portfolio, independent and embedded generating companies.
- Of the 56 tenders evaluated, National Grid offered Reactive Power Market Agreements to 32, of which 23 proceeded to contract.
- As at 1st October 2003 there were a total of 51 BM Units from a possible 149 on Reactive Power Market Agreements (23 from this Tender Round , and 28 from earlier Tender Rounds). Any BM Unit on a Reactive Power Market Agreement that commenced 1st October 2003 cannot be tendered again until Tender Round 14 (for agreements commencing 1st October 2004) at the earliest, due to the 12 month minimum agreement duration.

13th Tender Round

The next 'Market Day' for receipt of tenders for Reactive Power Market Agreements commencing on 1st April 2004, is Friday 28th November 2003. Invitation To Tender (ITT) Documentation for this Tender Round 13, has been available on the National Grid Industry Information website since 3rd October 2003.

Contents

1. Introduction

1.1 This market report provides information on the results from the assessment process carried out for Reactive Power Tender Round 12 (for contracts that commenced 1st October 2003). This includes details on the contractual position for the provision of Reactive Power Services to the National Grid Transmission System as at 1st October 2003.

1.2 National Grid manages the voltage of the England and Wales supergrid system, to meet Transmission Licence requirements for secure and stable power transmission and to ensure quality of supply to customers. Voltages are largely determined by the flows of Reactive Power on the system. National Grid ensures that Reactive Power resources are provided on a local basis to meet the constantly varying needs of the system and that there is sufficient Reactive Power reserve available to meet contingencies.

1.3 Generating Units provide Reactive Power Capability, and are capable of varying their Reactive Power output as a requirement of the Grid Code. The power system itself has inherent Reactive Power gains and losses, which vary in accordance with changes in real power flows and voltage. National Grid installs reactive compensation plant in parts of the system where there is insufficient generator reactive capability to meet licence requirements, and where voltages cannot be regulated effectively or economically by other means.

1.4 Dynamic reserves of Reactive Power are essential for system operation. National Grid values Reactive Power capability as it increases confidence in the availability of Reactive Power post-fault. National Grid seeks capability based Reactive Power Market Agreements as a different payment mechanism to help to ensure post fault reactive reserves are maintained.

1.5 Tender Round 12 was undertaken to secure such capability based Reactive Power Market Agreements from 1st October 2003. The service definitions, requirements and contract terms may be found in the Connection & Use of System Code (CUSC), the Grid Code and the ITT (Invitation to Tender) Documentaion. These can be accessed via National Grid's industry website at:
www.nationalgridinfo.co.uk

2. Tender Process

2.1 On 30th May 2003, National Grid held the Market Day for the Reactive Power Tender Round 12. This enabled any potential provider that fulfilled the qualification criteria specified in Schedule 3 of the CUSC to tender for a Reactive Power Market Agreement.

2.2 Tenderers could elect to choose the term of tenders from a minimum period of 12 months and thereafter in 6 month increments (e.g 12, 18, 24, 30, 36 months, etc.).

2.3 Tenderers who submitted tenders for periods greater than 12 months were also able to include indexation criteria on the tendered prices to be applied to any period(s) beyond the first 12 months.

2.4 Tenderers could tender for either the ORPS and/or the Enhanced Reactive Power Service (ERPS), as defined in Schedule 3 of the CUSC.

2.5 Potential tenderers comprised the following:

- Generators required to provide the minimum Grid Code ORPS and already in receipt of the Default Payment Mechanism, who wished to tender for alternative payment terms for the ORPS.

- Generators that had a reactive capability in excess of the minimum Grid Code ORPS, known as the "Grid Code Plus Enhanced Reactive Power Service".

- Any other eligible Service Provider able to offer other plant or apparatus which could generate or absorb Reactive Power, known as ERPS. The only requirement was that these Service Providers had to fulfil the market qualification criteria and have been capable of making their capability available for use by National Grid.

3. Tenders Submitted

3.1 A total of 56 discrete tender submissions were received, representing 14 generating companies and 25 power stations. All tenders were for BM Units offering the Grid Code ORPS service only, with contract durations of 12, 18, 24 and 36 months.

3.2 Tenders were received from both portfolio, independent and embedded generating companies. No tenders were received from non-BM providers.

3.3 Of the tenders received, all sought reactive capability biased payments in addition to utilisation payments.

3.4 All tenders were compliant with the submission criteria specified in Schedule 3 of the CUSC.

4. Tender Assessment

4.1 Tender assessment was carried out in accordance with the evaluation criteria specified in Appendix 6 of Schedule 3 of the CUSC. Details of this are more fully described in Appendix 6 of this report.

4.2 This assessment included input from the Reactive Power Capability Index as shown in Appendix A of the Invitation To Tender & Guidance Notes for Completion of Tenders that was included in the ITT Documentation. The purpose of this index is to provide an indication of the Reactive Power requirement in each of the zones defined. These requirements are based on the historic need for Reactive Power in the zones and any planned changes to National Grid's Transmission System (or the generation and demand connected to it), that are likely to affect the zonal reactive requirement.

4.3 Tenders were assessed via a process, which considered the following:

- economics (i.e. cost of market compared with default),
- the intrinsic capability value of the tendered reactive service (against the alternative of National Grid reactive assets);
- a number of other criteria, for example how competitive the utilisation price was, and what incentive the Generator was placing on themself to maintain the reactive capability.

Please refer to Appendix 6 in Schedule 3 of the CUSC for full details on the qualification and evaluation criteria.

5. Tender Observations

5.1 All tenders were seeking capability worth. As in the previous Tender Round some generators had made incremental changes in the balance between capability and utilisation prices presumably in the light of their experience from previous rounds. Some had completely restructured their tenders changing the balance between capability (both available and synchronised) and utilisation charges. Most generators continued to attempt to extract the majority of their income through capability prices.

5.2 A continuing feature from previous Tender Rounds was the continued use of combinations of available and synchronised capability prices. Synchronised capability is more useful to National Grid than available capability, but the valuation of the two differs, dependent on the total time for which the plant is synchronised and when this occurs. National Grid places higher value on tenders with high synchronised capability prices compared with availability prices if the plant tends to run less frequently but at times of high system need. Conversely National Grid places a lower value on plant with relatively high synchronised prices if the plant is expected to run for a large part of the assessment period as this is more likely to include significant periods when the capability is not essential to secure system operation.

5.3 This Tender Round, as with previous ones, has taken into account our views on expected utilisation of generating plant in the energy market. This also included our view on possible plant closures.

5.4 A number of tenderers appeared to be exploring price sensitivities across BM Units (within a station).

5.5 No tenders were received for enhanced capability.

6. Assessment Results

6.1 Of the 56 tenders evaluated, National Grid offered Market Agreements to 32 (an acceptance rate of 57%), of which 23 proceeded to contract. Service providers subsequently withdrew the 9 agreements which did not proceed to contract

6.2 This acceptance rate of 57% is similar to the last Tender Round 11 of 53% and the last directly comparable Tender Round 10 of 56%.

6.3 Tenders were scored against the specified assesment criteria and Figure 1 below shows the attractiveness of tenders from the assessment outcome. The tenders at the "Most" attractive side of Figure 1 were assessed with a positive score indicating they should be offered Market Agreements. Likewise the tenders at the "Least" attractive side of Figure 1 were assessed with a negative score indicating they should not be offered a Market Agreement. The tenders at either ends of these measures were considered to be very "attractive" or "unattractive". Those considered unattractive could, for example, have sought capability payments significantly above expectations of default payments and National Grid's value of capability.

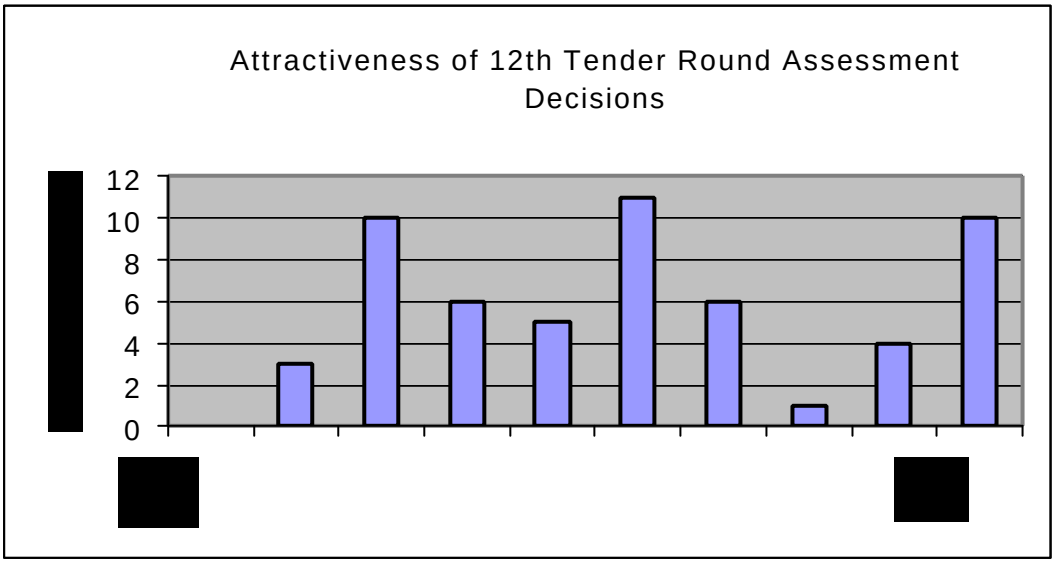


Figure 1

6.4 A complete list of all generator BM Units as at 1st October 2003 obliged under the Grid Code to be capable of providing the ORPS is given in Appendix 2. This list includes a record of which BM Units are on Reactive Power Market Agreements and which are on default arrangements (DPM). Whether those on Reactive Power Market Agreements will be able to be tendered again in Tender Round 13 depends

upon the term of their existing Market Agreement.

