



REACTIVE POWER UPLIFT

INCENTIVE ARRANGEMENTS FROM 1999/2000

CONSULTATION

DECEMBER 1998

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CONTENTS

FOREWORD

- 1 INTRODUCTION**
- 2 REACTIVE POWER**
- 3. PRESENT ARRANGEMENTS**
- 4. ISSUES FOR CONSIDERATION**

ANNEX: Transmission Services Activity Income Adjusting Events

REACTIVE POWER INCENTIVE ARRANGEMENTS FROM 1999/2000

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Foreword

The National Grid Company plc (“NGC”) has a licence obligation to manage efficiently the reactive power element of Uplift. The present arrangements were set at the time of the last transmission price control and revised from April 1998. They set a target for the total cost of Reactive Power Uplift and provide for customers and NGC to share gains and losses that rise from outturn being below or above the target.

The present incentive arrangements are due to expire on 31 March 1999. This consultation paper sets out issues to consider in reviewing the incentive arrangement from 1 April 1999. I have asked NGC for its views on the form, scope, level and duration of the incentive arrangement as summarised herein.

I am now seeking comments on these issues from other interested parties with a view to making proposals to NGC shortly afterwards. Replies should be sent to:

Mr J Stewart
Regulation and Business Affairs
Office of Electricity Regulation
Hagley House
Hagley Road
Birmingham
B16 8QG

by 29 January 1999.

OFFER intends to publish comments by placing them in its library.

PROFESSOR S C LITTLECHILD
Director General of Electricity Supply
30 December 1998

1. INTRODUCTION

- 1.1 Until April 1997 payments to generators for reactive power were made under the terms of the Pooling and Settlement Agreement (“PSA”). Since then NGC’s transmission price controls have included a restriction on the revenue the company can recover for Reactive Power Uplift. This arrangement is due to expire on 31 March 1999. OFFER intends to propose licence amendments for new arrangements to apply from 1 April 1999. Default arrangements are in place in the event that agreement cannot be reached.
- 1.2 The purpose of this consultation document is to set out and consult on the issues that will need to be considered in revising the arrangements for Reactive Power Uplift. As part of the review process the Director General invited NGC to submit views on the form, scope, level and duration of the incentive arrangements. The company’s proposals are summarised in section 4 together with a discussion of these proposals. A synopsis of NGC’s submission is available from NGC at the address given below:

Jon Carlton
Transmission Services Manager
The National Grid Company plc
National Grid Company House
Kirby Corner Road
Coventry
CV4 8JY

- 1.3 The Director General is now seeking comments from other interested parties.

2. REACTIVE POWER

- 2.1 Reactive power is a particular form of power which is required in order to maintain voltage on the transmission system within limits prescribed in the Grid Code. In order to control voltage, NGC must ensure that there is sufficient reactive power available.

Sources of Reactive Power

- 2.2 Reactive power is provided and absorbed in a number of ways: by generating sets; by specialist equipment owned by NGC; by the transmission and distribution systems themselves, and by customers’ equipment. Some of these components will provide reactive power whilst others will absorb it. The production and absorption of reactive power by the components of power transmission and distribution systems varies depending on the supply and demand conditions on the systems at any time. A balance must be made to ensure stable operation of the transmission system.

- 2.3 In 1997/98 the net requirement for reactive power, to meet consumer reactive demand, was some 119.2 Teravar hours (Tvarh). Approximately 85 per cent of this requirement was met by components of, or equipment attached to, the transmission and distribution systems. Of the 85 per cent, NGC's Static Var Compensators and Mechanically Switched Capacitors provided a net total of 12.5 Tvarh. The balance was met by other circuits on NGC's network.
- 2.4 Static Var Compensators are devices that are able to adjust their reactive current very quickly in response to system voltage changes. They are used when it is necessary to cope with minute to minute changes in reactive requirement and also rapid changes due, for example, to faults on the system. Static Var Compensators have high year-round availability and perform reliably. They operate under automatic control with NGC making remote adjustments of control parameters. Mechanically Switched Capacitors have less flexible operating regimes than Static Var Compensators.
- 2.5 The other 15 per cent of reactive power needed to meet consumer demand in 1997/98 was met by generators who provided some 17.9 Tvarh net in 1997/98. Generators are additional sources that NGC can call upon when reactive power is needed. NGC's recovery of the costs of this portion of reactive power was, until 31 March 1998, subject to provisions in the PSA. Since 1 April 1998, NGC has recovered its costs under the terms of the Master Connection Use of System Agreement ("MCUSA"). These costs are known as Reactive Power Uplift.

