



National Grid

NGC Reactive Market Report

**Fifth Tender Round for Obligatory and
Enhanced Reactive Power Services**

Effective from 1 April 2000

19 May 2000

NGC Reactive Market Report – May 2000

Executive Summary

National Grid Company Plc

This report describes the fifth tender round process for reactive market contracts commencing 1 April 2000, together with details of those proceeding to contract. Included are the prices and reactive capability data of successful tenders, together with metered Mvarh utilisation from all eligible Service Providers for the period 1st October 1999 – 31st March 2000. Enclosed for the same period are estimates of the reactive contribution of the NGC transmission system for the same period and a review of the performance of the market to date.

NGC evaluated all the tenders received against economic purchase and technical performance criteria in accordance with the agreed terms of the market mechanism. On 16 February 2000 tenderers were notified of the results of their respective tenders. The main points are as follows:

- C Tenders were received from 99 generating units, from a total of 151 gensets eligible to tender on 7 December 1999 'Market Day'.
- C One tender received was from a Non - Centrally Despatched source which was later withdrawn. The remaining 98 tenders represent 41 stations from 20 Generating Companies and were for the provision of the Grid Code Obligatory Service only.
- C Tenders received were for contract durations of 12, 24 and 36 months.
- C Tenderers included both portfolio and independent generating companies.
- C Of the 98 tenders evaluated, NGC offered Market Agreements to all of those submitted, of which 89 proceeded to contract.

Therefore, as at 1 April 2000 there are a total of 95 despatch units on a reactive Market Agreement, 1 from tender round three, 5 from tender round four and 89 from this, the fifth tender round.

The next market day for Market Agreements commencing on 1 October 2000 is 12 June 2000. Invitation To Tender (ITT) packs have been available on request since 17 April 2000 for Service Providers wishing to submit a tender. Despatch Units with Market Agreements commencing 1 April 2000 cannot be re-tendered until the seventh contract round commencing 1 April 2001 at the earliest, in accordance with the 12 month minimum contract duration.

For further information, please contact The Reactive Market Helpline on 02476 42 3039.

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1 Introduction

1.1 On 7 December 1999, National Grid Company plc (NGC) held the fifth Reactive Power

Market tender round. This enabled relevant Users providing the minimum Grid Code Obligatory Reactive Power Service (ORPS) to offer alternative payment terms to the default payment arrangements for the provision of voltage support to the NGC Transmission System. Furthermore, this mechanism also permits Users the opportunity to provide reactive power capability in excess of the Grid Code obligations, together with any other eligible Service Provider able to provide a meaningful service - a so called "Enhanced Reactive Power Service" (ERPS)

- 1.2 This market report provides information and results of the tender evaluation process, and describes the contractual position for the provision of Reactive Power services to the NGC Transmission system as at 1 April 2000.
- 1.3 This report also sets the outcome of this fifth Reactive Power Market tender round against the context of the previous tender rounds and the services delivered to the NGC Transmission System.
- 1.4 Included are estimates of the NGC transmission system utilisation for the period October 1999 to March 2000.
- 1.5 Under the provisions of Schedule 5 of the Master Connection and Use of System Agreement (MCUSA Schedule 5), from 1st April 2000 the capability element of the Default Payment Mechanism (DPM) has ceased and default reactive payments will be made on metered reactive utilisation only.

2 Voltage Requirements

- 2.1 NGC manages the voltage of the 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. NGC 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.
- 2.2 Generating Units provide reactive power capability, and have the ability to vary their reactive power output, as a requirement of the Grid Code. The power system itself has inherent reactive gains and losses, which vary in accordance with changes in power flows and voltage. NGC installs reactive compensation plant in parts of the system where there is insufficient generator reactive capability to meet requirements and where voltages cannot be regulated effectively or economically by other means.
- 2.3 Dynamic reserves of reactive power are essential for system operation. NGC values reactive capability as it gives rise to increased confidence in the availability of a post-fault service. Although the capability element of the DPM has concluded, NGC still seeks capability based market agreements especially in critical locations to ensure post fault reserves are maintained.

3 Results of fifth tender round

3.1 Nature of tenders received

- 3.11 Tenders were received from 99 Despatch Units at 41 power stations, representing 20 Generators and covering all fuel types.
- 3.12 The majority of tenders received were from existing service providers with Market Agreements ending on 31 March 2000.
- 3.13 One tender was received from a company not having tendered in the Reactive Market before.
- 3.14 One tender was received from a NCD service provider offering an ERPS service. This was later withdrawn.
- 3.15 All tenders that proceeded to contract were therefore from Centrally Despatched providers offering the Grid Code ORPS service only, with contract duration ranging from 12 to 36 months.
- 3.16 Of those tenders received, about half appeared to be seeking greater remuneration for their reactive power capability.
- 3.17 Most tenders included capability prices for hours available. There was also a notable increase in the number of tenders wishing to be paid capability money on the basis of hours synchronised. This is helpful to NGC in aligning its forecast of likely synchronisation in respect of marginal plant with that of the Service Provider.
- 3.18 Some of the tenders opted for a simple structure of Available Capability payments, reflecting a linear payment rate per Mvar of reactive power available. There was still a number of tenders offering a 'flat' Available Capability payment rate. The majority however, included an incentive in the form of a more 'kinked' structure of payment based around steeper incremental capability prices at higher Mvar outputs. Adopting this price structure signals to NGC the degree to which a service provider is incentivising itself to maintain its reactive capability, under which the genset loses a greater proportion of money for a small shortfall in reactive power capability; something which NGC values in its tenders as it allows greater certainty in forecasting of Mvar capability.

3.2 Tender Assessment

- 3.21 Tender assessment was carried out in accordance with evaluation criteria specified in Appendix 6 of MCUSA Schedule 5. Details of this are more fully described in Appendix 5 of this report.

3.3 Observations of fifth tender round

- 3.31 A number of tenders were priced with a 'kinked' price curve for Available Capability across the range of contract breakpoints, hence providing NGC with a clear cost signal as to the tenderers preferred incentive to maintain the capability. This meant that the market tender had placed a superior incentive upon the generator than that given by the DPM. In a number of the cases, this consideration had the potential to influence the decision whether to accept or reject a market agreement. In cases where capability considerations are material, a genset's previous record of reactive shortfalls may be a factor considered in tender assessment.
- 3.32 A number of tenders although weighted towards capability, offered a 'flat' Available Capability price across the full range of breakpoints. Tenders of this type place little incentive to maintain capability at the outer breakpoints, and are therefore viewed less favourably by NGC. However, it is notable that increasing numbers of Service Providers are now offering the more "kinked" price structure.
- 3.33 Many Service Providers offered a utilisation price below the default payment figure of £1.29/Mvarh. To compensate for this, these types of tender requested a larger payment for capability, but would still undercut the DPM in most, if not all cases. NGC values this form of tender as it enables the optimisation of Mvarh despatch, i.e. the re-despatch from more expensive to cheaper sources. The extent to which this is likely to be feasible is considered within the assessment of each tender.
- 3.34 The majority of tenderers utilisation price for the final breakpoint was above that of the DPM. This signals to NGC that the generator would prefer not be despatched in this region of operation. All efforts would be made by the System Operator not to despatch these generators at the outer limits except under fault conditions. Note that little economic penalty accrues to this style of tender. There was also some evidence of this where a number of tenders were offering utilisation prices very close to the DPM margin of £1.29/Mvarh.

3.4 Assessment Results

- 3.41 Of the 98 tenders evaluated, NGC offered market agreements to all. 89 proceeded to contract.
- 3.42 The range of assessment outcome is shown in a histogram in Figure 1. As in previous tender rounds many acceptance decisions were marginal. However, there has been a marked shift in the number of decisions at the attractive end of the range, reflecting tenderers increasing awareness and knowledge of the reactive market process.