6.5 Appendix 3 provides a list of BM Units on Market Agreements applicable as at 1st October 2003 showing when the agreements will terminate.

6.6 Appendix 7 shows the geographic distribution of BM Units on market and default agreements.

6.7 Details of the successful tenders that proceeded to contract commencing 1st October 2003 are listed in Appendix 4.

7. Comparisons with previous Tender Rounds

7.1 Figure 2 below shows the percentage participation of eligible BM Units for all Tender Rounds since the commencement of the Reactive Power Market. Tender Round 12 is comparable with Tender Rounds 2, 4, 6, 8 and 10, as all occur at the same start of 1st October each year.

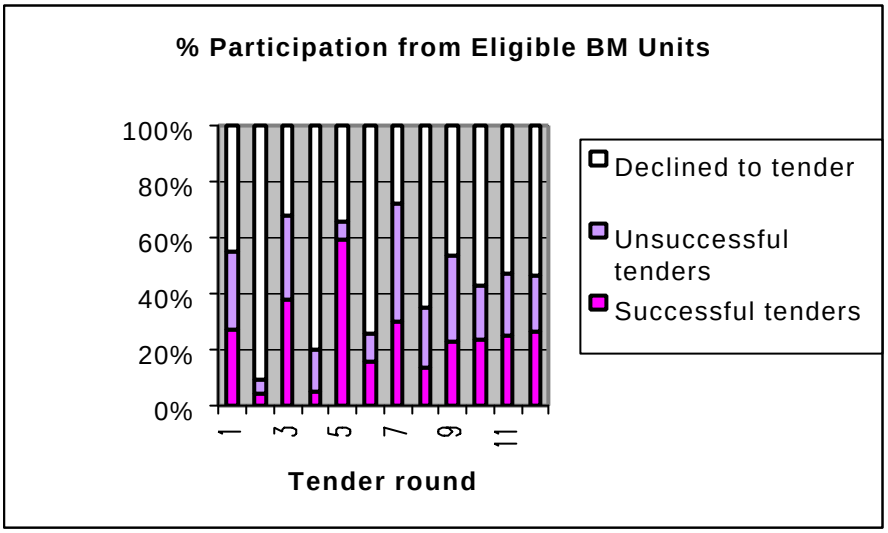
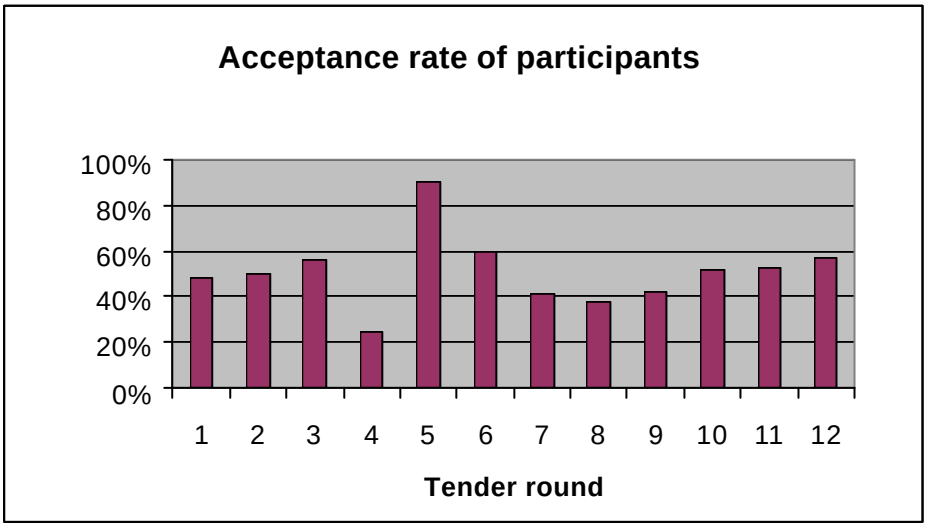


Figure 2 (Source: Appendix 1)

7.2 The acceptance rate of eligible participants in Tender Round 12 was very similar to the previous two Tender Rounds 10 and 11. Figure 3 shows the acceptance rate for all Tender Rounds since the commencement of the Reactive Power Market.

Figure 3 (Source: Appendix 1)



7.3 On 1st October 2003 there were a total of 51 BM Units on Reactive Power Market Agreements, 2 from Tender Round 10, 26 from Tender Round 11 and 23 from this 12th Tender Round. This information is shown in Figure 4 in percentage terms, including comparison with BM Units on default payment arrangements.

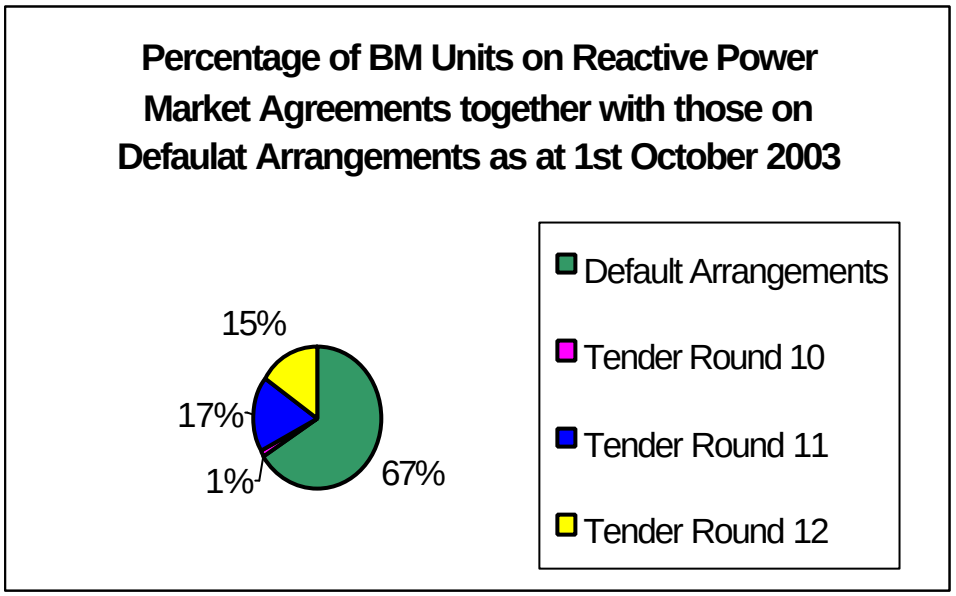


Figure 4 (Source: Appendix 2)

7.4 Figure 5 shows the percentage of BM Units on a Reactive Power Market Agreement as at 1st October 2003 on a regional basis.

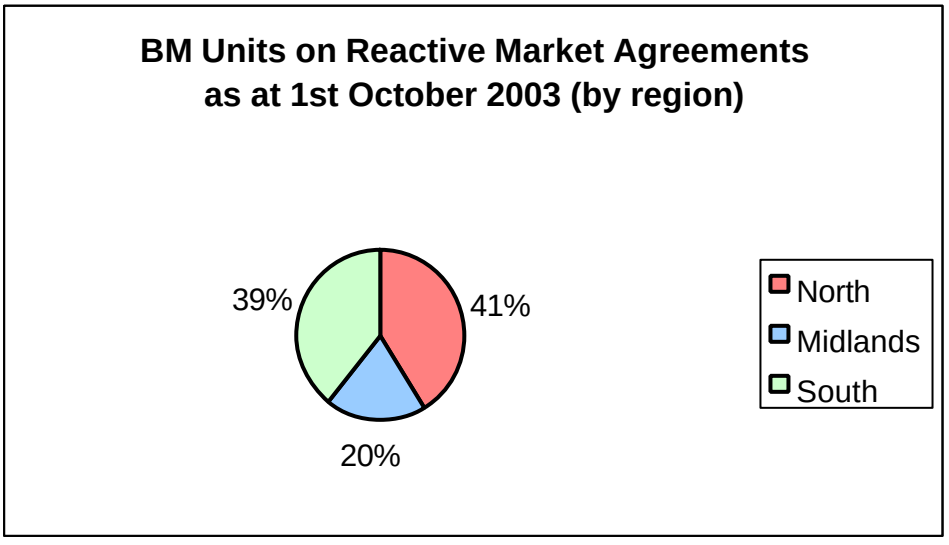


Figure 5 (Source: Appendix 2)

7.5 Figure 6 shows the % of total available lagging capability that has been contracted via Reactive Power Market Agreements since the commencement of the Reactive Power Market.

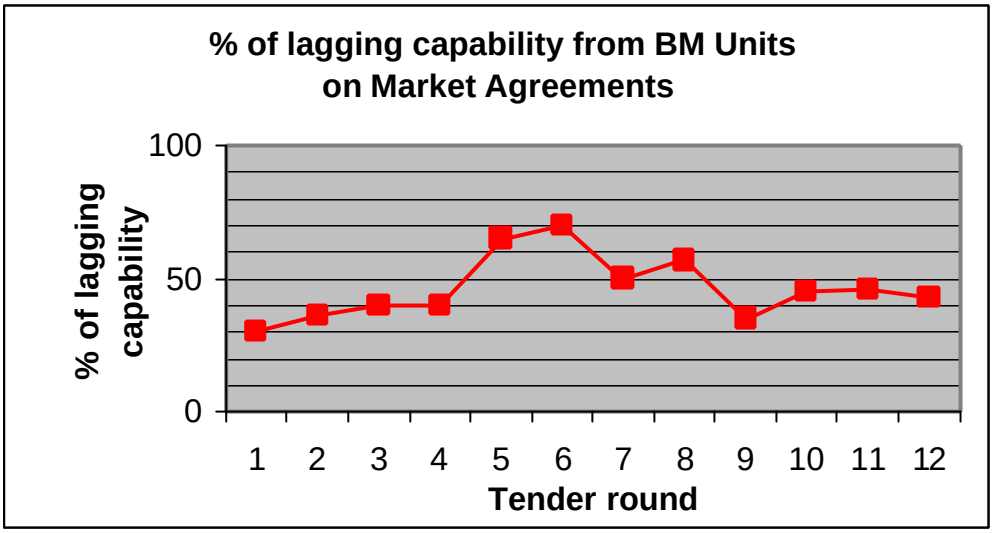


Figure 6 (Source: Appendix 1)

8. Generating Unit Reactive Mvarh Utilisation

8.1 This section summarises a six-month breakdown of metered BM Unit Reactive Power utilisation over the period 1st April 2003 to 30th September 2003.