History of Reactive Power payments

- 2.6 At Vesting, NGC entered into ancillary services agreements with the three successor generating companies (namely National Power, PowerGen, and Nuclear Electric) as well as the two Scottish generators, via the interconnector, and its own pumped storage stations for the provision of reactive power. NGC and the generators agreed that total payments to generators providing reactive power would be £40 million. Charging Principles are set out in the ancillary services agreements. In general, the Charging Principles recognise that generators' prices for reactive power should reflect heat losses and additional wear and tear incurred by generating sets providing reactive power. New generating companies entering the generation market have also signed agreements with NGC for the provision of reactive power.
- 2.7 The PSA contained provisions addressing the payment terms obtaining up to 31 March 1998. In May 1996, the Electricity Pool of England and Wales ("the Pool") set up a Reactive Power Market Working Group. One of the Group's terms of reference was to evaluate a business case for moving to a Reactive Power Market mechanism. The group considered how such a market would operate, the principles to be used and what documents would be needed to create it. The Reactive Power Market Working Group

presented its report to the Pool on 10 June 1997. The Pool decided that governance of the arrangements for reactive power should not lie within the Pool after 31 March 1998. Thereafter, the Reactive Power Market would be a matter between NGC and Users, without Pool involvement. Certain responsibilities for the governance of reactive power were to be transferred to a consultative group that was in the process of being formed, the Transmission Users' Group.

- 2.8 The required change was brought about by transferring governance from the PSA to the MCUSA, which is a multi-party agreement between NGC, Regional Electricity Companies, private ("second-tier") suppliers, most generators and a small number of directly connected customers. The principal purpose of the MCUSA is to establish a contract between all Users and to provide for the enforcement of the Grid Code.
- 2.9 In 1998, just prior to the transfer of governance to the MCUSA, NGC asked the Director General to settle the terms of the proposal which was disputed by a small number of its customers. The Director General's decision, issued on 30 March 1998, introduced two new schedules to the MCUSA which had the effect of establishing formally the Reactive Power Market and Transmission Users' Group.
- 2.10 One of the two new Schedules ("Schedule 5") to the MCUSA sets out the principles governing the new arrangements for the provision of reactive power. The other new Schedule ("Schedule 4") to the MCUSA formally constituted the Transmission Users' Group and gave it governance of the Reactive Power Market.

Costs of Reactive Power

- 2.11 Between 1994/95 and 1997/98, 80 per cent of payments to generators for reactive power were based on the generators' capability to provide such services, and 20 per cent on NGC's actual utilisation of generators' reactive power capability.
- 2.12 Table 1 shows reactive power payments from 1993/94 to 1996/97 as reported by the Pool and utilisation of reactive power as reported by NGC. For 1997/98, both figures are reported by NGC.

Table 1 Reactive Power Utilisation and Payments

Year	Utilisation (Tvarh)	Payment (£m)
1993/94	n/a	50.3
1994/95	42.05	48.2
1995/96	42.42	47.2
1996/97	42.06	51.2
1997/98	37.57	51.3

- 2.13 NGC forecasts that in 1998/99 the reactive power provided by generators will be over 6 per cent lower than in the previous year. NGC says that the reduction in Tvarh utilisation for the present year compared to the previous one reflects two factors. First, poor weather in the summer of 1998 resulted in a lower need for reactive power. Second, NGC was able to use reactive compensation equipment newly commissioned to comply with planning standards.
- 2.14 NGC forecasts that payments for reactive power in 1998/99 will be about £49.4 million, a reduction of nearly 4 per cent compared to the previous year. This is mainly due to favourable Market Agreements from the first tender and lower utilisation of generators' capability. In former years the costs of reactive power were based on an indexation of the previous year's target.

3 PRESENT ARRANGEMENTS

- 3.1 Under the terms of their generation licences generators are required to comply with the provisions of the Grid Code. This, in turn, obliges them to be capable of providing reactive power within operating limits that are prescribed in the Grid Code.
- 3.2 From time to time, following a request from NGC, licensed generators are required to offer terms for the provision of reactive power from any of their operating generation sets.
- 3.3 From 1 April 1998 the terms of the MCUSA requires NGC to establish new arrangements for the procurement of reactive power. Under these arrangements, twice a year NGC seeks tenders from providers of reactive power who wish to participate in the market process and from other parties who may be able to provide reactive power for use by NGC in maintaining voltage. Successful tenderers will sign a Market Agreement with NGC which determines their payments for providing reactive power. Generators who do not enter a Market Agreement but who nevertheless are required to provide reactive power, will receive a default payment. Market Agreements with NGC may be on more or less favourable terms than under the default payment.