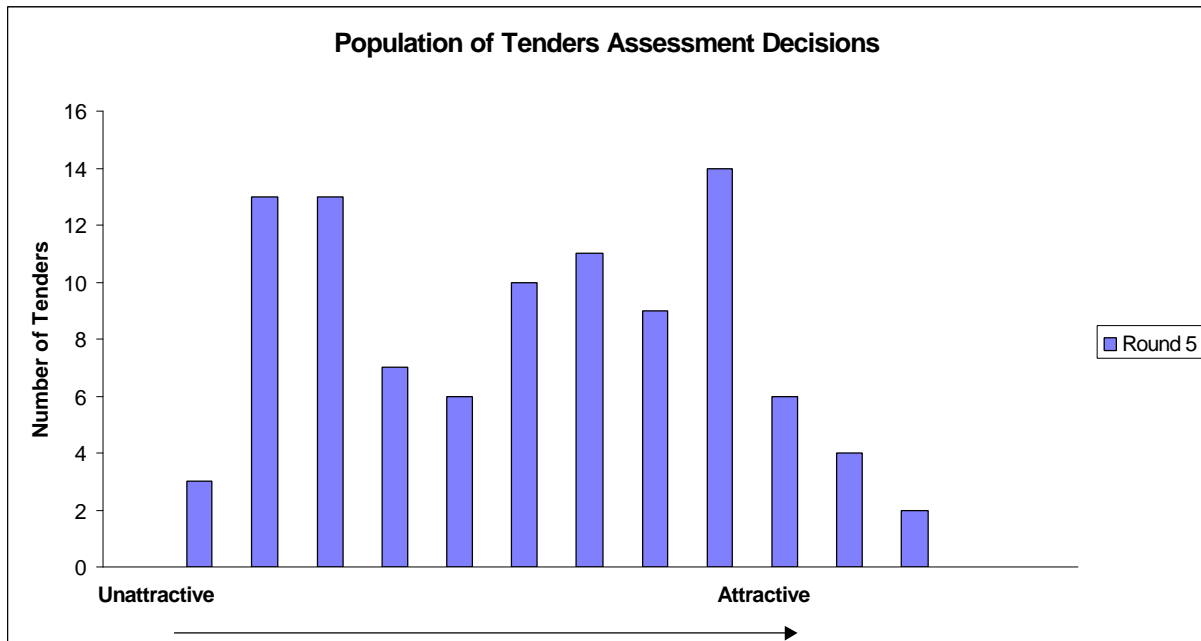


Figure 1 - Histogram of tender assessment decisions

3.43 A complete list of eligible Centrally Despatched gensets for 2000/2001 is given in Appendix 1, recording those that have signed market agreements. The remainder comprises those electing to remain on the DPM or choosing not to tender. Appendix 2 provides a definitive list of Market Agreements applicable from 1 April 2000, with Figure 2 illustrating the geographic distribution of market and default agreements.

3.44 Details of the successful tenders submitted for contracts commencing 1 April 2000 are listed in Appendix 3. Given the differences between location, genset utilisation and market bid structures, NGC has not sought to construct any meaningful summaries of this successful tender data across gensets.

3.5 Concluding Observations

3.51 Tender round five is comparable with tender rounds one and three, as all apply for a complete financial year. It is notable that tenderers appear to be continuing to adopt a financial year contracting strategy, with mid-year participation significantly lower. In percentages terms, tender rounds 1,3 and 5 have seen respectively 55%, 68% and 66% participation by eligible gensets. Of those tenders participating the percentages proceeding to contract from rounds 1,3 and 5 are 48%, 74% and 90% respectively, indicating an increased understanding of the market process and NGC's requirements.

3.52 From 1 April 2000 the DPM moved to a ratio of 100:0 on payments in respect of utilisation : capability. NGC values capability biased tenders which are structured with lower utilisation (, /Mvarh) prices. Such tenders will offer greater certainty for both NGC and tenderers and provide a basis for economic despatch.

- 3.53 On the whole, submitted tenders appeared to be well structured and informed. The message that NGC places value on capability biased tenders appears to have been noted, with fewer tenders offering a flat Available Capability price.
- 3.54 All the tenders received were in respect of ORPS only with two tenders offering contract duration's greater than the minimum 12 months, at 24 and 36 months. NGC welcomes longer-term tenders and tenders offering an Enhanced Reactive Power Service (ERPS), as they inform NGC's overall planning process. However the value of such contracts may change from year to year as system reactive needs evolve.

4 Reactive Payments and Genset Mvarh Utilisation

- 4.1 This section details a six-month breakdown of reactive payments and metered genset utilisation for the period October 1999 to March 2000.
- 4.2 Table 4.1 below details total expected payments due to providers for reactive power services for the period October 1999 to March 2000.

| Costs (£, m) | Default | Market | Total |
|--------------|--------------|-------------|--------------|
| Capability | 3.83 | 4.95 | 8.78 |
| Utilisation | 8.72 | 5.01 | 13.73 |
| Total | 12.55 | 9.96 | 22.51 |

Table 4.1 – Total Reactive Payments (£m) October '99 – March 20

- 4.3 Table 4.2 shows the Mvarh utilisation volumes (lead plus lag) for all eligible despatch units on a monthly basis. A breakdown by individual genset for the period October 1999 to April 2000 is provided in Appendix 4.

| Month | Utilisation Volume (Tvarh) | | |
|--------------|----------------------------|-------------|---------------------------------|
| | Market Agreements | DPM | Total = Market Agreements + DPM |
| Oct 99 | 1.30 | 1.50 | 2.80 |
| Nov 99 | 1.49 | 1.80 | 3.29 |
| Dec 99 | 1.38 | 1.63 | 3.01 |
| Jan 00 | 1.46 | 1.70 | 3.16 |
| Feb 00 | 1.24 | 1.48 | 2.72 |
| Mar 00 | 1.19 | 1.48 | 2.67 |
| Total | 8.06 | 9.59 | 17.65 |

Table 4.2 - Summary of Generator Reactive utilisation October '99 – March 2000

- 4.5 Table 4.3 shows six monthly utilisation totals since 1996, sorted by the Seven Year Statement defined regions - North, Midland and South.
- 4.6 The volumes set out in table 4.3 refer to all despatch units eligible for a reactive utilisation payment. Mvarh lag and Mvarh lead are calculated according to the aggregation methodology described within Appendix 4 of MCUSA Schedule 5 and also within the companion document "Methodology Document for the Aggregation of Reactive Power Metering" by which reactive utilisation payments are made.

| | 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 | 1.71 | 9.28 | 0.31 | 3.22 | 1.33 | 1.80 | 3.35 | 14.3 | 17.65 |

Table 4.3 – Generator Reactive Utilisation (Tvarh) by region

5 Comparisons of Tender Rounds 1, 3 and 5

- 5.1 Table 5.1 provides a summary of the five tender rounds to date.
- 5.2 From the tendered gensets in rounds one and three, the majority chose to re-tender in the fifth tender round. Of the 102 tenders contracted in round three, 93 were from gensets that were previously tendered in the first tender round. In round five, of the 99 tenders that were received, 90 had tendered in round three. It is also worth noting that of the 27 gensets that were unsuccessful in round three, 20 tendered in round five and all were

successful.

- 5.3 The tender success rate of round five was higher than that of tender rounds one and three, with 90% of tenders proceeding to contract as compared with 74% in round three and 48% in round one. Table 5.1 provides a summary of the five tender rounds to date.

| Tender Round | Eligible Gensets | Genset tenders Received | ORPS | ORPS + ERPS | 12 month | >12 months | Successful Gensets offered market agreements | Successful Gensets signing market agreements | % lagging capability with market agreements |
|--------------|------------------|-------------------------|------|-------------|----------|------------|--|--|---|
| 1 | 154 | 85 | 76 | 9 | 85 | 0 | 41 | 41 | ~30% |
| 2 | 113 | 10 | 10 | 0 | 9 | 1 | 5 | 5 | ~36% |
| 3 | 150 | 102 | 102 | 0 | 102 | 0 | 75 | 57 | ~40% |
| 4 | 99 | 20 | 20 | 0 | 14 | 6 | 5 | 5 | ~40% |
| 5 | 151 | 99 | 99 | 0 | 97 | 2 | 98 | 89 | ~65% |

Table 5.1 - Reactive Market Tender Submission Statistics

- 5.4 From 1 April 2000 there are a total of 95 gensets on a reactive Market Agreement, i.e. 1 from tender round three, 5 from tender round four and 89 from this, the fifth tender round. As mentioned in Table 5.1 the 95 gensets provide approximately 65% of total available lagging capability via Market Agreements.

6 Estimates of NGC System Reactive Utilisation October 1999 to March 2000

- 6.1 NGC is required by MCUSA Schedule 5 to 'use all reasonable endeavours' to provide estimates of the Mvarh absorption and generation by the NGC transmission system for the six-month period ending 31 March 2000.

- 6.2 This has been approached in two stages:

C The net reactive utilisation (Tvarh) of the NGC 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 6.1 where the accuracy of the data is consistent with the underlying meter readings.

C The net Tvarh described above has been broken down by NGC system component, this is given in Table 6.2. It should be noted that this information is based on estimates and operational records only.

6.3 The simple reactive balance found in Table 6.1 can be described by the equation:

$$|\text{Generation Net Tvarh}| = |\text{Net Reactive Demand at GSPs Tvarh}| - |\text{Net NGC System Tvarh}|$$

For example, for December 1999, $(-0.60 + 2.41 = 5.70 - 3.89)$. From Table 6.1 it can be seen that the Tvarh contribution from generation is small compared with the other components of the equation.

6.4 The generation figures are a national monthly summation of the Settlements figures given in Appendix 4. At this stage, the data in Table 6.1 is provisional and may be subject to amendment, via accruals or any outstanding disputes. The Tvarh output of embedded Centrally Despatched gensets is included in these figures.