8.2 Table 1 shows the Mvarh utilisation volumes (lead plus lag) for all eligible BM Units on a monthly basis. A breakdown by individual BM Unit for the period April to September 2003 is provided in Appendix 5.

Utilisation Volume (Mvarh)

Month	DPM	Market Agreements	Total = Market Agreements + DPM
Apr-03	843,349	876,348	1,719,697
May-03	790,013	729,301	1,519,314
Jun-03	874,620	929,288	1,803,908
Jul-03	907,312	966,782	1,874,094
Aug-03	846,330	995,695	1,842,025
Sep-03	981,946	1,051,547	2,033,493
Total	**5,243,570**	**5,548,961**	**10,792,531**

Table 1 - Summary of Generator Reactive utilisation Apr03 – Sep 03

8.3 Table 2, on the next page, shows six-monthly utilisation totals since 1996, sorted by the Seven Year Statement defined regions - North, Midland and South.

8.4 The volumes set out in Table 2 refer to all BM Units eligible for a reactive utilisation payment (default plus market). Mvarh lag and Mvarh lead are calculated according to the aggregation methodology described within Appendix 2 in Schedule 3 of the CUSC and also within the companion document "Methodology Document for the Aggregation of Reactive Power Metering" by which reactive utilisation payments are made.

8.5 The reduction over the last 6 years is attributable to more distributed generation and lower power flows across the system which has resulted in a reduction in reactive losses on the supergrid and hence the reactive utilisation required from generation.

	NORTH		MIDLANDS		SOUTH		TOTAL		
	lead	lag	lead	lag	Lead	lag	lead	Lag	| lead + lag |
Apr 96 - Sep 96	2.86	9.79	0.37	1.94	1.49	2.29	4.72	14.02	18.74
Oct 96 - Mar 97	2.72	12.71	0.36	3.07	1.74	2.72	4.82	18.50	23.32
Apr 97 - Sep 97	2.89	8.65	0.41	1.60	1.87	1.77	5.17	12.02	17.19
Oct 97 - Mar 98	2.78	10.67	0.31	3.07	1.54	2.01	4.63	15.75	20.38
Apr 98 - Sep 98	1.96	7.68	0.44	2.02	1.85	1.51	4.25	11.20	15.45
Oct 98 - Mar 99	1.71	9.54	0.36	2.07	1.65	1.66	3.76	13.48	17.24
Apr 99 - Sep 99	1.77	7.25	0.37	1.52	1.27	1.40	3.40	10.20	13.60
Oct 99 – Mar 00	1.98	10.45	0.27	2.13	1.35	2.19	3.60	14.77	18.37
Apr 00 – Sep 00	1.44	6.31	0.48	1.69	1.59	1.32	3.51	9.32	12.83
Oct 00 – Mar 01	1.52	7.40	0.40	2.72	1.48	1.73	3.40	11.85	15.25
Apr 01 – Sept 01	1.80	4.59	0.50	1.76	1.94	1.18	4.24	7.53	11.77
Oct 01 - Mar 02	1.70	5.79	0.58	3.07	1.50	1.78	3.79	10.65	14.44
Apr 02 – Sep 02	1.59	4.70	0.52	0.95	1.76	1.20	3.87	6.85	10.72
Oct 02 – Mar 03	1.71	5.73	0.47	2.51	1.53	1.78	3.71	10.02	13.73
Apr 03 – Sep 03	1.40	3.96	0.56	1.59	1.92	1.36	3.88	6.91	10.79

Table 2 – Generator Reactive Utilisation (Tvarh) by region

9. Estimates of the reactive contribution of the National Grid Transmission System for April to September 2003

9.1 National Grid is required by Schedule 3 of the CUSC to 'use all reasonable endeavours' to provide estimates of the Reactive Power absorption and generation in Mvarh by the National Grid Transmission System for the six-month period ending 30th September 2003.

9.2 This has been approached in two stages:

- The net Reactive Power utilisation (Tvarh) of the National Grid Transmission System has been derived from the difference between the reactive output of generating units and the reactive demand at Grid Supply Points (GSPs). This is given in Table 3 where the accuracy of the data is consistent with the underlying meter readings.

- The net Tvarh described above has been broken down by Transmission System component and is shown in Table 4. It should be noted that this information is based on estimates and operational records only.

Component (Tvarh)	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	6 monthly Total
Generation Lead	-0.59	-0.72	-0.61	-0.67	-0.65	-0.64	-3.88
Generation Lag	1.13	0.80	1.19	1.20	1.20	1.39	6.91
Net Reactive Demand at GSPs	4.58	4.69	4.79	6.32	5.23	5.21	30.82
Net National Grid System	4.04	4.61	4.21	5.79	4.68	4.46	27.79

Table 3 - Net National Grid System Effect

9.3 The simple reactive balance found in Table 3 can be described by the equation:

|Generation Net Tvarh| = |Net Reactive Demand at GSPs Tvarh| - |Net NGC System Tvarh|

For example, for June 2003, (1.19 - 0.61 = 6.37 – 4.21). From Table 3 it can be seen that the Tvarh contribution from generation is small compared with the other components of the equation.

9.4 The generation figures are a national monthly summation of the Settlements figures given in Appendix 5. At this stage, the data in Table 3 may be subject to amendment, via accruals or any outstanding disputes.

9.5 The 'net reactive demand at GSP' figures have been derived from operational records. The figure shown is net, i.e. lagging demand minus leading demand, and in this case is lagging in each month. This figure represents the net effect of the consumer demand plus the LV losses minus the LV gain.

9.6 The more detailed breakdown found in Table 4 can be described by the following equation:

- Generation Net Tvarh = Net Reactive Demand at GSPs - HV network shunt gain (BV^2) + HV network series loss (I^2X) + SGT series loss (I^2X_t) - Shunt capacitor gain - net SVC output + Shunt reactor loss.

Component (Tvarh)	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	6 month total
MSC	1.81	1.57	1.70	1.78	1.15	3.88	11.89
Shunt Reactor	-1.82	-2.00	-1.70	-1.75	-1.85	-3.41	-12.53
SVC generation	0.11	0.10	0.09	0.09	0.10	0.21	0.70
SVC absorption	-0.12	-0.15	-0.11	-0.18	-0.18	-0.30	-1.04
HV network shunt gain	8.21	8.68	8.36	9.64	8.58	8.22	51.69
HV network series losses	-2.27	-1.83	-1.82	-2.02	-2.05	-2.34	-12.33
SGT series losses	-1.88	-1.76	-2.31	-1.77	-1.07	-1.80	-10.59
Net NGC System Utilisation	4.04	4.61	4.21	5.79	4.68	4.46	27.79
Generation Lead	-0.59	-0.72	-0.61	-0.67	-0.65	-0.64	-3.88
Generation Lag	1.13	0.80	1.19	1.20	1.20	1.39	6.91
Net Demand at GSPs	4.58	4.69	4.79	6.32	5.23	5.21	30.82

Table 4 - Indicative Breakdown of Net National Grid System Effect

9.7 The figures in Table 4 are estimates and provide an indication of the likely national reactive energy balance within the system.

Points to note when considering Table 4 include:

- HV gain varies due to circuit switching, outages and system operating voltage
- HV losses are driven by active power flows across the system
- Supergrid transformer series reactive losses are predominantly driven by local distribution company demand
- Switching of MSCs (Mechanically Switched Capacitors), SVCs (Static Var Compensator) and shunt reactors is determined by operational security requirements.

10. Exceptional Reactive Power Requirements

10.1 Paragraph 5 in Schedule 3 of the CUSC (Statutory and Regulatory Obligations) enables National Grid to contract outside of the Reactive Power Market tender process in specific circumstances for the provision of exceptional Reactive Power services. National Grid is required to publish details of circumstances surrounding this in the preceding six month period. During the period 1st April 2003 – 30th September 2003 no such services were required by National Grid for the provision of voltage support.