- 3.4 The terms and conditions that govern payment to generators for the provision of reactive power to NGC are set out in ancillary services agreements between NGC and generators. The recently established Reactive Power Market enables parties other than licensed generators to submit tenders to provide NGC with reactive power. The arrangements are described in greater detail below.

Capability and Utilisation Payments

- 3.5 Tendering for the Reactive Power Market began on 1 October 1997, notwithstanding the fact that the arrangements for the Reactive Power Uplift had not been formalised at that stage. In the first half of 1997/98 generators received payments for providing reactive power under the terms of the PSA. For the second half of the year payments were made in accordance with the Reactive Power Market arrangements.
- 3.6 The Reactive Power Market provides for default payments to be split between a capability element and a utilisation element between 1 October 1997 and 1 April 2000.
- 3.7 The split between capability and utilisation payment made under the default payment arrangements is subject to a phasing process referred to as “the staircase”. The progressive move towards payments, based wholly on utilisation, provides an incentive to generators to enter Market Agreements with NGC, rather than to be exposed to the default payment arrangements. Table 2 below shows the scheduled split of payments between capability and utilisation.

Table 2 - The staircase: phasing of split between capability and utilisation payments

Start	End	Capability	Utilisation
October 1997	March 1998	80 %	20 %
April 1998	March 1999	50 %	50 %
April 1999	March 2000	25 %	75 %
April 2000	Onwards	0 %	100 %

- 3.8 Some generators have argued that there is not sufficient evidence of the success of the Reactive Power Market to justify changing the balance between capability and utilisation payments under the default payment arrangements. The Transmission Users’ Group discussed the possibility of delaying the move presently scheduled for 1 April 1999. However, at present there is no formal proposal to change the staircase arrangements.

Reactive Power Market: Initial outcomes

- 3.9 In the first tender round, which was completed by April 1998, NGC invited tenders from 154 centrally despatched gensets. Tenders were submitted from 85 gensets, representing about 70 per cent of the previous year’s total

genset Tvarh output. Market Agreements were signed to run from 1 April 1998 with the operators of 41 gensets. This represented some 30 per cent of the forecast total genset Tvarh to be despatched in the forthcoming year and approximately 30 per cent of the total generation capability available.

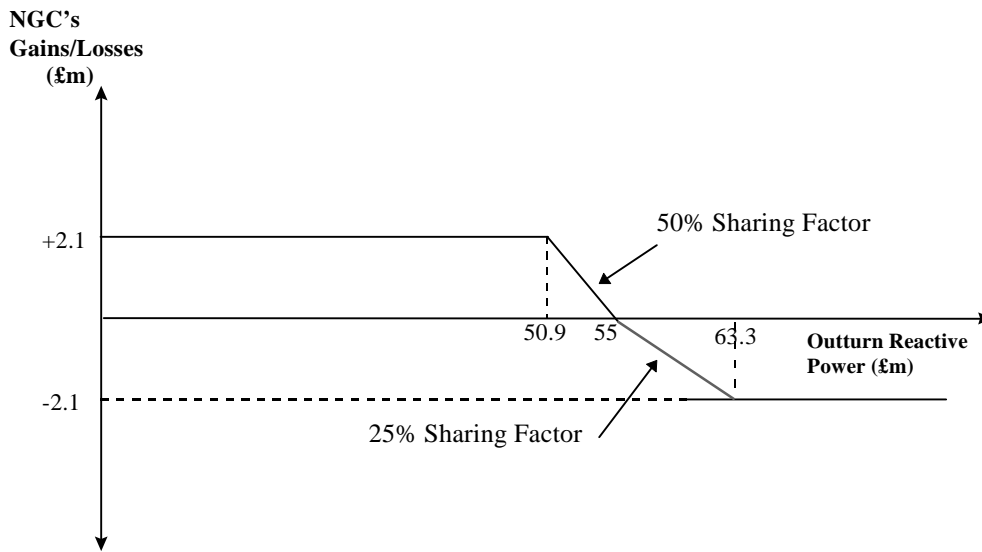
- 3.10 In the second tender round, completed by October 1998, NGC invited tenders from the operators of the 154 centrally despatched gensets who were not already contracted to provide reactive power. Tenders were submitted from a further 10 gensets. Market Agreements, to run from 1 October 1998, were signed with the operators of five gensets. This represented about 6 per cent of the forecast Tvarh to be despatched in the forthcoming year and approximately 6 per cent of the total generation capability available.
- 3.11 All contracts signed for Market Agreements from both tender rounds were for a minimum of twelve months whilst one contract, from the second tender round, was for two years. After the completion of the second tender round, NGC had Market Agreements in place with the operators of 46 gensets that represent some 36 per cent of the eligible available generation capability.

