

**NGC system operator incentive scheme
from 1 April 2003 – 31 March 2004**

**Final Proposals and Statutory Licence
Consultation**

March 2003

16/03

Summary

This document sets out Ofgem's Final Proposals for National Grid Company plc's ("NGC") System Operator ("SO") incentive scheme to apply from 1 April 2003 to 31 March 2004 and also includes the accompanying statutory notice of proposals for modification to NGC's electricity transmission licence¹. NGC's existing SO incentive scheme was introduced on 1 April 2002 to run until 31 March 2003. Therefore, a new incentive scheme needs to be put in place from 1 April 2003. Given the consultation period required by section 11 of the Electricity Act 1989, this means that the proposed licence modification, when introduced, will have retrospective effect and will apply from 1 April 2003 regardless of the date on which the Authority direction to modify NGC's licence is made.

The past SO incentive schemes, which have been primarily targeted at NGC's external costs of operating the existing transmission system and balancing overall supply and demand (i.e. the costs to NGC of purchasing balancing services from generators, suppliers and large customers), have delivered substantial benefits over time. Between 1994 (when the first incentive scheme was introduced) and 2001, NGC reduced the annual costs of system operation by more than £400 million. Over the course of the first external SO incentive scheme under the New Electricity Trading Arrangements (NETA) from 27 March 2001 to 31 March 2002, NGC substantially reduced the level of SO costs. As a result of NGC's performance during the first incentive scheme under NETA, Ofgem was able to reduce the target for the current external SO incentive scheme for the period 1 April 2002 to 31 March 2003 by approximately £25 million. NGC is on target to have significantly reduced costs below this lower target level for 2002/03.

Initial Proposals

In the Initial Proposals document², Ofgem suggested extending the scope of NGC's incentive scheme to cover not only its operation of the transmission system, but also the development of the transmission system (so called "deep" incentives). A deep SO incentive scheme would provide NGC with appropriate commercial incentives to respond to signals from market participants concerning their requirement for

¹ Appendix 1 contains a statutory notice in respect of the licence modifications. Appendix 2 provides a marked-up version of the proposed licence modifications.

² 'NGC system operator incentive schemes from April 2003, Initial proposals', Ofgem, December 2002.

transmission capacity and encourage efficient and timely development of the transmission system. Ofgem called this a transmission capacity release incentive scheme. Ofgem considered that these arrangements would extend and complement the current “shallow” incentive scheme for NGC and enhance security of supply and Ofgem proposed a phased approach to introducing the new deep incentive scheme.

Phase 1 (1 April 2003 – 30 September 2003)

Ofgem proposed to implement a revised shallow incentive scheme for a further 6 month period (1 April 2003 to 30 September 2003). Under the proposals, NGC would be given a specific target representing a reasonable ex-ante expectation of the external balancing costs throughout the duration of the incentive scheme, based on analysis of NGC’s historic costs since the introduction of NETA and NGC’s forecast of costs (with some adjustments by Ofgem).

If NGC’s balancing costs were below the target, it would keep a proportion (set by the upside sharing factor) of the reduction in costs as an incentive payment. Conversely, if its balancing costs were above the target, NGC would be charged a proportion (set by the downside sharing factor) of the costs in excess of the target. NGC’s overall gains or losses on its balancing costs would be limited by applying a cap on payments and a floor on losses. The annual parameters on which it was proposed that the 6 month scheme should be based, and the 2002/03 parameters, are shown in the table below.

Ofgem’s Initial Proposals options, based on NGC’s cost forecasts, for the SO incentive scheme from 1 April 2003 to 30 September 2003 (money of the day, annualised basis)

| Parameter | 2002/03 | 2003/04 | | |
|-------------------------|--------------|---------------------------------------|--------------|--------------|
| | | Option 1 | Option 2 | Option 3 |
| Target | £460 million | Between £376 million and £436 million | | |
| Upside sharing factor | 60% | 50% | 50% | 55% |
| Downside sharing factor | 50% | 50% | 50% | 55% |
| Cap | £60 million | £50 million | £40 million | £50 million |
| Floor | -£45 million | -£50 million | -£40 million | -£50 million |

Ofgem proposed that the monetary parameters (target, cap and floor) for the 6 month scheme should be set to be 45 per cent of the annual figures shown above, based on historic seasonal cost patterns.