Appendices

Appendix 1 - Comparisons with previous Tender Rounds

Tender Round	Tender Round Start date	BM Units able to tender	No. of BM/Non BM Unit tenders Received	ORPS	ORPS + ERPS	12 month duration	>12 months duration	Successful Gensets Offered Market Agreements	Successful Gensets signing Market Agreements	% total Mvar lagging capability with Market Agreements
1	1 Apr 1998	154	85	76	9	85	0	41	41	~30%
2	1 Oct 1998	113	10	10	0	9	1	5	5	~36%
3	1 Apr 1999	150	102	102	0	102	0	75	57	~40%
4	1 Oct 1999	99	20	20	0	14	6	5	5	~40%
5	1 Apr 2000	151	99	98	1	97	2	98	89	~65%
6	1 Oct 2000	58	15	15	0	15	0	9	9	~70%
7	1 Apr 2001	145	104	104	0	104	0	43	43	~50%
8	1 Oct 2001	111	39	39	0	39	0	17	15	~57%
9	1 Apr 2002	138	76	76	0	68	8	32	32	~35%
10	1 Oct 2002	123	52	52	0	48	4	29	27	~45%
11	1 Apr 2003	125	59	59	0	57	2	31	30	~46%
12	1 Oct 2003	121	56	56	0	49	7	32	23	~43%

Appendix 2 - BM Units position at 1st October 2003

North

	BM Unit	Contract		BM Unit	Contract		BM Unit	Contract
1	BRGG_01Z	DPM	24	DRAXX09G	DPM	48	HRTL_01Z	DPM
2	CDCL_01Z	Market 11	25	DRAXX10G	DPM	49	HRTL_02Z	DPM
3	CNQPS01Z	Market 11	26	DRAXX12G	DPM	50	KEAD_01Z	Market 12
4	CNQPS02Z	Market 12	27	EGGPS01Z	Market 12	51	KILNS01Z	Market 12
5	CNQPS03Z	Market 11	28	EGGPS02Z	Market 12	52	KILLP01Z	DPM
6	CNQPS04Z	Market 12	29	EGGPS03Z	Market 12	53	KILLP02Z	DPM
7	COTPS01Z	DPM	30	EGGPS04Z	Market 12	54	ROCK_01Z	DPM
8	COTPS02Z	DPM	31	FELL_01Z	DPM	55	ROOS_01Z	DPM
9	COTPS03Z	DPM	32	FERR_01Z	DPM	56	SCCL_01Z	DPM
10	COTPS04Z	DPM	33	FERR_02Z	DPM	57	SCCL_02Z	DPM
11	DEEP_01Z	Market 11	34	FERR_03Z	DPM	58	SCCL_03Z	DPM
12	DINO_01Z	DPM	35	FERR_04Z	DPM	59	SHBA_01Z	DPM
13	DINO_02Z	DPM	36	FFES_01Z	DPM	60	SHBA_02Z	Market 11
14	DINO_03Z	DPM	37	FFES_02Z	DPM	61	SHOT_01Z	DPM
15	DINO_04Z	DPM	38	FFES_03Z	DPM	62	TESI_01Z	DPM
16	DINO_05Z	DPM	39	FFES_04Z	DPM	63	TESI_02Z	DPM
17	DINO_06Z	DPM	40	FIDL_01Z	DPM	64	WBUPS01Z	Market 11
18	DRAXX01Z	DPM	41	FIDL_02Z	DPM	65	WBUPS02Z	Market 11
19	DRAXX02Z	DPM	42	FIDL_03Z	DPM	66	WBUPS03Z	Market 11
20	DRAXX03Z	DPM	43	FIDL_04Z	DPM	67	WBUPS04Z	Market 11
21	DRAXX04Z	DPM	44	HEYM101Z	Market 12	68	WYLF_01Z	DPM
22	DRAXX05Z	DPM	45	HEYM102Z	Market 12	69	WYLF_02Z	DPM
23	DRAXX06Z	DPM	46	HEYM207Z	Market 12	70	WYLF_03Z	DPM
			47	HEYM208Z	Market 12	71	WYLF_04Z	DPM

Midlands

	BM Unit	**Contract**		**BM Unit**	**Contract**		**BM Unit**	**Contract**
72	CORB_01Z	Market 11	79	PETEM01Z	DPM	86	RUGPS06G	DPM
73	DERW_01Z	DPM	80	RATS_01Z	Market 11	87	RUGPS07G	DPM
74	GYAR_01Z	DPM	81	RATS_02Z	Market 11	88	SIZB_01Z	Market 11
75	IRNPS01Z	Market 11	82	RATS_03Z	Market 12	89	SIZB_02Z	Market 11
76	IRNPS02Z	Market 11	83	RATS_04Z	Market 12	90	SIZEA01Z	DPM
77	KLYNA01Z	DPM	84	RUGPS06Z	DPM	91	SIZEA02Z	DPM
78	LBAR_01Z	DPM	85	RUGPS07Z	DPM	92	SUTB_01Z	Market 11

South

	BM Unit	Contract		BM Unit	Contract		BM Unit	Contract
93	ABTHB07Z	Market 11	112	DIDC_04G	DPM	131	KINO_03Z	Market 10
94	ABTHB08Z	Market 11	113	DNGB_21Z	Market 11	132	KINO_04Z	DPM
95	ABTHB09Z	Market 11	114	DNGB_22Z	Market 11	133	LITTD01G	DPM
96	AESB_01Z	DPM	115	DUNGA01Z	DPM	134	LITTD02G	DPM
97	BARK_02Z	Market 12	116	DUNGA02Z	DPM	135	LITTD03G	DPM
98	BARK_11Z	Market 11	117	DUNGA03Z	DPM	136	LITTD01Z	Market 12
99	COSO_01Z	DPM	118	DUNGA04Z	DPM	137	LITTD02Z	Market 12
100	COWE_01Z	DPM	119	EECL_01Z	DPM	138	MEDP_01Z	Market 12
101	COWE_02Z	DPM	120	FAWL_03Z	Market 11	139	OLDS_01Z	DPM
102	DAMC_01Z	DPM	121	FAWN_01Z	DPM	140	OLDS_02Z	DPM
103	DIDC_01Z	DPM	122	FIFO_13Z	DPM	141	RYHPS01Z	Market 11
104	DIDC_02Z	DPM	123	FIFO_14Z	DPM	142	SEAB_01Z	Market 12
105	DIDC_03Z	DPM	124	FIFO_15Z	DPM	143	SEAB_02Z	Market 12
106	DIDC_04Z	DPM	125	GRAI_01Z	DPM	144	SHOS_01Z	DPM
107	DIDCB05Z	DPM	126	GRAI_04Z	DPM	145	TAYL_02Z	Market 12
108	DIDCB06Z	DPM	127	HINB_07Z	Market 12	146	TAYL_03Z	Market 11
109	DIDC_01G	DPM	128	HINB_08Z	Market 12	147	TILBB08Z	DPM
110	DIDC_02G	DPM	129	KINO_01Z	Market 10	148	TILBB09Z	DPM
111	DIDC_03G	DPM	130	KINO_02Z	DPM	149	TILBB10Z	DPM

Notes :

Market 10 refers to those contracts commencing 1st October 2002
Market 11 refers to those contracts commencng 1st April 2003
Market 12 refers to those contracts commencing 1st October 2003
Eligible BM Units are those of reactive capability, leading or lagging greater than 15 Mvar at the commercial boundary, and the further stipulations stated in CUSC Schedule 3. There are to date, no market contracts for Enhanced Capability.

Appendix 3 - Reactive Market Agreement status at 1st October 2003

New Contracts Commencing on 1st October 2003			
	Company	**BM Unit ID**	**Contract Expiry Date**
1	Barking Power Limited	BARK021Z	30/09/04
2	British Energy Generation (UK) Ltd	HEYM101Z	30/09/04
2	British Energy Generation (UK) Ltd	HEYM102Z	30/09/04
4	British Energy Generation (UK) Ltd	HEYM207Z	30/09/04
5	British Energy Generation (UK) Ltd	HEYM208Z	30/09/04
6	British Energy Generation (UK) Ltd	HINB_07Z	30/09/04
7	British Energy Generation (UK) Ltd	HINB_07Z	30/09/04
8	Eggborough Power Ltd	EGGB_01Z	30/09/04
9	Eggborough Power Ltd	EGGB_02Z	30/09/04
10	Eggborough Power Ltd	EGGB_03Z	30/09/04
11	Eggborough Power Ltd	EGGB_04Z	30/09/04
12	Innogy plc	LITTD01Z	30/09/04
13	Innogy plc	LITTD02Z	30/09/04
14	Keadby Generation Ltd	KEAD_01Z	30/09/04
15	Killingholme Power Ltd	KILNS01Z	30/09/05
16	Medway Power Ltd	MEDP_01Z	30/09/04
17	Powergen UK plc	CONQ_02Z	30/09/04
18	Powergen UK plc	CONQ_04Z	30/09/04
19	Powergen UK plc	RATS_03Z	30/09/04
20	Powergen UK plc	RATS_04Z	30/09/04
21	Powergen UK plc	TAYL_02Z	30/09/06
22	Seabank Power Ltd	SEAB_01Z	30/09/04
23	Seabank Power Ltd	SEAB_02Z	30/09/04

Contracts Continuing on 1st October 2003			
	Company	**BM Unit ID**	**Contract Expiry Date**
1	Barking Power Limited	BARK_11Z	31/03/04
2	British Energy	DNGB_21Z	31/03/04
3	British Energy	DNGB_22Z	31/03/04
4	British Energy	SIZB_01Z	31/03/04
5	British Energy	SIZB_02Z	31/03/04
6	Corby Power Limited	CORB_01Z	31/03/04
7	Cottam Development Centre Ltd	CDCL-1	31/03/04
8	Deeside Power Development Co Ltd	DEEP_01Z	31/03/04
9	Humber Power Limited	SHBA_02Z	31/03/04
10	Innogy plc	ABTHB07Z	31/03/04
11	Innogy plc	ABTHB08Z	31/09/04
12	Innogy plc	ABTHB09Z	31/03/05
13	Innogy plc	FAWL_03Z	31/03/04
14	Powergen UK plc	CONQ_01Z	31/03/04
15	Powergen UK plc	CONQ_03Z	31/03/04
16	Powergen UK plc	IRNPS01Z	30/03/04
17	Powergen UK plc	IRNPS02Z	30/03/04
18	Powergen UK plc	KINO_01Z	31/03/04
19	Powergen UK plc	KINO_03Z	31/03/04
20	Powergen UK plc	RATS_01Z	30/03/04
21	Powergen UK plc	RATS_02Z	31/03/04
22	Powergen UK plc	TAYL_03Z	31/03/04
23	Scottish Power plc	RYHPS01Z	31/03/04
24	Sutton Bridge Power	SUTB_01Z	31/03/04
25	West Burton Limited	WBUPS01Z	31/03/04
26	West Burton Limited	WBUPS02Z	31/03/04
27	West Burton Limited	WBUPS03Z	31/03/04
28	West Burton Limited	WBUPS04Z	31/03/04