6.5 The net reactive demands 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.

| Component (Tvarh) | Oct-99 | Nov-99 | Dec-99 | Jan-00 | Feb-00 | Mar-00 | 6 monthly Total |
|-----------------------------|--------|--------|--------|--------|--------|--------|-----------------|
| Generation Lead | -0.64 | -0.52 | -0.60 | -0.59 | -0.47 | -0.54 | -3.36 |
| Generation Lag | 2.16 | 2.77 | 2.41 | 2.57 | 2.25 | 2.13 | 14.29 |
| Net Reactive Demand at GSPs | -5.78 | -6.23 | -5.70 | -5.98 | -5.70 | -5.78 | -35.18 |
| Net NGC System | 4.27 | 3.98 | 3.89 | 4.00 | 3.91 | 4.19 | 24.24 |

Table 6.1 - Net NGC System Effect

Note: a positive system utilisation denotes a net system reactive gain (capacitive).

6.6 The more detailed breakdown found in Table 6.2 can be described by the following equation:

$$\begin{aligned} \text{Generation Net Tvarh} = & \text{Net Reactive Demand at GSPs} - \text{HV network shunt gain (BV}^2\text{)} \\ & + \text{HV network series loss (I}^2\text{X)} + \text{SGT series loss (I}^2\text{X}_t\text{)} - \\ & \text{Shunt capacitor gain} - \text{net SVC output} + \text{Shunt reactor loss} \end{aligned}$$

6.7 The figures in Table 6.2 are estimates and provide an indication of the likely national reactive energy balance within the system.

6.8 Points to note when considering Table 6.2 include:

- C HV gain varies due to circuit switching, outages and system operating voltage
- C HV losses are driven by active power flows across the system
- C Supergrid transformer series reactive losses are predominantly driven by REC demand
- C Switching of MSCs and shunt reactors is determined by operational security requirements.

| Component (Tvarh) | Oct-99 | Nov-99 | Dec-99 | Jan-00 | Feb-00 | Mar-00 | 6 month total |
|---|--------|--------|--------|--------|--------|--------|---------------|
| MSC | 2.26 | 2.61 | 2.49 | 2.87 | 2.65 | 2.55 | 15.43 |
| Shunt Reactor | -1.64 | -1.38 | -1.76 | -1.73 | -1.47 | -1.92 | -9.90 |
| SVC generation | 0.12 | 0.11 | 0.10 | 0.11 | 0.10 | 0.09 | 0.63 |
| SVC absorption | -0.08 | -0.07 | -0.07 | -0.09 | -0.07 | -0.10 | -0.48 |
| HV network shunt gain | 8.64 | 8.66 | 9.45 | 9.64 | 8.68 | 9.36 | 54.43 |
| HV network series losses | -3.17 | -3.87 | -4.13 | -4.53 | -3.89 | -3.74 | -23.33 |
| SGT series losses | -1.86 | -2.09 | -2.19 | -2.29 | -2.08 | -2.04 | -12.55 |
| | | | | | | | |
| Net NGC System Utilisation | 4.27 | 3.98 | 3.89 | 4.00 | 3.91 | 4.19 | 24.23 |
| | | | | | | | |
| Generation Lead (inc. CD embedded) | -0.64 | -0.52 | -0.60 | -0.59 | -0.47 | -0.54 | -3.36 |
| Generation Lag (inc. CD embedded) | 2.16 | 2.77 | 2.41 | 2.57 | 2.25 | 2.13 | 14.29 |
| Net Demand at GSPs | -5.78 | -6.23 | -5.70 | -5.98 | -5.70 | -5.78 | -35.18 |

Table 6.2 - Indicative breakdown of Net NGC System Effect

7 Exceptional Reactive Power Service Requirements

7.1 MCUSA Schedule 5, paragraph 7 (Statutory and Regulatory Obligations) enables NGC to contract outside of the Reactive Power Market tender process in specific circumstances for the provision of exceptional reactive power services. NGC are required to publish details of circumstances surrounding this in the preceding six month period.

7.2 During the period 1 October 1999 – 31 March 2000 no such services were required by NGC for the provision of voltage support.

Appendix 1

Eligible Centrally Despatched Gensets position at 1 April 2000

Reactive Power - Eligible Centrally Despatched Gensets at April 2000

North

| | Genset | Contract | | Genset | Contract | | Genset | Contract |
|----|-----------|----------|----|-----------|----------|----|----------|----------|
| 1 | BLYTA01Z | DPM | 26 | DRAXX_03Z | Market 5 | 51 | HEYM102Z | Market 5 |
| 2 | BLYTA02Z | DPM | 27 | DRAXX_04Z | Market 5 | 52 | HEYM207Z | DPM |
| 3 | BLYTA03Z | DPM | 28 | DRAXX_05Z | Market 5 | 53 | HEYM208Z | DPM |
| 4 | BLYTA04Z | DPM | 29 | DRAXX_06Z | Market 5 | 54 | HMAR_01Z | DPM |
| 5 | BLYTB07Z | DPM | 30 | DRAXX_09G | DPM | 55 | HMAR_02Z | Market 5 |
| 6 | BLYTB08Z | DPM | 31 | DRAXX_10G | DPM | 56 | HMAR_03Z | Market 5 |
| 7 | BRGG_01Z | Market 5 | 32 | DRAXX_12G | DPM | 57 | HMAR_04Z | DPM |
| 8 | CDCL_01Z | DPM | 33 | EGGPS_01Z | DPM | 58 | HMAR_05Z | Market 5 |
| 9 | CONQ_01Z | Market 5 | 34 | EGGPS_02Z | DPM | 59 | HRTL_01Z | Market 5 |
| 10 | CONQ_02Z | Market 5 | 35 | EGGPS_03Z | DPM | 60 | HRTL_02Z | Market 5 |
| 11 | CONQ_03Z | Market 5 | 36 | EGGPS_04Z | DPM | 61 | KEAD_01Z | Market 5 |
| 12 | CONQ_04Z | Market 5 | 37 | FELL_01Z | DPM | 62 | KILLN01Z | DPM |
| 13 | COTT_01Z | Market 5 | 38 | FERR01Z | Market 5 | 63 | KILLP01Z | Market 5 |
| 14 | COTT_02Z | Market 5 | 39 | FERR02Z | Market 5 | 64 | KILLP02Z | Market 5 |
| 15 | COTT_03Z | Market 5 | 40 | FERR03Z | Market 5 | 65 | ROCK_01Z | DPM |
| 16 | COTT_04Z | Market 5 | 41 | FERR04Z | Market 5 | 66 | ROOS_01Z | DPM |
| 17 | DEEN_01Z | Market 5 | 42 | FFES_01Z | Market 5 | 67 | SHBA_01Z | Market 4 |
| 18 | DINO_01Z | Market 5 | 43 | FFES_02Z | Market 5 | 68 | SHBA_02Z | Market 5 |
| 19 | DINO_02Z | Market 5 | 44 | FFES_03Z | Market 5 | 69 | TESI_01Z | DPM |
| 20 | DINO_03Z | Market 5 | 45 | FFES_04Z | Market 5 | 70 | TESI_02Z | DPM |
| 21 | DINO_04Z | Market 5 | 46 | FIDL_01Z | Market 5 | 71 | WYLF_01Z | DPM |
| 22 | DINO_05Z | Market 5 | 47 | FIDL_02Z | Market 5 | 72 | WYLF_02Z | DPM |
| 23 | DINO_06Z | Market 5 | 48 | FIDL_03Z | Market 5 | 73 | WYLF_03Z | DPM |
| 24 | DRAXX_01Z | Market 5 | 49 | FIDL_04Z | Market 5 | 74 | WYLF_04Z | DPM |
| 25 | DRAXX_02Z | Market 5 | 50 | HEYM101Z | Market 5 | | | |

Midlands

| | Genset | Contract | | Genset | Contract | | Genset | Contract |
|----|----------|----------|----|----------|----------|-----|----------|----------|
| 75 | CORB_01Z | Market 5 | 84 | PETEM01Z | Market 5 | 93 | SIZB_01Z | Market 5 |
| 76 | DERW_01Z | Market 5 | 85 | RATS_01Z | Market 5 | 94 | SIZB_02Z | Market 5 |
| 77 | DRKW_09Z | Market 5 | 86 | RATS_02Z | Market 5 | 95 | SIZEA01Z | DPM |
| 78 | DRKW_10Z | Market 5 | 87 | RATS_03Z | Market 5 | 96 | SIZEA02Z | DPM |
| 79 | DRKW_12Z | Market 5 | 88 | RATS_04Z | Market 5 | 97 | SUTB_01Z | DPM |
| 80 | IROB_01Z | DPM | 89 | RUGLB06Z | Market 5 | 98 | WEBU_01Z | DPM |
| 81 | IROB_02Z | Market 5 | 90 | RUGLB07Z | DPM | 99 | WEBU_02Z | Market 5 |
| 82 | KLYNA01Z | Market 5 | 91 | RUGLB06G | DPM | 100 | WEBU_03Z | Market 5 |
| 83 | LBAR_01Z | Market 4 | 92 | RUGLB07G | DPM | 101 | WEBU_04Z | DPM |