The proposed scheme was to be 6 months in duration to allow time for a revised regime for the sale of transmission capacity to be developed, including the sale of longer-term rights. Ofgem considers that these are a necessary pre-requisite for the introduction of deep incentives, since the new incentive scheme would be designed to encourage NGC to respond promptly and efficiently to the signals of participants’ requirements resulting

from offering these longer-term rights for sale and develop the transmission system accordingly. Ofgem additionally proposed introducing a new licence obligation on NGC to use all reasonable endeavours to develop the necessary transmission regime by October 2003, and asked NGC to review certain aspects of its connections charging methodology.

Phase 2 (from 1 October 2003)

On the assumption that revised transmission arrangements had been developed by October 2003 to enable firm tradable transmission capacity rights to be allocated for the period October 2003 to March 2006, Ofgem proposed that a revised shallow incentive scheme covering the same time period (i.e. 2 ½ years from 1 October 2003 to 31 March 2006) should be put in place. In addition, the introduction of contractually firm rights would mean that NGC would be required to buy-back any transmission capacity rights that it had sold but which the owners were not able to use on the day, due to constraints on the transmission system. Ofgem therefore proposed that a SO transmission capacity buy-back incentive should also be put in place covering the same period. Additionally, Ofgem proposed the introduction of a rolling 5-year SO transmission capacity release incentive by 1 April 2004 at the latest.

Final Proposals

The Final Proposals outlined in this document relate to Phase 1 of the NGC SO incentive arrangements from 1 April 2003.

Most respondents to the Initial Proposals supported the extension of the present shallow SO balancing incentive scheme. Respondents additionally supported putting in place a shallow scheme for one year rather than the 6 month scheme proposed by Ofgem. This was due, in particular, to the view that more time was needed to consider reforms to transmission access arrangements. NGC continued to support a longer-term deep SO incentive but considered that such arrangements could be implemented without any extensive changes to the transmission access regime, other than those already brought forward (CUSC Amendment Proposal CAP043: "Transmission Access – Definition").³

³ Alternative Amendment CAP043 was approved on 6 February 2003 with effect from 1 April 2003.

Ofgem has carefully considered the views of respondents and NGC in developing the Final Proposals. Ofgem now considers that, in light of respondents' views, the incentive scheme should be in place for one year rather than six months. Consequently, Ofgem's final proposal is that the Phase 1 SO incentive scheme should apply for the period 1 April 2003 to 31 March 2004. Additionally, Ofgem initially considered, given NGC's initial forecast of its balancing costs for 2003/04 and respondents' views to the Initial Proposals, that a target in the middle of the £376 million to £436 million range consulted upon would be appropriate. However, in February 2003 NGC provided Ofgem with new information, which it believed needed to be considered by Ofgem before setting any incentive target.

In particular, NGC argued that, though its forecast for overall 2002/03 outturn costs remains at around £404 million, the plant margin for 2003/04 is likely to be approximately 1.8 GW lower than it had assumed in its original November 2002 forecast. Of this reduction, 1.1 GW arises from an increase in NGC's forecast peak demand⁴ and the remainder is attributed to additional plant closures and mothballing. As a result of this decrease in plant margin, NGC argued that it would have to contract for additional volumes of reserve (compared with its original November 2002 forecast) to secure the necessary operating margin. NGC translated the increase in operating margin associated with the change in plant margin into an increase in incentivised balancing costs of between £5 million and £22 million, depending on the scenario being considered.

In light of Ofgem's and NGC's statutory duties in relation to security of supply and NGC's position as system operator, Ofgem has carefully considered NGC's new submission and has concluded, based on NGC's latest information, that the plant margin is likely to be lower than NGC originally forecast and, as such, a higher level of reserve holdings is justified.

Ofgem's Final Proposals for NGC's Phase 1 SO incentive scheme are shown in the table below. The target value effectively corresponds to the middle of the range presented in the Initial Proposals, but revised to take account of the increase in reserve associated with a tighter plant margin.

⁴ This refers to 'restricted' average cold spell demand, i.e. weather corrected peak demand net of any notified load management.

Ofgem's Final Proposals for the SO incentive scheme from 1 April 2003 to 31 March 2004 (money of the day)

| Parameter | 2002/03 | 2003/04 |
|-------------------------|----------------|----------------|
| Target | £460 million | £416 million |
| Upside sharing factor | 60% | 50% |
| Downside sharing factor | 50% | 50% |
| Cap | £60 million | £40 million |
| Floor | -£45 million | -£40 million |

Overall, Ofgem considers that the parameters of the incentive scheme provide NGC with an appropriate balance of risk and reward which is in the interest of consumers, who ultimately pay for the costs of system operation.