Appendix 4 - Successful tender details for contracts commencing 1st October 2003

Company Name: Barking Power Ltd			Station Name: Barking (Module 2)			
Genset ID: BARK_02Z			Contract Period: 12 months			
Nominated GRC: 611 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	308	90	50	100	150	197
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.080	0.060	0.040	0.040	0.060	0.070
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.180	0.930	0.610	0.790	0.960	1.420

Company Name: British Energy Generation			Station Name: Heysham 1			
Genset ID: HEYM101Z			Contract Period: 12 months			
Nominated GRC: 538 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	290	150	50	75	200	319
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.100	0.070	0.068	0.068	0.070	0.100
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.350	0.865	0.860	0.860	0.865	1.350

Company Name: British Energy Generation			Station Name: Heysham 1			
Genset ID: HEYM102Z			Contract Period: 12 months			
Nominated GRC: 522 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	290	150	50	75	200	328
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.100	0.070	0.068	0.068	0.070	0.100
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.350	0.865	0.860	0.860	0.865	1.350

Company Name: British Energy Generation			Station Name: Heysham 2			
Genset ID: HEYM207Z			Contract Period: 12 months			
Nominated GRC: 635 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	279	200	50	50	200	289
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.100	0.080	0.075	0.075	0.080	0.100
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.360	0.875	0.870	0.870	0.875	1.360

Company Name: British Energy Generation			Station Name: Heysham 2			
Genset ID: HEYM208Z			Contract Period: 12 months			
Nominated GRC: 625 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	277	200	50	50	200	297
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.100	0.080	0.075	0.075	0.080	0.100
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.360	0.875	0.870	0.870	0.875	1.360

Company Name: British Energy Generation			Station Name: Hinkley Point B			
Genset ID: HINB_07Z			Contract Period: 12 months			
Nominated GRC: 625 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	305	200	75	50	150	260
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.060	0.030	0.026	0.026	0.030	0.060
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.270	0.870	0.860	0.860	0.870	1.270

Company Name: British Energy Generation			Station Name: Hinkley Point B			
Genset ID: HINB_08Z			Contract Period: 12 months			
Nominated GRC: 588 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	300	200	75	50	150	294
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.060	0.030	0.026	0.026	0.030	0.060
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.270	0.870	0.860	0.860	0.870	1.270

Company Name: Eggborough Power Ltd			Station Name: Eggborough			
Genset ID: EGGB_01Z			Contract Period: 12 months			
Nominated GRC: 475 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	149	100	50	75	150	225
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.050	0.022	0.018	0.018	0.022	0.050
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.010	0.007	0.005	0.005	0.007	0.010
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.370	0.950	0.850	0.850	0.950	1.370

Company Name: Eggborough Power Ltd			Station Name: Eggborough			
Genset ID: EGGB_02Z			Contract Period: 12 months			
Nominated GRC: 465 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	152	100	50	75	150	226
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.060	0.025	0.022	0.022	0.025	0.060
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.350	0.950	0.900	0.900	0.950	1.350

Company Name: Eggborough Power Ltd			Station Name: Eggborough			
Genset ID: EGGB_03Z			Contract Period: 12 months			
Nominated GRC: 480 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	154	100	50	75	150	216
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.070	0.038	0.035	0.035	0.038	0.070
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.015	0.010	0.005	0.005	0.010	0.015
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.380	0.500	0.450	0.450	0.500	1.380

Company Name: Eggborough Power Ltd			Station Name: Eggborough			
Genset ID: EGGB_04Z			Contract Period: 12 months			
Nominated GRC: 479 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	153	100	50	75	150	215
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.080	0.040	0.038	0.038	0.040	0.080
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.400	0.550	0.480	0.480	0.550	1.400

Company Name: Innogy plc			Station Name: Littlebrook D			
Genset ID: LITTD01Z			Contract Period: 12 months			
Nominated GRC: 685 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	297	175	100	50	140	198
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.004	0.002	0.001	0.002	0.004	0.087
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.312	0.156	0.052	0.312	0.520	1.352
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.000	0.800	0.300	0.300	0.800	2.000

Company Name: Innogy plc			Station Name: Littlebrook D			
Genset ID: LITTD02Z			Contract Period: 12 months			
Nominated GRC: 685 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	297	175	100	50	140	198
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.004	0.002	0.001	0.002	0.004	0.087
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.312	0.156	0.052	0.312	0.520	1.352
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.000	0.800	0.300	0.300	0.800	2.000

Company Name: Keadby Generation Ltd			Station Name: Keadby			
Genset ID: KEAD_01Z			Contract Period: 12 months			
Nominated GRC: 715 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	349	300	50	100	280	323
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.250	0.130	0.020	0.020	0.170	0.300
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.100	0.050	0.030	0.050	0.080	1.200

Company Name: Medway Power Ltd			Station Name: Medway			
Genset ID: MEDP_01Z			Contract Period: 12 months			
Nominated GRC: 700 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	369	200	50	100	200	337
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.130	0.028	0.023	0.023	0.028	0.140
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.002	0.001	0.000	0.000	0.001	0.002
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.700	0.370	0.360	0.360	0.370	1.700

Company Name: Killingholme Power Ltd			Station Name: Killingholme			
Genset ID:KILNS01Z			Contract Period: 24 months			
Nominated GRC: 650 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	305	150	50	50	200	314
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.010	0.010	0.010	0.010	0.015	0.025
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.050	0.045	0.040	0.040	0.055	0.085
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.350	0.500	0.220	0.220	0.700	1.900

Company Name: Powergen UK plc			Station Name: Connahs Quay			
Genset ID: CONQ_02Z			Contract Period: 12 months			
Nominated GRC: 355 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	176	140	48	48	125	155
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.043	0.042	0.041	0.041	0.042	0.043
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.052	0.051	0.050	0.050	0.051	0.052
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.000	0.127	0.085	0.170	0.171	2.000

Company Name: Powergen UK plc			Station Name: Connahs Quay			
Genset ID: CONQ_04Z			Contract Period: 12 months			
Nominated GRC: 355 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	177	140	48	48	125	155
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.047	0.046	0.045	0.045	0.046	0.047
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.047	0.046	0.045	0.045	0.046	0.047
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.000	0.127	0.085	0.170	0.171	2.000

Company Name: Powergen UK plc			Station Name: Ratcliffe on Soar			
Genset ID: RATS_03Z			Contract Period: 12 months			
Nominated GRC: 500 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	128	90	48	73	160	193
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.042	0.041	0.040	0.040	0.041	0.042
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.041	0.040	0.039	0.039	0.040	0.041
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.500	0.300	0.200	0.400	0.401	2.500

Company Name: Powergen UK plc			Station Name: Ratcliffe on Soar			
Genset ID: RATS_04Z			Contract Period: 12 months			
Nominated GRC: 500 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	141	110	48	73	140	178
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.042	0.041	0.040	0.040	0.041	0.042
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.029	0.028	0.027	0.027	0.028	0.029
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.500	0.300	0.200	0.400	0.401	2.500

Company Name: Powergen UK plc			Station Name: Taylors Lane			
Genset ID: TAYL_02Z			Contract Period: 36 months			
Nominated GRC: 68 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	33	25	8	8	25	29
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.003	0.002	0.001	0.001	0.002	0.003
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.752	0.751	0.750	0.750	0.751	0.752
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	2.000	0.184	0.123	0.246	0.247	2.000

Company Name: Seabank Power Ltd			Station Name: Seabank			
Genset ID: SEAB_01Z			Contract Period: 12 months			
Nominated GRC: 755 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	361	200	50	100	242	346
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.011	0.008	0.002	0.016	0.046	0.183
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.840	0.420	0.360	0.360	0.400	2.070

Company Name: Seabank Power Ltd			Station Name: Seabank			
Genset ID: SEAB_02Z			Contract Period: 12 months			
Nominated GRC: 385 MW	Maximum Leading Capability	Mid Point Leading Capability	Low point Leading Capability	Low point Lagging Capability	Mid Point Lagging Capability	Maximum Lagging Capability
Capability (Mvar)	Q3Lead:	Q2Lead:	Q1Lead:	Q1Lag:	Q2:Lag	Q3:Lag
	187	100	25	50	121	173
Available Capability Prices (£/Mvar/h)	CA3Lead:	CA2Lead:	CA1Lead:	CA1Lag:	CA2Lag:	CA3Lag:
	0.020	0.014	0.004	0.028	0.079	0.314
Synchronised Capability Prices (£/Mvar/h)	CS3Lead:	CS2Lead:	CS1Lead:	CS1Lag:	CS2Lag:	CS3Lag:
	0.000	0.000	0.000	0.000	0.000	0.000
Utilisation Prices (£/Mvarh)	CU3Lead:	CU2Lead:	CU1Lead:	CU1Lag:	CU2Lag:	CU3Lag:
	1.840	0.400	0.360	0.360	0.400	2.070