Reactive Power Uplift Incentive Arrangements

- 3.12 NGC is incentivised under its transmission licence to hold down the costs of Transmission Services Uplift and Reactive Power Uplift. From 1 April 1998, a two year incentive arrangement for Transmission Services Uplift was put in place. This will need to be replaced from 1 April 2000 but is not considered further in this paper. The Reactive Power Uplift incentive put in place from 1 April 1998 is for one year only.
- 3.13 The present Reactive Power Uplift control for 1998/99 has a target of £55 million. This figure represents the previous year's target indexed by RPI. Under the control NGC takes 50 per cent of the benefit if it betters the target - that is, if Reactive Power Uplift costs are below £55 million - and bears 25 per cent of the losses if it fails to achieve the target. NGC's gains or losses under the incentive scheme are capped at £2 million. Thus, the range between which the incentive applies is from £50.9 million to £63.3 million. Figure 1 below illustrates the arrangements.

Figure 1

Reactive Power Uplift Incentive Arrangements 1998 /99



- 3.14 In the event that new arrangement for Reactive Power Uplift are not agreed, NGC's licence provides a default arrangement. For 1999/2000 the default target would be this year's target plus or minus half the difference between this year's target and outturn.

4. ISSUES FOR CONSIDERATION

The Need For a Control

NGC's Views

- 4.1 NGC says that the need to meet reactive power demands can only be assessed and managed by the system operator, and that this puts it in the position of a monopsony buyer.
- 4.2 It says that the Transmission Service Incentive arrangements introduced over the last few years have clearly demonstrated the benefit of direct financial incentivisation of NGC to maintain security and stability of the transmission system.
- 4.3 NGC says that, for these reasons, it considers it appropriate to continue a form of regulatory control for Reactive Power Uplift.

Discussion

- 4.4 NGC's procurement arrangements for reactive power, either through the Market Agreements or the Default Payment Mechanism, are under-pinned by the revenue restriction in the incentive arrangements. Even with the development of a more competitive Reactive Power Market, there will remain a need for efficiency incentives on NGC. As it is, Reactive Power Uplift is developing and the incentives on NGC will need to be examined in

the context of the revised electricity trading arrangements intended to be introduced from 1 April 2000. In the circumstances it seems appropriate to continue an incentive scheme after 31 March 1999.

Scope of the Control

NGC's Views

- 4.5 NGC says that the present scope of the Reactive Power Uplift control covers payments made by NGC for purchasing reactive power from generators and other providers where appropriate. Under the terms of Schedule 5 NGC is required, by December 1999, to examine and report to the Transmission Users' Group on the practicalities of a unified Reactive Power Market embracing other present and potential sources of reactive power, such as NGC static compensation equipment.
- 4.6 NGC argues that it would be inappropriate to pre-empt the outcome of this study by including present NGC assets within the scope of Reactive Power Uplift control for 1999/00. It says that the Reactive Power Market is still in its infancy and uncertainties over the path of future costs still remain. It also points to the uncertainty caused by the implementation of the revised electricity trading arrangements and how this will impact on Transmission Services Activity.

Discussion

- 4.7 In its Transmission Services Incentive Scheme Proposals, published in February 1998, OFFER asked NGC to bring forward proposals on whether and how its own reactive compensation equipment could participate in the Reactive Power Market arrangements. NGC has yet to make such proposals. Under the terms of Schedule 5 of the MCUSA, NGC has to report to the Transmission Users' Group by 31 December 1999 on the practicalities of establishing a unified mechanism for the provision of voltage support for the NGC transmission system.
- 4.8 The capital costs of NGC's equipment are taken into account in NGC's Transmission Business price control which covers the period April 1997 to March 2001. Any arrangements to include NGC's own equipment in the Reactive Power Market would require such costs to be reallocated for price control purposes. It is for consideration whether, at this stage, it is practical and desirable to alter the Transmission Price Control, before the end of the price control period, in order to include NGC's own equipment in the Reactive Power Market. However, since NGC's own equipment presently accounts for about 85 per cent of reactive power compared to about 17 per cent from generators, it is important that NGC takes early steps to enable discussion of how its own equipment can be included in this market.