Ofgem continues to consider it appropriate to set symmetrical upside and downside sharing factors and symmetrical cap and floor values, as included in the Initial Proposals. Accordingly, the Final Proposals set the sharing factors at 50 per cent, the cap at £40 million and the floor at -£40 million. Ofgem proposes that these sharing factors should also be applied to NGC's SO internal cost incentive.⁵ Setting the same sharing factors for the internal and external SO incentives ensures that NGC's interests are aligned with those of consumers.

Deep SO incentive arrangements

A recent amendment⁶ to the Connection and Use of System Code (CUSC) has more clearly defined existing transmission rights. Ofgem considers that reform of the contractual framework and charging methodologies relating to use of NGC's transmission system and the associated introduction of a deep SO transmission capacity release incentive scheme should continue to be progressed to deliver further benefits to industry participants and consumers.

In its Initial Proposals, Ofgem proposed the introduction of a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system. NGC has advised Ofgem that it does not consider this obligation to be necessary in light of its current obligations. Furthermore, NGC has committed to use all reasonable endeavours to review and, if appropriate, bring forward further proposals for reform of its contractual

⁵ The other parameters of the internal cost incentive (targets, caps and floors) have been set until March 2006.

⁶ CUSC Amendment Proposal CAP043: "Transmission Access – Definition". Alternative Amendment CAP043 was approved by the Authority on 6 February 2003 with effect from 1 April 2003.

framework and charging methodologies, for implementation in April 2004.⁷ NGC considers that such a commitment is consistent with its existing licence conditions relating to obligations in respect of its charging methodologies and system operation. Having considered the representations made by NGC, Ofgem has accepted NGC's assurances, and expects NGC to make substantial progress in updating the contractual framework and charging methodologies in the next year. Ofgem will also be undertaking its own review of NGC's charging methodologies over the same timescales. Therefore, in light of NGC's commitment, and Ofgem's intention to undertake an independent review of NGC's charging methodologies, Ofgem is not now seeking to introduce a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system.

Way forward

This document incorporates a statutory notice of licence modification under section 11 of the Electricity Act 1989 in order to amend NGC's transmission licence to take account of the proposed changes to the SO incentive scheme for the period 1 April 2003 to 31 March 2004.

The statutory notice under section 11 of the Electricity Act 1989 specifies a period of 28 days during which interested parties can make representations or objections to the proposed licence modification, following which revisions to the proposed licence modification will be made if they are considered appropriate. Responses should be submitted in writing by 17 April 2003.

This timetable means that the consultation process in relation to NGC's SO incentive scheme to apply from 1 April 2003 until 31 March 2004 will not be completed until after 1 April 2003. However, subject to consideration of responses to the statutory notice and NGC's consent to the making of the proposed licence modification, the proposed modification to the transmission licence introduced will apply from 1 April 2003, notwithstanding the date of the direction to modify NGC's licence (i.e. it will have retrospective effect to 1 April 2003 notwithstanding the date of introduction).

⁷ NGC's commitments are detailed in paragraphs 6.14 to 6.16.

If NGC does not accept Ofgem's Final Proposals, the proposed SO incentive scheme for the period 1 April 2003 to 31 March 2004 will be referred by Ofgem to the Competition Commission for final adjudication.

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1. Introduction

Purpose of this document

- 1.1. This document sets out Ofgem's Final Proposals for National Grid Company plc's ("NGC") System Operator ("SO") incentives to apply from 1 April 2003 to 31 March 2004 and also includes the accompanying statutory notice in respect of proposed modification to NGC's electricity transmission licence⁸. Given the consultation period required by section 11 of the Electricity Act 1989, this means that the proposed modification, when introduced, will have retrospective effect and will apply from 1 April 2003 regardless of the date on which the direction to modify NGC's licence is made.
- 1.2. These proposals are intended to improve the incentives on NGC to operate the England and Wales transmission system in an economic, efficient and co-ordinated manner, which is in the interest of consumers, who ultimately pay for the costs of system operation.