Appendix 5 - Generation Utilisation Volumes by BM Unit – April – September 2003

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
ABTHB07Z	Market	3,004	3,665	680	550	1,351	3,124	1,921	11,339	2,724	13,138	3,201	8,506	12,881	40,323
ABTHB08Z	Market	902	6,722	1,835	4,429	1,021	4,344	1,834	15,530	1,771	12,353	2,755	6,813	10,119	50,192
ABTHB09Z	Market	1,752	7,049	3,512	4,916	410	1,132	0	0	0	0	1,137	6,100	6,810	19,197
AESB_01Z	Default	92	591	22	450	0	0	0	25	0	0	0	0	114	1,066
BARK_02Z	Default	7,393	13,464	16,080	10,217	10,881	22,393	6,131	11,676	8,684	7,728	9,616	19,023	58,784	84,499
BARK_11Z	Market	6,005	12,090	3,911	1,430	7,726	17,326	9,128	17,810	1 3,288	16,607	9,824	16,611	49,882	81,874
BRGG_01Z	Default	386	1,391	420	676	1,165	1,637	1,510	1,767	2,666	4,476	1,656	4,026	7,803	13,973
CDCL_01Z	Market	4,750	27,879	2,716	16,267	5,805	14,119	2,348	18,132	2,087	17,761	1,528	35,076	19,235	129,235
CNQPS01Z	Market	5,071	7,657	11,816	8,872	3,692	16,625	9,564	6,826	9,771	5,585	5,683	8,597	45,598	54,162
CNQPS02Z	Market	4,562	9,075	9,047	6,942	1,887	5,565	8,195	6,355	9,871	6,047	5,153	9,969	38,717	43,953
CNQPS03Z	Market	4,819	11,707	9,685	9,832	2,435	6,211	8,629	5,969	6,850	3,988	4,940	6,348	37,358	44,055
CNQPS04Z	Market	2,694	6,606	676	956	3,001	18,753	9,009	5,646	7,491	7,799	7,946	8,012	30,818	47,772
CORB_01Z	Market	5,227	8,438	5,687	5,655	1,133	1,766	2,203	3,697	4,875	4,549	1,679	8,560	20,804	32,664
COSO_01Z	Default	4,084	2,659	2,789	7,081	2,868	4,348	3,976	5,247	3,981	6,903	5,292	8,028	22,990	34,266
COTPS01Z	Default	3,962	12,183	2,375	11,521	879	13,559	1,515	11,771	2,537	12,970	2,039	12,770	13,307	74,774
COTPS02Z	Default	2,227	16,812	2,103	13,391	1,447	12,865	1,856	12,145	2,841	19,349	1,256	17,722	11,730	92,284
COTPS03Z	Default	3,456	13,537	1,571	10,145	1,554	9,812	1,512	10,795	1,255	14,351	700	23,074	10,049	81,713
COTPS04Z	Default	1,882	12,689	3,064	4,872	796	1,750	0	0	0	0	130	0	5,872	19,310
COWE_01Z	Default	0	0	0	20	0	0	0	30	0	58	0	14	0	121
COWE_02Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAMC_01Z	Default	8,034	7,194	19,796	9,523	14,614	19,062	19,335	18,881	18,937	20,277	22,791	16,695	103,507	91,632
DEEP_01Z	Market	2,445	3,787	2,244	6,409	1,152	11,657	9,843	4,719	9,229	10,601	5,423	10,534	30,336	47,708
DERW_01Z	Market	2,623	3,118	1,868	3,569	3,475	4,948	3,044	7,405	4,701	6,208	2,862	6,888	18,573	32,136
DIDC_01G	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIDC_01Z	Market	11,157	2,755	12,429	1,134	7,341	4,096	10,596	3,737	2,717	373	9,485	8,307	53,724	20,401

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
DIDC_02G	Default	0	0	0	0	0	0	0	3	0	0	0	0	0	3
DIDC_02Z	Default	8,466	2,383	11,315	641	6,406	4,981	10,970	3,634	11,380	8,946	0	0	48,537	20,584
DIDC_03G	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIDC_03Z	Default	5,943	2,547	12,113	1,022	3,319	3,346	1,472	588	12,646	12,409	9,316	6,218	44,809	26,130
DIDC_04G	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIDC_04Z	Market	8,829	2,968	8,810	1,525	10,185	8,083	17,372	4,969	16,340	12,401	15,111	8,754	76,647	38,701
DIDCB05Z	Default	19,365	5,245	27,569	3,921	29,809	12,130	34,319	8,973	12,253	3,055	25,242	13,734	148,555	47,057
DIDCB06Z	Default	26,480	4,726	33,047	3,042	34,061	8,692	39,320	6,700	20,393	4,873	28,945	14,415	182,246	42,448
DINO_01Z	Default	9,339	203	7,383	1,104	7,146	967	8,561	1,263	7,958	523	6,838	1,012	47,224	5,072
DINO_02Z	Default	376	0	0	0	0	0	0	0	40	0	725	257	1,140	257
DINO_03Z	Default	328	0	717	0	698	0	734	0	5,239	854	9,195	1,554	16,910	2,408
DINO_04Z	Default	3,822	1,551	3,721	1,408	2,694	1,908	3,466	1,866	5,811	1,174	7,028	1,524	26,541	9,430
DINO_05Z	Default	5,538	1,346	3,494	3,189	4,001	3,317	6,021	2,111	5,850	921	6,518	2,262	31,423	13,147
DINO_06Z	Default	4,595	1,132	2,592	1,443	3,304	1,152	6,156	481	5,869	444	3,930	1,243	26,446	5,895
DNGB_21Z	Market	0	0	14,388	3,814	22,164	7,220	9,664	1,279	18,547	3,600	17,091	6,182	81,854	22,095
DNGB_22Z	Market	14,534	1,343	27,109	3,482	22,547	6,816	23,640	4,446	12,879	1,412	21,562	5,219	122,272	22,718
DRAXX01Z	Default	4,806	26,466	4,027	24,363	5,589	26,183	6,620	33,051	5,674	28,647	2,883	31,894	29,599	170,603
DRAXX02Z	Market	4,973	24,462	0	0	0	0	2,724	2,658	8,841	20,529	3,638	37,602	20,176	85,251
DRAXX03Z	Default	2,139	26,436	5,730	32,286	4,091	29,348	2,184	11,182	0	0	718	11,782	14,863	111,035
DRAXX04Z	Market	7,983	29,198	4,429	26,082	6,545	33,382	7,619	34,722	6,352	20,450	4,324	34,506	37,252	178,340
DRAXX05Z	Default	7,555	28,100	5,967	26,547	4,689	42,106	6,981	33,912	6,849	23,246	3,223	26,357	35,264	180,267
DRAXX06Z	Market	5,759	34,621	4,259	28,042	4,662	38,945	8,570	36,481	5,810	26,287	4,369	35,627	33,429	200,003
DRAXX09G	Default	0	18	0	2	0	0	0	18	0	0	0	2	0	41
DRAXX10G	Default	0	0	1	3	0	0	0	0	0	0	0	0	1	3
DRAXX12G	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DUNGA01Z	Default	8,920	302	4,441	141	3,320	2,888	6,184	1,033	8,074	1,042	3,750	1,514	34,688	6,920
DUNGA02Z	Default	7,806	477	4,748	106	4,428	2,201	1,508	749	4,685	1,489	2,046	2,394	25,221	7,416
DUNGA03Z	Default	710	5	0	0	2,329	1,883	2,416	1,084	6,068	922	4,695	704	16,218	4,599

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
DUNGA04Z	Default	725	40	151	27	2,529	3,855	7,976	682	8,971	547	7,648	193	27,999	5,344
EECL_01Z	Default	6,230	5,867	6,469	9,131	6,598	14,871	4,984	13,408	6,897	20,158	4,415	16,860	35,593	80,294
EGGPS01Z	Default	2,249	7,818	2,657	8,403	836	11,135	3,244	13,238	2,170	9,773	1,420	8,877	12,576	59,244
EGGPS02Z	Default	1,458	3,373	1,139	3,516	402	7,427	2,050	10,558	1,284	7,180	2,045	6,577	8,378	38,631
EGGPS03Z	Default	505	6,345	0	0	0	0	0	0	1,615	5,679	2,506	9,710	4,625	21,733
EGGPS04Z	Default	1,102	13,923	2,125	12,544	1,561	12,992	853	6,608	0	0	617	4,619	6,258	50,685
FAWL_03Z	Market	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FAWN_01Z	Default	496	837	464	896	363	652	11	1,175	10	18	1,634	57	2,978	3,636
FELL_01Z	Default	2	18,999	0	18,084	4	14,335	0	21,800	0	24,374	0	26,852	6	124,444
FERR_01Z	Default	3,953	5,400	4,662	3,852	1,961	9,349	2,858	10,206	1,302	10,993	1,125	7,770	15,860	47,570
FERR_02Z	Default	2,508	3,646	4,125	2,237	1,487	6,588	0	0	0	0	0	0	8,121	12,472
FERR_03Z	Default	1,555	5,395	0	0	998	5,583	2,187	11,655	924	11,028	804	14,561	6,468	48,223
FERR_04Z	Default	2,268	5,689	3,336	5,485	2,120	7,860	3,035	8,787	783	12,074	792	10,876	12,334	50,771
FFES_01Z	Default	159	428	135	624	223	581	146	862	907	454	894	326	2,464	3,275
FFES_02Z	Default	2,413	254	1,947	149	1,793	74	2,036	121	990	352	601	221	9,779	1,170
FFES_03Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FFES_04Z	Default	1,704	101	1,277	45	1,447	44	1,373	17	1,435	24	1,503	79	8,740	309
FIDL_01Z	Default	6,026	927	5,494	1,329	3,431	1,165	3,483	1,575	5,627	2,212	3,401	1,964	27,462	9,173
FIDL_02Z	Default	5,134	1,618	3,079	182	0	0	0	0	0	0	0	0	8,213	1,801
FIDL_03Z	Default	0	0	0	0	2,919	862	4,835	1,285	5,619	1,623	6,355	1,149	19,727	4,918
FIDL_04Z	Default	8,442	2,101	4,424	3,348	3,850	1,735	4,842	2,820	4,192	1,498	4,038	2,740	29,789	14,242
FIFO_13Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FIFO_14Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FIFO_15Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAI_01Z	Market	0	0	0	0	0	0	0	0	0	0	2	78	2	78
GRAI_04Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEYM101Z	Market	8,011	37,270	7,732	22,719	7,100	28,097	5,844	35,895	6,560	25,108	3,257	18,587	38,505	167,676
HEYM102Z	Market	8,955	35,040	8,247	21,462	2,078	9,225	7,488	27,349	6,896	22,323	7,029	25,116	40,693	140,515