Duration of the control

NGC's Views

- 4.9 The present Reactive Power Uplift incentive is for one year from 1 April 1998. NGC proposes that the new Reactive Power Uplift control should have a further one year duration from 1 April 1999.

Discussion

- 4.10 A further one year control would enable the incentive arrangements for both Transmission Services Uplift and Reactive Power Uplift to be considered for revision at the end of March 2000. Subsequent arrangements for NGC's management of ancillary services, including reactive power and any incentive arrangements on NGC in its role as system operator, will be reviewed as part of the Review of Electricity Trading Arrangements.

Form of the Control

NGC's Views

- 4.11 NGC says that there has been much debate in the past over the merits and properties of different forms of regulatory control, that the Reactive Power Market is in its infancy and that uncertainty exists regarding the path of future Reactive Power Uplift costs. NGC says that it has previously agreed that a sliding scale (or profit sharing) form of control is most appropriate where there is uncertainty or potential volatility surrounding the future path of costs covered by regulatory control. NGC therefore proposes that the future Reactive Power Uplift control should continue to be of the profit sharing form.

Discussion

- 4.12 Successive incentive arrangements applied to NGC's management of Transmission Services Uplift and Reactive Power Uplift have taken a sliding scale form. A target is set and the gains or losses relative to it are shared between NGC and suppliers.
- 4.13 OFFER's Transmission Services Incentive Scheme Proposals, issued in February 1998, said that changes to the form of the control for Reactive Power Uplift would be premature until the market in reactive power had been in operation for a time. This pointed to a continued use of sliding scale arrangements for Reactive Power Uplift. The contribution of the present scheme to bringing down costs suggests there would be advantage in maintaining the form of the incentive control at this stage.

Sharing factors

NGC's Views

- 4.14 NGC proposes the retention of the existing 50 per cent profit and 25 per cent loss sharing factors. NGC says that maintaining these asymmetric sharing factors reflects the asymmetry of risk associated with the volatility of future Reactive Power Uplift payments.

Discussion

- 4.15 It is not clear that there is an asymmetry of risk with respect to Reactive Power Uplift payments. However, the sharing factors match those in the Transmission Services Uplift arrangements. Introducing asymmetry between sharing factors in the Transmission Services Uplift and Reactive Power Uplift incentive arrangements could reduce the effectiveness of the two schemes and might give NGC inappropriate incentives to alter its cost allocation between the two elements. NGC says that, in general, it schedules plant to optimise the balance of active energy before balancing reactive power. There is an interaction between Reactive Power Uplift and Transmission Services Uplift. The costs of one can affect the costs of the other. Managing this balance effectively is part of NGC's task.

Caps and Collars

NGC's Views

- 4.16 NGC suggests that, given the increased exposure of Reactive Power Uplift to the volatility of reactive utilisation, together with the increased scope of NGC control actions, NGC would like its gains and losses range widened from $\pm£2$ million to $\pm£3$ million. It points out that, under the Transmission Services Uplift incentive scheme for 1998/99, its maximum potential gain is £20 million, representing 9.5 per cent of the incentive scheme's target. The Reactive Power Uplift cap and collar of $\pm£2$ million for this present year represents only 4 per cent of the target of £55 million. NGC says the potential gain should be increased to move it closer, in percentage terms, to the Transmission Services Uplift incentive. It recognises, though, that the scope for effective NGC action is wider in the context of Transmission Services Uplift, than in Reactive Power Uplift, and does not argue for the percentages to be identical to those in the Transmission Services Uplift incentive arrangements.

Discussion

- 4.17 There may be an argument for widening the target range if the uncertainty of reactive power costs were to alter. However, NGC has not produced clear

reasons to support its arguments that the future utilisation costs of reactive power are likely to be more uncertain than they have previously been. NGC's argument poses the question as to whether the present incentive range is the best one. Increasing the potential gains and losses available to NGC could enhance the incentive effect of the control provided that a suitably demanding target is also set.