Ofgem's Initial Proposals

- 1.3. In October 2002, Ofgem published an Initial Consultation⁹ on NGC's incentives to apply from 1 April 2003. Following consideration of respondents' views to the Initial Consultation, Ofgem considered it appropriate to adopt a phased approach to introducing "deep" SO incentives for NGC. The first stage (Phase 1), intended to apply from 1 April 2003 to 30 September 2003, was to introduce a new 6 month "shallow" incentive scheme. Phase 2 would apply from 1 October 2003 onwards. Subject to the introduction of contractually firm tradable entry and exit transmission rights by 1 October 2003, Ofgem would introduce a SO balancing incentive and a SO transmission capacity buy-back incentive both of which would last until 31 March 2006. In addition, as soon as possible after 1 October 2003 and no later than 1 April 2004, Ofgem intended

⁸ Appendix 1 contains a statutory notice in respect of the licence modifications. Appendix 2 provides a marked-up version of the proposed licence modifications.

⁹ 'NGC system operator incentive scheme 2003/04 – 2005/06, Initial consultation document', Ofgem, October 2002.

to deepen the SO incentives by introducing a SO transmission capacity release incentive.

- 1.4. These proposals were intended to improve the incentives on NGC to operate the England and Wales transmission system in an economic, efficient and co-ordinated manner. In particular, the proposals were designed to improve the incentives on NGC to expand the England and Wales transmission system in a timely way in response to market participants' signals of changing requirements for transmission capacity rights. Customers (final consumers) would benefit as they ultimately pay for the costs of system operation. At the same time, the phased implementation was designed to provide the necessary time to introduce a revised regime for the sale of transmission capacity to be developed via a transparent and inclusive process.
- 1.5. The remainder of this document focuses on the shallow SO incentive scheme to apply in Phase 1 from 1 April 2003 to 31 March 2004.
- 1.6. To set the target for the incentive scheme in Phase 1, Ofgem analysed NGC's historic costs since the introduction of NETA and its forecast costs. Ofgem's proposed options for the incentive scheme parameters, in the context of an annual scheme, are outlined in Table 1.1. Ofgem defined the range within which the final target value was likely to be set and also suggested three alternative sets of sharing factors, caps and floors. As the proposed incentive scheme was intended to be 6 months in duration, Ofgem proposed that the monetary parameters (target, cap and floor) for the 6 month scheme would be set to be 45 per cent of the annual figures, based on historic seasonal cost patterns.

Table 1.1 – Ofgem's Initial Proposals options, based on NGC's cost forecasts, for the SO incentive scheme from 1 April 2003 to 30 September 2003 (money of the day, annualised basis)

| Parameter | 2002/03 | 2003/04 | | |
|-------------------------|--------------|---------------------------------------|--------------|--------------|
| | | Option 1 | Option 2 | Option 3 |
| Target | £460 million | Between £376 million and £436 million | | |
| Upside sharing factor | 60% | 50% | 50% | 55% |
| Downside sharing factor | 50% | 50% | 50% | 55% |
| Cap | £60 million | £50 million | £40 million | £50 million |
| Floor | -£45 million | -£50 million | -£40 million | -£50 million |

- 1.7. Ofgem also proposed the introduction of a new licence obligation on NGC to use all reasonable endeavours to put in place transmission arrangements based around the allocation of contractually firm, tradable entry and exit transmission capacity rights. In addition, Ofgem asked NGC to review those aspects of its connection charging methodology related to shared assets and termination amounts to ensure that its connection charges are fully shallow.

Responses to the Initial Proposals – Phase 1

- 1.8. Ofgem received 22 responses,¹⁰ including NGC's, to the Initial Proposals document in relation to Phase 1 and a list of those who responded is provided in Appendix 3. The views of all respondents to this consultation have been taken into consideration during the development of this Final Proposals document for Phase 1 of NGC's SO incentive scheme from 1 April 2003.

Respondents' views

- 1.9. Most respondents to the Initial Proposals supported the extension of the present shallow SO balancing incentive scheme. Respondents additionally supported putting in place a shallow scheme for one year rather than the 6 month scheme proposed by Ofgem. This was due, in particular, to the view that more time was needed to consider reforms to transmission access arrangements. NGC continued to support the introduction of a deep SO incentive scheme and considered that deep incentivisation could be introduced from 1 April 2003, decoupled from reforms to transmission access.
- 1.10. Respondents welcomed the proposal for a target within the range of £376 million to £436 million. There was general support for a target in the lower half of the proposed range. The majority of respondents who commented supported the intention to set symmetrical upside and downside sharing factors and also symmetrical cap and floor values. These respondents were of the opinion that this provides an appropriate balance of risk and reward for NGC.