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
HEYM207Z	Market	7,597	30,481	7,249	18,681	5,513	24,549	7,285	30,752	5,995	15,446	7,166	21,827	40,805	141,736
HEYM208Z	Market	1,535	5,937	6,975	20,704	6,170	26,049	7,803	30,190	8,094	20,620	8,018	21,070	38,595	124,569
HINB_07Z	Market	13,983	8,193	27,221	4,057	30,437	3,723	26,998	5,885	3,434	2,363	0	0	102,072	24,221
HINB_08Z	Market	13,485	4,522	24,953	1,774	28,182	3,344	24,303	6,052	16,082	12,682	28,645	10,285	135,650	38,657
HRTL_01Z	Market	1,423	45,408	9,752	38,359	6,283	55,159	358	36,556	1,387	81,383	621	54,237	19,824	311,103
HRTL_02Z	Market	1,738	41,880	82	2,020	912	7,722	4,366	3,324	38,762	314	34,582	145	80,442	55,405
IRNPS01Z	Market	4,971	11,151	6,085	1,699	3,111	5,600	2,044	3,379	6,002	6,148	8,656	3,478	30,869	31,455
IRNPS02Z	Market	4,338	6,700	4,260	4,658	3,440	5,356	0	0	0	0	1,410	6,604	13,448	23,317
KEAD_01Z	Default	2,341	60,406	3,592	40,028	2,154	50,693	4,048	52,920	3,717	25,403	2,146	39,333	17,998	268,784
KILLP01Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KILLP02Z	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KILNS01Z	Default	4,091	24,000	1,679	11,846	2,902	19,924	338	0	4,551	18,657	2,062	21,668	15,623	96,096
KINO_01Z	Market	538	0	357	0	311	0	488	0	276	10	66	0	2,035	10
KINO_02Z	Market	11,358	1,461	6,716	2,252	6,303	555	7,477	5,757	11,551	4,957	8,303	5,510	51,709	20,492
KINO_03Z	Market	11,226	4,069	12,623	1,159	11,082	7,503	2,399	2,113	0	0	0	0	37,330	14,845
KINO_04Z	Market	127	43	114	96	100	98	149	46	242	149	64	2	797	435
KLYNA01Z	Default	5,028	0	6,483	0	3,397	0	6,553	0	1,198	0	4,381	0	27,039	0
LBAR_01Z	Default	4,749	27,527	12,888	8,585	6,966	24,253	8,702	25,437	9,306	35,052	4,740	33,493	47,352	154,347
LITTD01G	Default	0	0	0	0	0	0	2	4	0	0	0	0	2	4
LITTD01Z	Market	0	0	0	0	3	850	548	2,151	270	3,931	84	335	905	7,266
LITTD02G	Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LITTD02Z	Market	287	0	0	0	0	0	8	307	1	1,769	0	0	296	2,076
LITTD03G	Default	0	0	2	0	0	0	0	0	2	0	0	0	5	0
MEDP_01Z	Default	23,869	4,672	23,391	5,614	24,549	14,727	3,869	678	4,198	1,007	29,612	10,146	109,488	36,843
OLDS_01Z	Default	7,847	3,743	6,098	4,182	5,181	6,191	5,191	7,179	6,159	8,732	5,438	5,425	35,913	35,453
OLDS_02Z	Default	3,948	11,196	3,458	9,613	2,342	12,395	5,279	9,653	4,941	10,830	2,018	9,891	21,985	63,578
PETEM01Z	Default	1,722	3,542	2,194	2,806	784	1,124	3,117	2,902	2,629	7,540	4,914	5,342	15,359	23,256
RATS_01Z	Market	9,626	14,907	11,773	10,741	9,231	15,077	4,054	7,048	5,618	27,562	2,270	30,555	42,573	105,890

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
RATS_02Z	Market	5,003	18,935	9,402	13,189	7,380	14,548	12,524	5,402	4,882	1,755	5,753	11,228	44,943	65,057
RATS_03Z	Market	55	3,353	0	0	2,170	2,799	10,901	10,346	4,866	21,742	2,533	15,608	20,526	53,848
RATS_04Z	Market	3,320	18,167	8,481	11,040	5,454	15,480	11,944	11,888	2,184	2,378	3,550	18,150	34,934	77,103
ROCK_01Z	Default	15,561	7,427	9,966	7,534	10,590	9,455	13,545	7,678	18,302	8,281	3,706	4,057	71,670	44,431
ROOS_01Z	Market	0	0	0	0	1,068	2,102	1,168	2,466	911	2,604	448	4,495	3,595	11,667
RUGPS06G	Default	0	37	0	10	0	13	0	21	0	85	0	0	0	166
RUGPS06Z	Default	1,657	14,929	3,897	7,365	1,826	12,028	3,996	14,157	3,900	20,581	3,585	25,140	18,860	94,200
RUGPS07G	Default	0	0	0	0	0	0	0	20	0	130	0	0	0	150
RUGPS07Z	Default	2,271	13,603	4,486	4,672	2,202	14,347	5,799	15,045	5,470	19,200	3,392	27,230	23,620	94,097
RYHPS01Z	Market	9,995	20,283	5,650	13,158	8,200	27,900	10,655	28,393	11,122	33,383	7,539	36,072	53,161	159,189
SCCL_01Z	Default	2,103	3,815	1,494	4,985	1,338	2,945	1,524	2,472	1,087	4,758	1,640	4,871	9,186	23,846
SCCL_02Z	Default	2,201	5,377	3,640	3,168	2,870	6,227	640	8,915	6,521	3,862	4,002	5,949	19,874	33,498
SCCL_03Z	Default	2,398	2,915	2,309	4,424	1,418	4,000	1,579	8,862	251	2,517	882	4,220	8,837	26,937
SEAB_01Z	Market	5,198	5,995	8,186	4,292	8,761	16,884	8,725	13,939	12,567	14,231	7,957	11,843	51,395	67,186
SEAB_02Z	Market	4,619	5,405	7,653	2,551	6,018	8,571	5,841	8,901	7,094	11,343	11,443	5,367	42,669	42,137
SHBA_01Z	Default	0	0	4,835	4,726	5,882	8,763	5,557	11,650	4,707	10,075	4,037	13,630	25,017	48,844
SHBA_02Z	Market	0	0	5,331	3,209	3,234	10,228	3,109	9,825	3,280	10,952	2,165	15,913	17,119	50,126
SHOS_01Z	Default	4,469	3,272	3,618	6,244	6,870	3,512	4,627	4,951	3,599	4,704	4,818	4,345	28,002	27,028
SIZB_01Z	Market	4,234	12,064	6,979	3,117	11,617	8,887	11,304	9,898	8,553	10,179	7,724	10,663	50,412	54,808
SIZB_02Z	Market	5,027	10,594	8,583	2,404	14,690	7,138	13,252	8,364	10,753	8,424	6,544	11,938	58,847	48,861
SIZEA01Z	Default	800	5,083	2,512	2,834	2,782	5,777	1,836	5,698	3,690	3,595	1,783	5,752	13,403	28,738
SIZEA02Z	Default	2,258	5,566	6,820	2,187	372	580	1,966	1,223	3,323	3,275	1,537	3,878	16,276	16,709
SUTB_01Z	Market	4,849	16,339	9,480	8,786	7,619	16,308	9,414	15,747	7,731	22,635	7,222	17,570	46,314	97,385
TAYL_02Z	Market	6	38	4	1	0	2	0	14	0	77	0	3	11	135
TAYL_03Z	Market	3	25	4	6	5	2	0	4	9	33	0	0	21	70
TESI_01Z	Default	4,248	14,768	11,543	9,485	5,398	15,196	2,090	55,621	2,244	26,169	2,813	38,860	28,335	160,098
TESI_02Z	Default	978	9,422	8,187	10,288	2,834	14,275	1,479	50,682	1,805	26,985	3,004	27,309	18,287	138,961
TILBB08Z	Default	4,693	1,761	9,266	2,083	5,632	5,588	6,854	7,777	4,425	4,997	7,494	7,183	38,364	29,389

BM Unit	Agreement	Monthly Mvarh												6 Month TOTAL	
		Apr-03		May-03		Jun-03		Jul-03		Aug-03		Sep-03			
		Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
TILBB09Z	Default	1,190	4,829	7,839	1,804	5,779	6,693	3,055	2,366	1,956	287	4,639	7,643	24,459	23,622
TILBB10Z	Default	3,610	2,740	6,796	1,901	0	0	0	0	1,487	1,788	2,963	6,053	14,856	12,481
WBUPS01Z	Market	307	13,635	0	0	286	21,093	437	25,217	204	31,884	366	25,663	1,601	117,492
WBUPS02Z	Market	0	0	0	0	512	23,892	516	26,491	608	26,393	544	39,112	2,180	115,888
WBUPS03Z	Market	1,101	35,313	862	24,165	1,026	27,580	271	27,873	703	29,094	1,011	29,951	4,974	173,976
WBUPS04Z	Market	558	25,438	1,418	27,827	819	23,205	1,051	24,859	795	22,557	470	28,780	5,111	152,665
WYLF_01Z	Default	13,286	39	3,859	32	0	0	0	0	0	0	0	0	17,145	71
WYLF_02Z	Default	11,815	226	3,664	43	817	693	0	0	7,786	920	9,964	612	34,048	2,494
WYLF_03Z	Default	19,315	11	12,600	1,738	6,486	2,658	9,504	587	1,126	0	13,610	520	62,641	5,515
WYLF_04Z	Default	5,400	1,741	8,129	3,039	10,909	2,044	8,138	1,086	3,465	0	9,334	907	45,376	8,816
Subtotal	Default	346,481	496,867	391,812	398,200	304,888	569,733	325,950	581,363	314,260	532,070	336,841	645,105	2,020,232	3,223,338
Subtotal	Market	240,562	635,786	331,272	398,029	305,650	623,637	348,627	618,155	331,580	664,115	303,152	748,395	1,860,843	3,688,118
Total	Mvarh	587,043	1,132,653	723,085	796,229	610,538	1,193,370	674,576	1,199,518	645,839	1,196,186	639,994	1,393,500	3,881,075	6,911,456

Appendix 6 - Tender Assessment Procedure

A6 Introduction

A6.1 National Grid assessed Reactive Power Tender Round 12 in a manner consistent with the processes applied to all previous Tender Rounds, as detailed in CUSC. Analytical processing was conducted in six-month time periods (Summer 1st April to 30th September and Winter 1st October to 31st March) in order to consider any interaction with the overlap of contracts secured during the previous Reactive Power Market Tender Rounds.