Setting the target level

NGC's views

- 4.18 NGC proposes a target Reactive Power Uplift figure for 1999/00 of £50.6 million. This is based on its forecast outturn for Reactive Power Uplift, which is £49.4 million, plus an additional £1.2 million to provide NGC in 1998/99 with an expectation of recovering its forecast operating costs of £0.6 million assuming a 50 per cent sharing factor. NGC says that its proposal takes no account of the possibility, discussed with Transmission Users' Group, that the staircase might be changed to delay the move to a 25:75 split between capability and utilisation. It says that one result of such a delay could be to increase Reactive Power Uplift costs for 1999/00 by some £5 million.

Discussion

- 4.19 NGC's proposed target of £50.6 million is below this year's target of £55 million, but above NGC's forecast of this year's outturn of £49.4 million.
- 4.20 In the first six months of operation of the present incentive arrangements (April to September 1998), Reactive Power Uplift costs were £21.7 million. This figure does not include incentive payments made to or by NGC. NGC suggests that this year's outturn (1998/99) will be lower than last year's, mainly due to favourable Market Agreements signed for first tender round. In addition, NGC's newly commissioned reactive compensation equipment and reduced reactive demand due to poor weather have had a secondary effect. For 1999/2000 NGC forecasts that Reactive Power Uplift Tvarh will be 2 per cent higher than this year due to consumer demand growth.
- 4.21 Table 3 below shows NGC's Tvarh requirements from gensets in six month periods (figures provided by NGC).

Table 3 Tvarh Requirements

	Total Tvarh		
	Lead	Lag	Lead +lag
Apr 1996/Sep 1996	4.72	14.02	18.74
Oct 1996/Mar 1997	4.82	18.50	23.32
Apr 1997/Sep 1997	5.17	12.02	17.19
Oct 1997/Mar 1998	4.63	15.75	20.38
Apr 1998/Sep 1998	4.25	11.20	15.45

- 4.22 The figures show that the total reactive power utilisation in 1997/98 was lower than in 1996/97. Utilisation in the period April to September 1998 was lower than in the corresponding period in 1997 which in turn was lower than in 1996. The figures show a downward trend for reactive power utilisation.
- 4.23 Lower utilisation of reactive power should mean lower costs of reactive power. Indications are that the Reactive Power Market has brought some reduction in reactive power cost. As the scope of the market expands, and as market participants gain further experience and where appropriate install more equipment, there should be scope for further reductions in the forthcoming year, implying a target lower than NGC's proposal.

Operating costs

NGC's views

- 4.24 Over the course of 1999/2000, NGC says it expects to incur operating costs on a variety of activities which will serve towards improving reactive power management and an enlarged scope for Reactive Power Uplift cost reductions. Software to retrospectively analyse contractual availability, operation and performance is currently under development to improve NGC's management activity.
- 4.25 NGC says that, at present, such costs are attributed to the Transmission Business. Since they relate to Transmission Services Activity, NGC says they should not be treated as Ancillary Services costs nor charged to Pool suppliers. NGC says that these costs were neither considered at the Transmission Business Price Review nor in setting the present Transmission Services Uplift incentive arrangements.
- 4.26 NGC says the operating costs for 1999/2000, over and above the costs of managing Reactive Power Uplift allowed for in the company's price control associated with these activities, are estimated at £0.6 million for direct and indirect staff costs and for software development. NGC proposes (see 4.18 above) that these costs should be taken into account by adding £1.2 million to the Reactive Power Uplift target for 1999/00 to give NGC an expectation of cost recovery.

Discussion

- 4.27 The present control allowed NGC to recover £1 million of operating costs over two years as part of the Transmission Services Uplift incentive arrangements on the grounds that NGC's operating expenditure might increase as the target tightened. Those operating costs were set against an outturn of £209 million. In contrast Reactive Power Uplift is worth less than one third of that sum. The need for any additional expenditure has not been conclusively demonstrated. Neither is it necessarily appropriate for the incentive effectively to guarantee recovery of that level of costs.

Income Adjusting Event

Background

- 4.28 The present licence conditions, that set out the arrangements in respect of the Transmission Services Incentives Reactive Power Uplift, contain provisions to allow for Income Adjusting Events. These are events over which NGC is assumed to have no control and which might have a large material impact (greater than £2 million) on the outturn of Reactive Power Uplift. A list of events which might, in principle, trigger an adjustment has been agreed between the Director General and NGC, and is shown in the Annex. If such an event occurs, the Director General is empowered to adjust NGC's allowed revenue in respect of Reactive Power Uplift.