South

| | Genset | Contract | | Genset | Contract | | Genset | Contract |
|-----|----------|----------|-----|----------|----------|-----|----------|----------|
| 102 | ABTHB07Z | Market 4 | 121 | DIDCB06Z | Market 5 | 140 | HINPA03Z | DPM |
| 103 | ABTHB08Z | Market 4 | 122 | DIDC_01G | DPM | 141 | HINPA04Z | DPM |
| 104 | ABTHB09Z | Market 4 | 123 | DIDC_02G | DPM | 142 | HINPA05Z | DPM |
| 105 | BARK_02Z | Market 5 | 124 | DIDC_03G | DPM | 143 | HINPA06Z | DPM |
| 106 | BARK_11Z | Market 5 | 125 | DIDC_04G | DPM | 144 | KINO_01Z | Market 5 |
| 107 | BARR_01Z | DPM | 126 | DNGB_21Z | Market 5 | 145 | KINO_02Z | Market 5 |
| 108 | BRWE_01Z | Market 5 | 127 | DNGB_22Z | Market 5 | 146 | KINO_03Z | Market 5 |
| 109 | BRWE_02Z | Market 5 | 128 | DUNGA01Z | DPM | 147 | LITTD01Z | Market 3 |
| 110 | BRWE_03Z | Market 5 | 129 | DUNGA02Z | DPM | 148 | LITTD01G | DPM |
| 111 | BRWE_04Z | Market 5 | 130 | DUNGA03Z | DPM | 149 | LITTD02G | DPM |
| 112 | BRWE_05Z | Market 5 | 131 | DUNGA04Z | DPM | 150 | MEDP_01Z | Market 5 |
| 113 | BRWE_06Z | Market 5 | 132 | FAWL_03Z | Market 5 | 151 | OLDS_01Z | Market 5 |
| 114 | COWE_01Z | DPM | 133 | FAWN_01Z | DPM | 152 | OLDS_02Z | Market 5 |
| 115 | COWE_02Z | DPM | 134 | GRAI_01Z | Market 5 | 153 | RYEH_01Z | Market 5 |
| 116 | DIDC_01Z | DPM | 135 | GRAI_04Z | Market 5 | 154 | SEAB_01Z | Market 5 |
| 117 | DIDC_02Z | DPM | 136 | HINB_07Z | DPM | 155 | TAYL_02Z | Market 5 |
| 118 | DIDC_03Z | DPM | 137 | HINB_08Z | DPM | 156 | TAYL_03Z | Market 5 |
| 119 | DIDC_04Z | DPM | 138 | HINPA01Z | DPM | 157 | TILBB08Z | Market 5 |
| 120 | DIDCB05Z | Market 5 | 139 | HINPA02Z | DPM | 158 | TILBB09Z | Market 5 |

Note :
 Market 3 refers to those contracts commencing April 1999
 Market 4 refers to those contracts commencing October 1999
 Market 5 refers to those contracts commencing April 2000

Eligible CD Gensets are those of reactive capability, leading or lagging greater than 15 Mvar at the commercial boundary, and the further stipulations within the new MCUSA Schedule 5. There are to date, no market contracts for Enhanced Capability

Appendix 2

Reactive Market Agreement status at 1 April 2000

Reactive Market Agreement status as at 1 April 2000

Contracts Continuing on 31st March 2000

| | Company | Genset ID | Contract Expiry Date |
|---|----------------|-----------|----------------------|
| 1 | National Power | LITTD_01Z | 30/09/00 |
| 2 | National Power | ABTHB07Z | 30/09/00 |
| 3 | National Power | ABTHB08Z | 30/09/00 |

| | Company | Genset ID | Contract Expiry Date |
|---|----------------|-----------|----------------------|
| 4 | National Power | ABTHB09Z | 30/09/00 |
| 5 | National Power | LBAR_01Z | 30/09/00 |
| 6 | Humber Power | SHBA_01Z | 30/09/00 |

Contracts Commencing 1st April 2000

| | Company | Genset ID | Contract Expiry Date |
|----|---------------------------|-----------|----------------------|
| 1 | Barking Power | BARK_02Z | 31/03/01 |
| 2 | Barking Power | BARK_11Z | 31/03/01 |
| 3 | Regional Power Generators | BRGG_01Z | 31/03/01 |
| 4 | BNFL - Magnox | BRWE_01Z | 31/03/01 |
| 5 | BNFL - Magnox | BRWE_02Z | 31/03/01 |
| 6 | BNFL - Magnox | BRWE_03Z | 31/03/01 |
| 7 | BNFL - Magnox | BRWE_04Z | 31/03/01 |
| 8 | BNFL - Magnox | BRWE_05Z | 31/03/01 |
| 9 | BNFL - Magnox | BRWE_06Z | 31/03/01 |
| 10 | PowerGen | CONQ_01Z | 31/03/01 |
| 11 | PowerGen | CONQ_02Z | 31/03/01 |
| 12 | PowerGen | CONQ_03Z | 31/03/01 |
| 13 | PowerGen | CONQ_04Z | 31/03/01 |
| 14 | Corby Power | CORB_01Z | 31/03/03 |
| 15 | PowerGen | COTT_01Z | 31/03/01 |
| 16 | PowerGen | COTT_02Z | 31/03/01 |
| 17 | PowerGen | COTT_03Z | 31/03/01 |
| 18 | PowerGen | COTT_04Z | 31/03/01 |
| 19 | National Power | DEEN_01Z | 31/03/01 |
| 20 | Derwent Power | DERW_01Z | 31/03/01 |
| 21 | National Power | DIDCB_05Z | 31/03/01 |
| 22 | National Power | DIDCB_06Z | 31/03/01 |
| 23 | First Hydro | DINO_01Z | 31/03/01 |
| 24 | First Hydro | DINO_02Z | 31/03/01 |
| 25 | First Hydro | DINO_03Z | 31/03/01 |
| 26 | First Hydro | DINO_04Z | 31/03/01 |
| 27 | First Hydro | DINO_05Z | 31/03/01 |
| 28 | First Hydro | DINO_06Z | 31/03/01 |
| 29 | Eastern Merchant | DRKW_09Z | 31/03/01 |
| 30 | Eastern Merchant | DRKW_10Z | 31/03/01 |
| 31 | Eastern Merchant | DRKW_12Z | 31/03/01 |
| 32 | AES Drax Power | DRAXX01Z | 31/03/01 |
| 33 | AES Drax Power | DRAXX02Z | 31/03/01 |
| 34 | AES Drax Power | DRAXX03Z | 31/03/01 |
| 35 | AES Drax Power | DRAXX04Z | 31/03/01 |
| 36 | AES Drax Power | DRAXX05Z | 31/03/01 |
| 37 | AES Drax Power | DRAXX06Z | 31/03/01 |
| 38 | British Energy | DNGB_21Z | 31/03/01 |
| 39 | British Energy | DNGB_22Z | 31/03/01 |
| 40 | National Power | FAWL_03Z | 31/03/02 |
| 41 | Edison First | FERRC01Z | 31/03/01 |
| 42 | Edison First | FERRC02Z | 31/03/01 |
| 43 | Edison First | FERRC03Z | 31/03/01 |
| 44 | Edison First | FERRC04Z | 31/03/01 |