A6.2 National Grid has divided the process of assessing tenders into several stages, which were addressed as follows:

- *Tender Receipt and Registration*: The tenders were opened, in the presence of a separate witness and all tender data submitted was entered into TARDIS (Transmission Ancillary Reactive Database Information System).

- *Tender Data validation*: All TARDIS entries were then separately checked back to the original tender sheets. Compliance checks within TARDIS showed that all tenders submitted were compliant.

- *Obligatory Reactive Power Service Assessment*: The tenders were assessed against likely outgoings, taking into account the many interacting factors associated with each tender acceptance decision, as described in Appendix 6 in Schedule 3 of the CUSC. This involved, inter-alia, evaluation against projections of expenditure and availability of service against historic and forecast Mvar and Mvarh data to produce central views of the money payable under the DPM (Default Payment Mechansim) or a Market Agreement (described below). The overall assessment was supported by an examination of a number of credible sensitivities around the central assessment.

- *Enhanced Reactive Power Service Assessment*: Had National Grid received any ERPS tenders these would have been considered on a case-by-case basis against possible alternatives, such as transmission constraints or National Grid investment.

A6.3 Core Analytical Processing

- Tender assessment takes place in the context of uncertainties and interactions affecting reactive payments and transmission requirements. To initiate the assessment of the overall value of each tender, it is considered necessary to construct a central view of future payments so that the relative impact of the factors influencing the economic evaluation of tenders can be fully addressed.

For each BM Unit tendered, the processing was as follows:

- Forecast Mvarh generated, in each band by reactive Mvar breakpoints, were set via extrapolations from historic observations and forecast load factors. The historic observations covered the period 2001 to 2002 and came from the Ancillary Services records against which Reactive Power utilisation is currently being paid.

- The default utilisation money was set at forecast Mvarh multiplied by the utilisation price of £1.39/ Mvarh nationally. (Derived from CUSC Schedule 3)

- Market agreement capability money was set at tendered price multiplied by tendered capability, allowing for break-points, multiplied by forecast hours both available and synchronised.

- Market agreement utilisation money was set at tendered prices, multiplied by the above forecast Mvarh, respecting the tendered break-point bands of Mvarh utilisation.

- The core comparison of default versus market agreement is based on the forecast payments detailed above. Reactive Power assessment is however, by no means as simple as taking the cheapest option. A full understanding of the factors influencing Reactive Power requirements on the National Grid Transmission System must be taken into account to provide a complete economic assessment of tender value.

A6.4 Assessment Sensitivities

- The principal role of tender assessment is to quantify and evaluate consistently the many factors that should be considered. These factors are referred to in 5.3(e)(ii) of Schedule 3 of the CUSC and are cross-referenced in section 2.12 of the Invitation to Tender & Guidance Notes for Completion of Tenders in the ITT Documentation. National Grid assessment has developed and implemented a process enabling these factors and associated uncertainties to be methodically considered.

- Because CAP045 was being considered during the tender process and a change in the DPM might effect the balance between market and default payments, the robustness of the core contract decisions were tested against a range of default prices from ±6p/Mvarh over the default price used of £1.39/Mvarh.

- The Reactive Power market tender evaluation process is subjective in nature. It has therefore been important to establish a framework within which this

subjectivity could be exercised in a consistent fashion across all tenders.

Specific questions were asked of each tender, examples of which follow:

- *Would a Market Agreement (central case assessment) give a reduction in payments?*

- *Would a Market Agreement reflect the effectiveness at providing voltage support at that location?*

- *Would a Market Agreement be robust against expected individual variations in utilisation due to:*
  - ♦ *a new station opening nearby*
  - ♦ *an existing nearby station closing*
  - ♦ *trends in local Reactive Power demand*
  - ♦ *reinforcements to and planned outages of parts of the transmission system*

- *Would a Market Agreement enhance the incentive on the Generator to maintain its Grid Code capability?*

- *How would a Market Agreement affect operational despatch?*

- *To what extent might a Market Agreement potentially offset National Grid investment?*

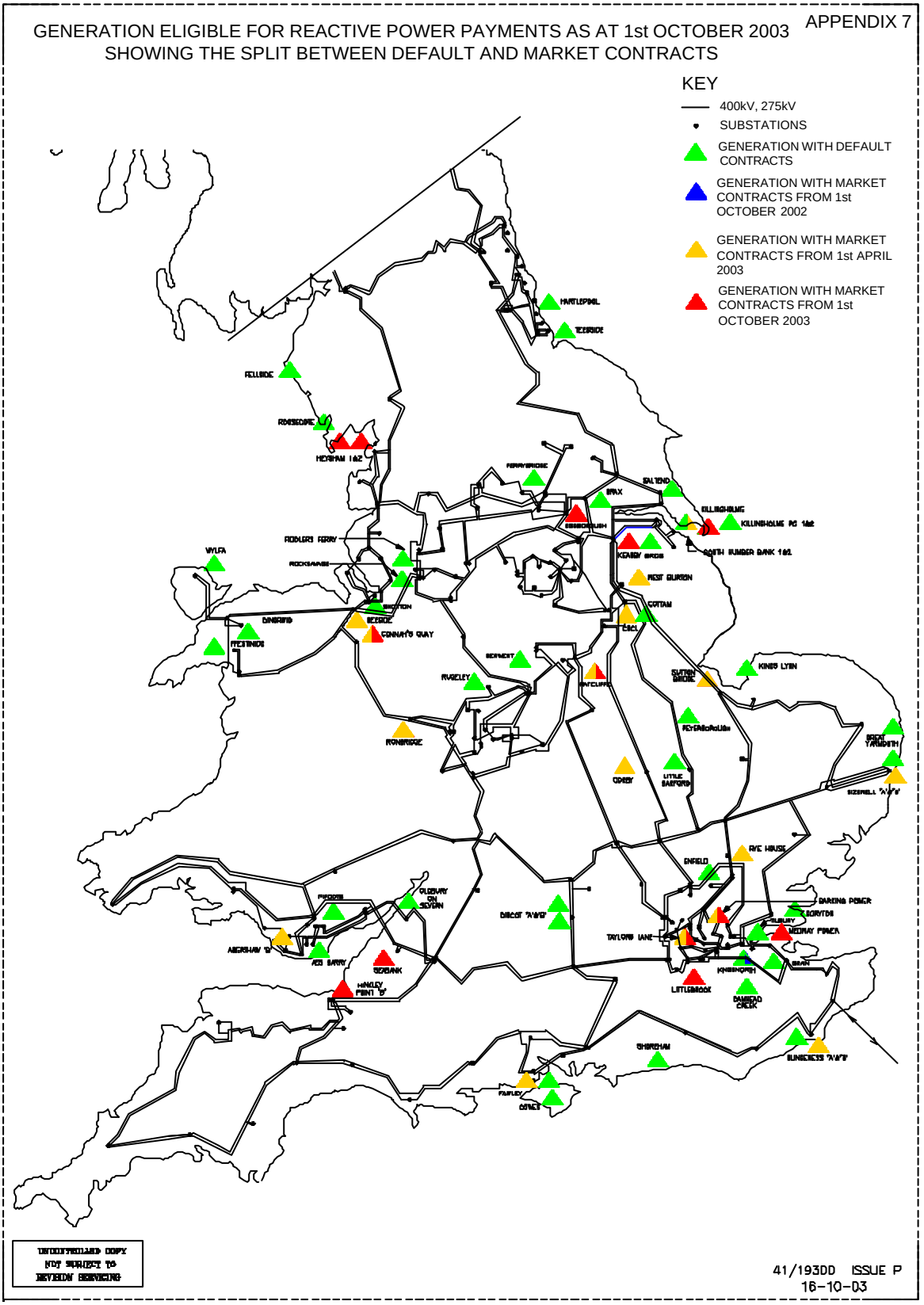
- *Would a Market Agreement for ORPS enable a desired contract for ERPS?*

- All other criteria in CUSC Schedule 3, paragraph 3, are covered by this methodology.

- In all cases, National Grid continued to consider interaction with forecast transmission constraints. In all cases there were insignificant interactions with constraints identified.

- In all cases, National Grid considered possible interaction with National Grid planned investments. The commissioning in 2003/04 and 2004/05 of new National Grid transmission equipment, which includes some reactive compensation equipment, influenced National Grid's view of forecast Mvarh. All of the commissioning equipment is required for compliance with Transmission Licence Standards, and re-phasing of planned National Grid investments within a 12-month contract period is not a practical option.

Appendix 7 - Geographic Distribution between DPM and Market Contracts



Appendix 8 - Contact Information

A8.1 Further report information, comments suggestions and enquiries can be directed to:

Paul Bagg
Operations and Trading
National Grid Company plc
NGT House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

On telephone number: **01926 653443**
Email: **paul.bagg@uk.ngrid.com**

A8.2 For any other information please visit the National Grid website on the following address:

www.nationalgrid.com/uk/balancing/indinfo/balancing/mn_reactive.html