NGC's views

- 4.29 NGC proposes that the following Incoming Adjusting Event be included specifically in the 1999/00 Reactive Power Uplift incentive arrangements in addition to those in the present Transmission Services Activity Income Adjusting Events, that is:-
- In respect of a period of greater than 1 month, greater than 25 per cent unavailability of capability for reactive power services within a Reactive Tariff Zone.

Discussion

- 4.30 The costs arising from Income Adjusting Events are passed onto suppliers. NGC's customers rely on NGC to procure reactive power in an efficient and economic manner. Additions to the list of approved Income Adjusting Events should not be made unless the risk of them occurring is clear and it has been established that they are beyond NGC's control.
- 4.31 NGC's proposed additional event means that if one quarter of the total genset reactive power capability in a zone is unavailable for more than one month, and the total effect on Reactive Power Uplift is greater than £2 million, NGC may ask the Director General to determine an adjustment to

Reactive Power Uplift. The Reactive Power Market should provide sufficient incentives to generators to make their generating capability available. NGC has not provided a detailed justification for including the proposed Income Adjusting Event. Moreover, the circumstances under which such an event would occur are not clear.

Issues for comment

4.32 Comments are invited on all aspects of the Reactive Power Uplift incentive and in particular, on:

- the form of the Reactive Power Uplift control;
- the scope of the Reactive Power Uplift control;
- the target level
- the extent to which additional operating and capital expenditure or other costs should be allowed for;
- the duration of the Reactive Power Uplift control;
- whether a new Income Adjusting Event should be included in the list of Income Adjusting Events;

4.33 The views of respondents on these and any other matters are invited by 29 January 1999

December 1998

Annex

Transmission Services Activity Income Adjusting Events

21 February 1997

- (a) the export from England to France through the interconnector in any period of 1 month of more MWh of Active Energy than are imported from France to England through the interconnector in such period;
- (b) a change of genset ownership, a change to the Pooling and Settlement Agreement, or any change to, or introduction of new, Agreed Procedures;
- (c) a change to the Grid Code, or the MCUSA (including any Supplementals thereto) and/or (without prejudice to the generality of the foregoing) any replacement of, or a change in, the schedule used in either the Settlement System or in Scheduling and Despatch;
- (d) a change pursuant to Condition 12 of the Transmission Licence in the transmission system security standards which were specified in paragraph 1 of Condition 12 of the Transmission Licence as at 31 December 1996;
- (e) a change to the planning and/or operational standards referred to or contained in the British Grid Systems Agreement and/or the Protocol with Electricite De France;
- (f) the grant, renewal or non-renewal of a derogation to any authorised electricity operator or the holder of a Transmission Licence in relation to the obligation to comply with any provision of the Grid Code, the Distribution Code, the distribution system planning standards, the transmission system security standards pursuant to Condition 12 of the Transmission Licence or the system planning standards applicable to those holding a licence granted pursuant to Section 6(1)(a) of the Act;
- (g) any amendment or re-enactment of the Electricity (Class Exemptions from the Requirement for a Licence) (No 2) Orders 1995;
- (h) any settlement, award or determination by either an arbitrator, a court, the Director or other competent authority with regard to any of the constituent elements used in the determination of transmission services uplift or reactive power uplift;
- (i) a change in the level of Transport Uplift due to a change in the amount of Primary Response and/or Secondary Response (as defined in the Grid Code) from that amount held at 1st April 1997 in order to meet paragraph 1(b) of Condition 12 of the Transmission Licence;
- (j) failure of the Grid Operator and each Supplier (who is a network operator) to agree by 1st August 1997 the terms of an Agreement for the

reimbursement to NGC of the costs associated with out of merit generation required only to support the stability of a local network;

- (k) if at any time the content of the Ex Post Unconstrained Schedule is determined by the Executive Committee in accordance with the provisions of Schedule 9 to the Pooling and Settlement Agreement;
- (l) a determination of a Pool Civil Emergency Period as defined in Clause 61.1 of the Pooling and Settlement Agreement;

Except as otherwise provided herein, and unless the context otherwise requires, words and expressions used herein shall have the same meaning as defined in the Pooling and Settlement Agreement and/or the Transmission Licence. In the event of conflict between definitions, the definition used in the Transmission Licence will prevail.