| | Company | Genset ID | Contract Expiry Date |
|----|--------------------|-----------|----------------------|
| 45 | First Hydro | FFES_01Z | 31/03/01 |
| 46 | First Hydro | FFES_02Z | 31/03/01 |
| 47 | First Hydro | FFES_03Z | 31/03/01 |
| 48 | First Hydro | FFES_04Z | 31/03/01 |
| 49 | Edison First | FIDF_01Z | 31/03/01 |
| 50 | Edison First | FIDF_02Z | 31/03/01 |
| 51 | Edison First | FIDF_03Z | 31/03/01 |
| 52 | Edison First | FIDF_04Z | 31/03/01 |
| 53 | PowerGen | GRAI_01Z | 31/03/01 |
| 54 | PowerGen | GRAI_04Z | 31/03/01 |
| 55 | British Energy | HEYM101Z | 31/03/01 |
| 56 | British Energy | HEYM102Z | 31/03/01 |
| 57 | Eastern Merchant | HMAR_02Z | 31/03/01 |
| 58 | Eastern Merchant | HMAR_03Z | 31/03/01 |
| 59 | Eastern Merchant | HMAR_05Z | 31/03/01 |
| 60 | British Energy | HRTL_01Z | 31/03/01 |
| 61 | British Energy | HRTL_02Z | 31/03/01 |
| 62 | Eastern Merchant | IROB_02Z | 31/03/01 |
| 63 | Keadby Generation | KEAD_01Z | 31/03/01 |
| 64 | PowerGen | KILLP_01Z | 31/03/01 |
| 65 | PowerGen | KILLP_02Z | 31/03/01 |
| 66 | PowerGen | KINO_01Z | 31/03/01 |
| 67 | PowerGen | KINO_02Z | 31/03/01 |
| 68 | PowerGen | KINO_03Z | 31/03/01 |
| 69 | Anglian Power | KLYNA_01Z | 31/03/01 |
| 70 | Medway Power | MEDP_01Z | 31/03/01 |
| 71 | BNFL - Magnox | OLDS_01Z | 31/03/01 |
| 72 | BNFL - Magnox | OLDS_02Z | 31/03/01 |
| 73 | Peterborough Power | PETEM_01Z | 31/03/01 |
| 74 | PowerGen | RATS_01Z | 31/03/01 |
| 75 | PowerGen | RATS_02Z | 31/03/01 |
| 76 | PowerGen | RATS_03Z | 31/03/01 |
| 77 | PowerGen | RATS_04Z | 31/03/01 |
| 78 | Eastern Merchant | RUGEB_06Z | 31/03/01 |
| 79 | PowerGen | RYEH_01Z | 31/03/01 |
| 80 | Seabank Power | SEAB_01Z | 31/03/01 |
| 81 | Humber Power | SHBA_02Z | 31/03/01 |
| 82 | British Energy | SIZB_01Z | 31/03/01 |
| 83 | British Energy | SIZB_02Z | 31/03/01 |
| 84 | PowerGen | TAYL_02Z | 31/03/01 |
| 85 | PowerGen | TAYL_03Z | 31/03/01 |
| 86 | National Power | TILBB_08Z | 31/03/01 |
| 87 | National Power | TILBB_09Z | 31/03/01 |
| 88 | Eastern Merchant | WEBU_02Z | 31/03/01 |
| 89 | Eastern Merchant | WEBU_03Z | 31/03/01 |

Appendix 3

Successful tender details for contracts commencing 1 April 2000

Appendix 4

Reactive Power Generation Utilisation Volumes by Genset October 1999 to March 2000

Reactive Power Generation Utilisation Volumes by Genset (October 99 to March 00) - Revised Data

| Genset | Agreement | October-99 | | November-99 | | December-99 | | January-00 | | February-00 | | March-00 | | 6 Monthly Total (Mvarh) | |
|----------|-----------|------------|-------|-------------|-------|-------------|-------|------------|-------|-------------|-------|----------|-------|-------------------------|--------|
| | | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| ABTHB07Z | Market | 1296 | 11561 | 2231 | 7160 | 3484 | 6069 | 1356 | 6077 | 696 | 8048 | 2342 | 4320 | 11406 | 43235 |
| ABTHB08Z | Market | 0 | 0 | 132 | 1792 | 2639 | 5915 | 1337 | 9762 | 2299 | 9540 | 3760 | 8385 | 10166 | 35394 |
| ABTHB09Z | Market | 1312 | 14696 | 2249 | 10143 | 695 | 4416 | 1819 | 9589 | 2365 | 10867 | 3077 | 9090 | 11517 | 58801 |
| AESB_01Z | DPM | 2210 | 4918 | 2953 | 4735 | 1823 | 4823 | 2159 | 4350 | 3689 | 2762 | 2264 | 3566 | 15098 | 25154 |
| BARK_02Z | DPM | 25962 | 22386 | 13963 | 22087 | 12876 | 24561 | 11468 | 18546 | 13761 | 11053 | 18721 | 6685 | 96751 | 105317 |
| BARK_11Z | DPM | 23862 | 21167 | 12946 | 20570 | 12248 | 22865 | 11884 | 16095 | 13317 | 10849 | 17506 | 5714 | 91763 | 97260 |
| BLYTA01Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLYTA02Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLYTA03Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLYTA04Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLYTB07Z | DPM | 0 | 0 | 0 | 0 | 2 | 2103 | 5 | 1330 | 29 | 1168 | 0 | 0 | 36 | 4601 |
| BLYTB08Z | DPM | 0 | 0 | 71 | 1139 | 50 | 1493 | 0 | 151 | 1 | 2429 | 0 | 0 | 121 | 5212 |
| BRGG_01Z | Market | 2395 | 4209 | 3789 | 2340 | 5994 | 1079 | 1818 | 3273 | 1019 | 3533 | 1812 | 3020 | 16828 | 17454 |
| BRWE_01Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRWE_02Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRWE_03Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRWE_04Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRWE_05Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRWE_06Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CDCL_01Z | DPM | 0 | 0 | 7648 | 8363 | 3731 | 11463 | 4462 | 12529 | 1395 | 24520 | 1970 | 29049 | 19206 | 85924 |
| CONQ_01Z | Market | 6477 | 24293 | 2585 | 38145 | 4843 | 22450 | 2699 | 33451 | 1183 | 26631 | 3294 | 23448 | 21082 | 168418 |
| CONQ_02Z | Market | 5849 | 29496 | 2322 | 30361 | 3473 | 21554 | 0 | 0 | 0 | 0 | 1896 | 13934 | 13541 | 95346 |
| CONQ_03Z | Market | 6563 | 23979 | 2253 | 37485 | 4527 | 23457 | 886 | 29538 | 1025 | 21858 | 3027 | 22625 | 18281 | 158941 |
| CONQ_04Z | Market | 7420 | 23292 | 2169 | 36703 | 5247 | 21568 | 1554 | 32522 | 1460 | 25899 | 3775 | 23380 | 21624 | 163364 |
| CORB_01Z | DPM | 4208 | 6913 | 3405 | 12241 | 3819 | 11583 | 2439 | 12322 | 1536 | 15026 | 5503 | 10340 | 20909 | 68424 |
| COTT_01Z | Market | 4137 | 15140 | 472 | 22027 | 1203 | 32435 | 1016 | 28870 | 553 | 21672 | 637 | 10157 | 8017 | 130301 |
| COTT_02Z | Market | 3782 | 35372 | 2342 | 46433 | 322 | 38002 | 1184 | 47274 | 801 | 37559 | 2507 | 37151 | 10938 | 241792 |
| COTT_03Z | Market | 5468 | 19702 | 1374 | 29294 | 1453 | 18819 | 1049 | 28978 | 1054 | 25203 | 985 | 31039 | 11382 | 153035 |
| COTT_04Z | DPM | 682 | 6147 | 468 | 24656 | 1119 | 22012 | 542 | 2398 | 434 | 5666 | 66 | 5058 | 3310 | 65936 |
| COWE_01Z | DPM | 0 | 18 | 0 | 44 | 0 | 7 | 0 | 1 | 0 | 0 | 0 | 14 | 0 | 85 |
| COWE_02Z | DPM | 0 | 7 | 0 | 55 | 0 | 10 | 0 | 8 | 0 | 4 | 0 | 88 | 0 | 173 |
| DEEN_01Z | DPM | 9726 | 13537 | 2410 | 36719 | 7538 | 33953 | 3781 | 33175 | 2499 | 36780 | 9023 | 23483 | 34977 | 177646 |
| DERW_01Z | DPM | 2846 | 4233 | 5302 | 2099 | 2470 | 4840 | 3314 | 4704 | 2311 | 7758 | 4035 | 3351 | 20277 | 26984 |
| DIDC_01G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 14 | 0 | 15 |
| DIDC_01Z | DPM | 3045 | 12399 | 569 | 7521 | 132 | 4676 | 1705 | 16148 | 4697 | 12118 | 2487 | 6198 | 12634 | 59061 |
| DIDC_02G | DPM | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 2 | 0 | 5 | 0 | 15 |
| DIDC_02Z | DPM | 2339 | 331 | 3371 | 354 | 1486 | 161 | 14992 | 96 | 3655 | 116 | 14792 | 156 | 40634 | 1215 |
| DIDC_03G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| DIDC_03Z | DPM | 295 | 8731 | 194 | 6329 | 377 | 15140 | 0 | 0 | 0 | 0 | 0 | 0 | 865 | 30200 |
| DIDC_04G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 15 | 0 | 20 |
| DIDC_04Z | DPM | 1363 | 9336 | 587 | 9290 | 1218 | 9602 | 3531 | 20304 | 2383 | 9824 | 3648 | 4513 | 12731 | 62869 |

| Genset | Agreement | October-99 | | November-99 | | December-99 | | January-00 | | February-00 | | March-00 | | 6 Monthly Total (Mvarh) | |
|----------|-----------|------------|-------|-------------|-------|-------------|-------|------------|-------|-------------|-------|----------|-------|-------------------------|--------|
| | | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| DIDCB05Z | Market | 2933 | 4011 | 11453 | 25945 | 9910 | 28923 | 7611 | 33251 | 10777 | 21382 | 13916 | 16150 | 56601 | 129661 |
| DIDCB06Z | Market | 18447 | 18788 | 9022 | 23731 | 10999 | 25911 | 14560 | 24565 | 15705 | 16607 | 17381 | 11609 | 86114 | 121211 |
| DINO_01Z | Market | 3885 | 513 | 3396 | 416 | 2979 | 718 | 4442 | 2195 | 5464 | 1413 | 5388 | 1076 | 25554 | 6331 |
| DINO_02Z | Market | 8081 | 679 | 11521 | 1024 | 6313 | 1201 | 6772 | 2388 | 6572 | 1606 | 6129 | 1767 | 45388 | 8665 |
| DINO_03Z | Market | 11493 | 923 | 5132 | 653 | 5331 | 1640 | 4320 | 3260 | 4230 | 2242 | 2499 | 1465 | 33005 | 10182 |
| DINO_04Z | Market | 7802 | 1089 | 6936 | 822 | 4774 | 1736 | 3224 | 2497 | 3036 | 2563 | 2472 | 1555 | 28244 | 10261 |
| DINO_05Z | Market | 11189 | 1731 | 16178 | 1649 | 7541 | 4571 | 6227 | 7219 | 4220 | 1997 | 4393 | 5111 | 49749 | 22277 |
| DINO_06Z | Market | 4359 | 767 | 4726 | 1129 | 2210 | 1273 | 2045 | 1274 | 2540 | 1357 | 2319 | 1366 | 18200 | 7166 |
| DNGB_21Z | Market | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DNGB_22Z | Market | 6085 | 10475 | 11097 | 7483 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17182 | 17958 |
| DRAXX01Z | DPM | 7113 | 68655 | 3156 | 77923 | 6788 | 44669 | 2236 | 61961 | 9442 | 53703 | 3471 | 63709 | 32206 | 370621 |
| DRAXX02Z | DPM | 3891 | 63856 | 1155 | 82940 | 5305 | 46202 | 4908 | 63854 | 3057 | 55324 | 855 | 47581 | 19171 | 359756 |
| DRAXX03Z | DPM | 1869 | 64886 | 2291 | 79589 | 4102 | 50491 | 0 | 0 | 0 | 0 | 0 | 0 | 8263 | 194966 |
| DRAXX04Z | DPM | 7022 | 71006 | 1701 | 82350 | 9371 | 55067 | 5945 | 49649 | 7649 | 43283 | 1200 | 64009 | 32887 | 365363 |
| DRAXX05Z | DPM | 3498 | 47025 | 2237 | 91993 | 7038 | 51774 | 6322 | 52857 | 5927 | 42414 | 1567 | 70718 | 26589 | 356781 |
| DRAXX06Z | DPM | 9480 | 59851 | 2651 | 82489 | 6714 | 49108 | 7188 | 45278 | 6509 | 45276 | 974 | 64821 | 33515 | 346824 |
| DRAXX09G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DRAXX10G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DRAXX12G | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DRKW_09Z | DPM | 768 | 6100 | 788 | 5181 | 1258 | 6218 | 1702 | 10143 | 217 | 549 | 600 | 861 | 5334 | 29052 |
| DRKW_10Z | DPM | 659 | 3293 | 773 | 6635 | 1165 | 3437 | 1152 | 10024 | 174 | 1388 | 82 | 501 | 4005 | 25278 |
| DRKW_12Z | DPM | 1158 | 19224 | 1008 | 18746 | 1805 | 17187 | 620 | 23788 | 1475 | 5563 | 0 | 0 | 6066 | 84508 |
| DUNGA01Z | DPM | 2183 | 5484 | 2179 | 4634 | 4173 | 3231 | 1512 | 1926 | 510 | 4575 | 2168 | 1991 | 12724 | 21841 |
| DUNGA02Z | DPM | 872 | 7899 | 1358 | 7178 | 2614 | 4502 | 454 | 4775 | 152 | 6413 | 1366 | 3366 | 6816 | 34134 |
| DUNGA03Z | DPM | 2753 | 5284 | 3024 | 3449 | 4537 | 3020 | 1805 | 2300 | 1019 | 3975 | 3591 | 1435 | 16729 | 19463 |
| DUNGA04Z | DPM | 5385 | 3147 | 4446 | 2094 | 7257 | 1453 | 4416 | 600 | 1412 | 3136 | 5381 | 918 | 28297 | 11349 |
| EGGPS01Z | DPM | 2624 | 17094 | 901 | 30957 | 2168 | 18532 | 3420 | 28029 | 1143 | 18306 | 2652 | 16850 | 12907 | 129768 |
| EGGPS02Z | DPM | 0 | 0 | 22 | 1622 | 2136 | 10724 | 2035 | 18933 | 451 | 16875 | 1538 | 9543 | 6182 | 57696 |
| EGGPS03Z | DPM | 3828 | 19901 | 3243 | 17555 | 6905 | 13679 | 7356 | 9764 | 3564 | 14318 | 1635 | 14507 | 26531 | 89723 |
| EGGPS04Z | DPM | 839 | 18157 | 14118 | 15459 | 9040 | 7227 | 1810 | 33578 | 1574 | 31058 | 789 | 22769 | 28169 | 128247 |
| FAWL_03Z | DPM | 120 | 754 | 157 | 581 | 144 | 1535 | 189 | 662 | 43 | 69 | 102 | 361 | 755 | 3962 |
| FAWN_01Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3288 | 86 | 2776 | 70 | 6063 | 156 |
| FELL_01Z | DPM | 2418 | 575 | 2351 | 469 | 1038 | 1989 | 5129 | 36 | 2641 | 123 | 1932 | 1529 | 15510 | 4722 |
| FERR_01Z | Market | 1834 | 35466 | 234 | 26059 | 5995 | 28854 | 5921 | 30007 | 5594 | 22937 | 3837 | 36293 | 23415 | 179616 |
| FERR_02Z | Market | 1536 | 23000 | 1569 | 50298 | 5313 | 27270 | 6803 | 25828 | 6763 | 27901 | 4058 | 28612 | 26042 | 182910 |
| FERR_03Z | Market | 2046 | 42019 | 1225 | 53526 | 5210 | 30188 | 6738 | 27216 | 6097 | 31046 | 4857 | 34419 | 26173 | 218413 |
| FERR_04Z | Market | 273 | 9006 | 1 | 650 | 347 | 3423 | 0 | 0 | 0 | 0 | 326 | 1200 | 948 | 14280 |
| FFES_01Z | Market | 662 | 713 | 651 | 740 | 1016 | 1000 | 525 | 987 | 140 | 490 | 422 | 456 | 3416 | 4385 |
| FFES_02Z | Market | 806 | 734 | 668 | 626 | 554 | 323 | 1066 | 501 | 257 | 923 | 419 | 1238 | 3770 | 4344 |
| FFES_03Z | Market | 1526 | 380 | 1393 | 495 | 1301 | 558 | 526 | 227 | 1158 | 525 | 1570 | 547 | 7474 | 2732 |
| FFES_04Z | Market | 1054 | 231 | 1374 | 236 | 1985 | 308 | 2117 | 463 | 2140 | 271 | 1394 | 233 | 10062 | 1742 |
| FIDL_01Z | Market | 4367 | 6292 | 3252 | 12539 | 7228 | 8932 | 5144 | 9780 | 2692 | 8936 | 3560 | 6458 | 26243 | 52936 |
| FIDL_02Z | Market | 7351 | 4676 | 6736 | 10759 | 10327 | 13318 | 5974 | 13526 | 4830 | 9747 | 7223 | 7416 | 42441 | 59442 |
| FIDL_03Z | Market | 5609 | 2897 | 7903 | 2674 | 6111 | 923 | 3862 | 2361 | 5282 | 3410 | 1763 | 648 | 30531 | 12913 |
| FIDL_04Z | Market | 33462 | 77 | 40831 | 154 | 25905 | 8 | 32228 | 330 | 34646 | 34 | 26251 | 448 | 193322 | 1049 |

| Genset | Agreement | October-99 | | November-99 | | December-99 | | January-00 | | February-00 | | March-00 | | 6 Monthly Total (Mvarh) | |
|----------|-----------|------------|-------|-------------|--------|-------------|--------|------------|--------|-------------|-------|----------|--------|-------------------------|--------|
| | | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| GRAI_01Z | DPM | 206 | 795 | 114 | 1168 | 117 | 1980 | 1207 | 253 | 0 | 0 | 0 | 0 | 1645 | 4196 |
| GRAI_04Z | DPM | 57 | 602 | 279 | 708 | 549 | 830 | 283 | 943 | 154 | 4 | 0 | 0 | 1322 | 3087 |
| HEYM101Z | DPM | 1752 | 93962 | 1390 | 100020 | 733 | 73263 | 779 | 92976 | 895 | 86788 | 1144 | 89154 | 6692 | 536164 |
| HEYM102Z | DPM | 1291 | 96511 | 573 | 70657 | 3129 | 85802 | 853 | 99256 | 869 | 86581 | 1203 | 87170 | 7917 | 525977 |
| HEYM207Z | DPM | 824 | 21787 | 1633 | 94124 | 117 | 27217 | 0 | 0 | 191 | 14138 | 838 | 61421 | 3603 | 218686 |
| HEYM208Z | DPM | 0 | 0 | 0 | 0 | 964 | 65404 | 1123 | 72720 | 989 | 57579 | 935 | 60957 | 4011 | 256660 |
| HINB_07Z | DPM | 26364 | 3605 | 15584 | 2321 | 40917 | 987 | 83868 | 0 | 53322 | 1 | 30797 | 1278 | 250852 | 8191 |
| HINB_08Z | DPM | 17239 | 5322 | 9346 | 9290 | 9128 | 21089 | 8451 | 26024 | 8494 | 13463 | 14469 | 5697 | 67128 | 80883 |
| HINPA01Z | DPM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| HINPA02Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HINPA03Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HINPA04Z | DPM | 2590 | 125 | 374 | 1324 | 4 | 225 | 0 | 0 | 0 | 0 | 0 | 0 | 2968 | 1674 |
| HINPA05Z | DPM | 3016 | 135 | 279 | 2096 | 2 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 3297 | 2476 |
| HINPA06Z | DPM | 28 | 276 | 114 | 3801 | 0 | 302 | 0 | 0 | 0 | 0 | 0 | 0 | 142 | 4378 |
| HMAR_01Z | DPM | 266 | 121 | 1016 | 159 | 528 | 359 | 1245 | 196 | 248 | 53 | 0 | 0 | 3303 | 888 |
| HMAR_02Z | DPM | 107 | 738 | 184 | 3309 | 223 | 1837 | 279 | 5266 | 38 | 1943 | 0 | 0 | 831 | 13092 |
| HMAR_03Z | DPM | 187 | 340 | 68 | 2027 | 96 | 1458 | 297 | 4905 | 94 | 984 | 1 | 673 | 743 | 10387 |
| HMAR_04Z | DPM | 405 | 365 | 553 | 299 | 1008 | 206 | 1415 | 719 | 637 | 138 | 288 | 170 | 4305 | 1898 |
| HMAR_05Z | DPM | 58 | 891 | 73 | 520 | 79 | 652 | 97 | 4657 | 24 | 1034 | 7 | 811 | 338 | 8564 |
| HRTL_01Z | Market | 122 | 92528 | 0 | 135157 | 122 | 109601 | 988 | 127341 | 184 | 90804 | 6 | 127067 | 1422 | 682498 |
| HRTL_02Z | Market | 51834 | 294 | 49071 | 60 | 32876 | 2274 | 48924 | 14 | 37564 | 203 | 43583 | 75 | 263852 | 2920 |
| IROB_01Z | DPM | 717 | 4951 | 951 | 9953 | 988 | 11156 | 725 | 6138 | 870 | 9449 | 882 | 6595 | 5132 | 48241 |
| IROB_02Z | DPM | 1333 | 15453 | 1233 | 15520 | 889 | 12665 | 866 | 8745 | 999 | 13266 | 1816 | 16753 | 7135 | 82402 |
| KEAD_01Z | Market | 2448 | 65315 | 648 | 76641 | 4654 | 63269 | 5160 | 55223 | 767 | 54246 | 1392 | 60182 | 15069 | 374876 |
| KILLP01Z | Market | 5126 | 13434 | 1462 | 34468 | 2219 | 33516 | 564 | 36350 | 334 | 33135 | 1831 | 29229 | 11536 | 180132 |
| KILLP02Z | Market | 3921 | 34624 | 2214 | 33900 | 3389 | 27786 | 1087 | 31600 | 839 | 30286 | 2829 | 27830 | 14280 | 186025 |
| KILNS01Z | DPM | 7104 | 37268 | 3321 | 37676 | 4376 | 43879 | 1266 | 38886 | 1120 | 31867 | 4578 | 31141 | 21765 | 220716 |
| KINO_01Z | Market | 43630 | 351 | 0 | 19822 | 397 | 27532 | 1901 | 7410 | 5595 | 8551 | 3012 | 106944 | 11257 | |
| KINO_02Z | Market | 5035 | 9569 | 6615 | 10650 | 5870 | 8931 | 6024 | 3614 | 4093 | 3673 | 6125 | 1572 | 33762 | 38009 |
| KINO_03Z | DPM | 0 | 0 | 11 | 368 | 2170 | 9545 | 3326 | 6391 | 4514 | 11570 | 11843 | 5665 | 21865 | 33539 |
| KINO_04Z | DPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KLYNA01Z | Market | 2684 | 18206 | 2559 | 13343 | 3253 | 11739 | 897 | 7845 | 1856 | 10690 | 4233 | 10929 | 15482 | 72752 |
| LBAR_01Z | DPM | 2509 | 13491 | 3621 | 52885 | 1697 | 58034 | 911 | 72187 | 470 | 57407 | 1626 | 52692 | 10835 | 306696 |
| LITTD01G | DPM | 0 | 0 | 0 | 0 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| LITTD01Z | Market | 1591 | 9007 | 2643 | 10831 | 1157 | 15880 | 2095 | 4676 | 1218 | 6171 | 232 | 336 | 8935 | 46901 |
| LITTD02G | DPM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 10 | 0 | 12 | 1 |
| MEDP_01Z | DPM | 23395 | 15891 | 18406 | 13139 | 22409 | 10697 | 22894 | 8497 | 20216 | 8445 | 21679 | 10559 | 128998 | 67228 |
| OLDS_01Z | Market | 1404 | 21531 | 1023 | 25946 | 1940 | 22491 | 1889 | 33441 | 356 | 13186 | 2958 | 18409 | 9570 | 135006 |
| OLDS_02Z | Market | 3468 | 14118 | 3323 | 19076 | 6882 | 17059 | 1368 | 27706 | 3417 | 30424 | 3806 | 20709 | 22265 | 129091 |
| PETEM01Z | Market | 3290 | 9482 | 3650 | 11688 | 6105 | 13294 | 3872 | 13247 | 6340 | 8223 | 4151 | 9630 | 27409 | 65563 |
| RATS_01Z | Market | 6008 | 21023 | 3126 | 24819 | 390 | 31256 | 2101 | 41483 | 2208 | 34245 | 24 | 5063 | 13857 | 157889 |
| RATS_02Z | Market | 1696 | 21439 | 526 | 8617 | 179 | 4788 | 612 | 24060 | 891 | 18681 | 3098 | 19252 | 7001 | 96836 |
| RATS_03Z | Market | 2120 | 32760 | 1831 | 34208 | 2599 | 36950 | 795 | 40904 | 626 | 39151 | 872 | 39469 | 8842 | 223441 |
| RATS_04Z | DPM | 1 | 877 | 2888 | 21595 | 1012 | 31476 | 878 | 19741 | 381 | 14172 | 681 | 7249 | 5840 | 95110 |
| ROCK_01Z | DPM | 13270 | 40233 | 3177 | 52545 | 10141 | 30211 | 11710 | 34479 | 3434 | 36363 | 10872 | 30988 | 52604 | 224819 |

| Genset | Agreement | October-99 | | November-99 | | December-99 | | January-00 | | February-00 | | March-00 | | 6 Monthly Total (Mvarh) | |
|------------------|---------------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|-------------------------|-----------------|
| | | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| ROOS_01Z | DPM | 445 | 6726 | 24 | 7560 | 126 | 8585 | 3 | 15339 | 0 | 12445 | 0 | 9691 | 597 | 60346 |
| RUGLB06G | DPM | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 14 | 5 | 19 |
| RUGLB06Z | Market | 2253 | 19430 | 599 | 11534 | 4335 | 30120 | 3752 | 27235 | 2832 | 24281 | 1787 | 12065 | 15560 | 124665 |
| RUGLB07G | DPM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 6 | 0 | 11 |
| RUGLB07Z | Market | 478 | 20251 | 3396 | 30663 | 1264 | 25815 | 3354 | 30298 | 1962 | 22481 | 1774 | 13947 | 12228 | 143455 |
| RYEH_01Z | Market | 15100 | 34619 | 11528 | 46747 | 10705 | 40847 | 7660 | 47890 | 6828 | 35763 | 14701 | 20856 | 66521 | 226721 |
| SEAB_01Z | Market | 9235 | 12820 | 12081 | 15092 | 16141 | 10887 | 4825 | 2353 | 2799 | 254 | 11540 | 8015 | 56620 | 49421 |
| SHBA_01Z | Market | 8776 | 14849 | 4631 | 14665 | 6579 | 13780 | 3989 | 16450 | 4616 | 12220 | 3423 | 15788 | 32015 | 87752 |
| SHBA_02Z | Market | 5306 | 10362 | 3835 | 14728 | 4791 | 12504 | 1938 | 17013 | 1354 | 14393 | 1972 | 19297 | 19195 | 88298 |
| SIZB_01Z | DPM | 10188 | 23965 | 6289 | 32949 | 2445 | 37908 | 1967 | 45578 | 2102 | 32672 | 4944 | 17671 | 27935 | 190743 |
| SIZB_02Z | DPM | 10367 | 23697 | 6367 | 32588 | 2513 | 37797 | 2209 | 45189 | 2134 | 32821 | 4969 | 17624 | 28559 | 189717 |
| SIZEA01Z | DPM | 0 | 4 | 0 | 0 | 278 | 7136 | 3106 | 7807 | 1814 | 7789 | 0 | 0 | 5198 | 22736 |
| SIZEA02Z | DPM | 2457 | 10441 | 746 | 11578 | 285 | 3574 | 0 | 0 | 1 | 541 | 3026 | 1457 | 6516 | 27590 |
| SUTB_01Z | DPM | 6541 | 31578 | 6891 | 36307 | 4072 | 40719 | 5890 | 41128 | 7166 | 31647 | 9931 | 20255 | 40492 | 201634 |
| TAYL_02Z | DPM | 0 | 5 | 2 | 5 | 1 | 14 | 1 | 74 | 2 | 2 | 3 | 29 | 8 | 129 |
| TAYL_03Z | DPM | 0 | 11 | 0 | 1 | 0 | 5 | 0 | 2 | 8 | 9 | 9 | 7 | 17 | 35 |
| TESI_01Z | DPM | 705 | 65952 | 548 | 75024 | 2901 | 53251 | 559 | 67714 | 21 | 77328 | 175 | 79051 | 4909 | 418320 |
| TESI_02Z | DPM | 851 | 62154 | 833 | 75898 | 1912 | 60035 | 282 | 71757 | 50 | 91204 | 358 | 82271 | 4286 | 443319 |
| TILBB08Z | DPM | 752 | 9054 | 869 | 8161 | 688 | 8226 | 1971 | 7192 | 1626 | 6065 | 5750 | 6557 | 11656 | 45255 |
| TILBB09Z | DPM | 713 | 10864 | 570 | 5082 | 1307 | 11453 | 768 | 7164 | 44 | 1380 | 0 | 0 | 3402 | 35944 |
| WEBU_01Z | Market | 623 | 20551 | 574 | 20875 | 706 | 43923 | 583 | 42924 | 358 | 42025 | 259 | 25116 | 3102 | 195413 |
| WEBU_02Z | Market | 993 | 24948 | 282 | 45914 | 767 | 50306 | 566 | 57836 | 263 | 61109 | 450 | 36767 | 3321 | 276880 |
| WEBU_03Z | Market | 1592 | 35362 | 271 | 54481 | 661 | 54297 | 690 | 53162 | 402 | 50010 | 1571 | 35396 | 5186 | 282709 |
| WEBU_04Z | Market | 1362 | 24609 | 1189 | 36162 | 1851 | 29420 | 1530 | 31622 | 759 | 28604 | 377 | 27226 | 7068 | 177643 |
| WYLF_01Z | DPM | 2623 | 4729 | 11421 | 1267 | 15202 | 835 | 10054 | 490 | 7838 | 1730 | 9432 | 1721 | 56570 | 10772 |
| WYLF_02Z | DPM | 2492 | 4859 | 9638 | 2228 | 15780 | 785 | 12039 | 344 | 7512 | 1213 | 10992 | 1595 | 58452 | 11025 |
| WYLF_03Z | DPM | 8140 | 1031 | 18549 | 575 | 17474 | 354 | 15915 | 246 | 10854 | 698 | 11402 | 1518 | 82333 | 4423 |
| WYLF_04Z | DPM | 348 | 12337 | 3898 | 6344 | 3303 | 5169 | 5598 | 1764 | 1871 | 5724 | 4530 | 4443 | 19548 | 35781 |
| Sub total | DPM | 282362 | 1213467 | 233277 | 1559112 | 302018 | 1324719 | 321311 | 1375089 | 240954 | 1235037 | 281883 | 1196667 | 1661806 | 7904091 |
| Sub total | Market | 359596 | 947685 | 284291 | 1213756 | 294483 | 1087973 | 267615 | 1193395 | 224873 | 1016048 | 258838 | 931852 | 1689696 | 6390710 |
| TOTAL | DPM + Market | 641958 | 2161152 | 517569 | 2772868 | 596501 | 2412692 | 588926 | 2568484 | 465827 | 2251086 | 540721 | 2128519 | 3351502 | 14294801 |

Appendix 5

Tender Assessment Procedure

A5.1 Introduction

A5.11 NGC assessed the fifth Reactive Power Market tender round using a similar process as that which applied to all previous tender rounds. Analytical processing was conducted in six-monthly segments in order to consider any interaction with the overlap of contracts secured during the previous Reactive Power Market tender rounds.

A5.12 NGC divided the process of assessing tenders into several stages, which were addressed as follows:

- C *Tender Receipt and Registration:* The tenders were opened, in the presence of a separate witness and all tender data was transcribed into TARDIS (Transmission Ancillary Reactive Database Information System).
- C *Tender Data validation:* All database entries were then separately checked back to the original tender sheets. TARDIS compliance checks showed that all tenders submitted were indeed compliant.
- C *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 MCUSA Schedule 5, Appendix 6. 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 or a market agreement (described below). The overall assessment was supported by an examination of many credible sensitivities around the central view.
- C *Enhanced Reactive Power Service Assessment:* Had NGC received any ERPS tenders these would have been considered on a case-by-case basis against possible alternatives, such as transmission constraints or NGC investment.

A5.2 Core Analytical processing

A5.21 Tender assessment takes place in the context of uncertainties and interactions affecting reactive uplift 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.

A5.22 For each genset tendered for 2000/01, the processing was as follows:

- C 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 representative days over 1997,1998 and 1999 and came from the Ancillary Services records against which reactive power utilisation is currently being paid.
- C The default utilisation money was set at forecast Mvarh multiplied by the utilisation price of £1.29/ Mvarh nationally. (Derived from MCUSA Schedule 5)
- C 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.
- C Market agreement utilisation money was set at tendered prices, multiplied by the above forecast Mvarh, respecting the tendered break-point bands of Mvarh utilisation.

A5.23 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 NGC Transmission System must be taken into account to provide a complete economic assessment of tender value.

A5.3 Assessment Sensitivities

A5.31 The principal role of tender assessment is to quantify and evaluate consistently the many factors that NGC and the Reactive Power Market Working Group (RPMWG) have agreed should be considered. These factors are those referred to in 5.3(e)(ii) of MCUSA Schedule 5 and are cross-referenced in section 2.12 of the Invitation to Tender pack. The NGC evaluation team has developed and implemented a process enabling these factors and associated uncertainties to be methodically considered.

A5.32 The RPMWG accepted at the outset of the reactive market that aspects of the tender evaluation process would be subjective in nature. It was therefore important to establish a framework within which this subjectivity could be exercised in a consistent fashion across all tenders.

A5.33 Specific questions were asked of each tender, examples of which follow:

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

- C *Would a Market Agreement enhance the incentive on the Generator to maintain his Grid Code capability?*
- C *How would a Market Agreement affect operational despatch?*
- C *To what extent might a Market Agreement potentially offset NGC investment?*
- C *Would a Market Agreement for ORPS enable a desired contract for ERPS?*

A5.34 All other criteria in MCUSA Schedule 5 paragraph 5.3 are covered by this methodology.

A5.35 In all cases, NGC continued to consider interaction with forecast transmission constraints. In all cases there were insignificant interactions with constraints identified.

A5.36 In all cases, NGC considered possible interaction with NGC planned investments. The commissioning in 2000/01 of new NGC transmission equipment, which includes some reactive compensation equipment, influenced NGC's view of forecast Mvarh. All of the commissioning equipment is required for compliance with Transmission Licence Standards, and re-phasing of planned NGC investments within a 12-month contract period is not a practical option.

Appendix 6

Contact Numbers

A6.1 Comments, suggestions and enquiries can be directed to National Grid's **Reactive Market Helpline** on: **024 76 42 3039**

A6.2 Further report information may be obtained by contacting:

**Transmission Services
National Grid House
Kirby Corner Road
Coventry CV4 8JY**

A6.3 For any other information please feel free to look up the NGC website on the following address:

www.nationalgrid.com/uk

Figure 2

Geographic distribution of gensets highlighting those with market agreements and those on default

FIGURE 2

GENERATION ELIGIBLE FOR REACTIVE POWER PAYMENTS AS AT 1st APRIL 2000
 SHOWING THE SPLIT BETWEEN DEFAULT AND MARKET CONTRACTS