¹⁰ Copies of the non-confidential responses are available on the Ofgem website at the following url: http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=electradingarrangements&levelids=,1_1369 and have been placed in Ofgem's library.

- 1.11. The majority of respondents considered that it would be inappropriate to introduce a reasonable endeavours obligation for NGC to introduce a system of contractually firm, tradable entry and exit transmission rights by 1 October 2003.

NGC's views

- 1.12. NGC was opposed to the introduction of a 6 month incentive scheme to run from 1 April 2003, regarding such a move as a retrograde step. NGC reiterated its support for longer-term incentivisation and stated that it considered it to be feasible to introduce a 3 year balancing incentive from 1 April 2003.
- 1.13. NGC considered that its forecast of £438.3 million for 2003/04 was valid and represented the appropriate target value to consider. NGC confirmed its view that, unless an explicit risk premium is built into the target, the sharing factors and the cap and floor in the scheme should be asymmetric, with a lower downside sharing factor and floor representing an appropriate balance of risk and reward given the low risk nature of the business.
- 1.14. NGC was not supportive of introducing a licence condition to deliver reforms to transmission access by a specified date. NGC did not consider this obligation to be necessary in light of its existing licence conditions relating to obligations in respect of its charging methodologies and system operation. Additionally, NGC considered that the obligation could override existing governance procedures in an inappropriate manner. Furthermore, NGC did not consider the implementation date 1 October 2003 to be achievable, given the extent of the changes to the existing transmission access arrangements that would be required. In addition, NGC expressed concern that it may find itself in a position of having to decide whether to accept a licence obligation as part of the Phase 1 proposals prior to proposals for Phase 2 being established.

Ofgem's Final Proposals – Phase 1

- 1.15. Ofgem has carefully considered the views of respondents and NGC in developing the Final Proposals. Ofgem now considers that, in light of respondents' views, the incentive scheme should be in place for one year rather than six months. Consequently, Ofgem's final proposal is that the Phase 1 SO

incentive scheme should apply for the period 1 April 2003 to 31 March 2004. Additionally, Ofgem initially considered, given NGC's initial forecast of its balancing costs for 2003/04 and respondents' views to the Initial Proposals, that a target in the middle of the £376 million to £436 million range consulted upon would be appropriate. However, in February 2003 NGC provided Ofgem with new information, which it believed needed to be considered by Ofgem before setting any incentive target.

- 1.16. In particular, NGC argued that, though its forecast for overall 2002/03 outturn costs remain at around £404 million, the plant margin for 2003/04 is likely to be approximately 1.8 GW lower than it had assumed in its original November 2002 forecast. Of this reduction, 1.1 GW arises from an increase in the forecast peak demand and the remainder is attributed to additional plant closures and mothballing. As a result of this decrease in plant margin, NGC argued that it would have to contract for additional volumes of reserve (compared with its original November 2002 forecast) to secure the necessary operating margin. NGC translated the increase in operating margin associated with the change in plant margin into an increase in incentivised balancing costs of between £5 million and £22 million, depending on the scenario being considered.
- 1.17. In light of Ofgem's and NGC's statutory duties in relation to security of supply and NGC's position as system operator, Ofgem has carefully considered NGC's new submission and has concluded, based on NGC's latest information, that the plant margin is likely to be lower than NGC originally forecast and, as such, a higher level of reserve holdings is justified.
- 1.18. NGC's new information, together with the operational experience from 1 April 2002 to 31 January 2003 and NGC's forecast for overall 2002/03 outturn costs, which remains at £403.7 million (the same value as it provided for the Initial Proposals), have all been taken into account when setting these proposals. Ofgem's Final Proposals for NGC's Phase 1 SO incentive scheme are shown in Table 1.2. The target value effectively corresponds to the middle of the range presented in the Initial Proposals, but revised to take account of the increase in reserve associated with tighter plant margin.

Table 1.2 – Ofgem’s Final Proposals for the SO incentive scheme from 1 April 2003 to 31 March 2004 (money of the day)

| Parameter | 2002/03 | 2003/04 |
|-------------------------|----------------|----------------|
| Target | £460 million | £416 million |
| Upside sharing factor | 60% | 50% |
| Downside sharing factor | 50% | 50% |
| Cap | £60 million | £40 million |
| Floor | -£45 million | -£40 million |

- 1.19. Overall, Ofgem considers that the parameters of the incentive scheme provide NGC with an appropriate balance of risk and reward which is in the interest of consumers, who ultimately pay for the costs of system operation.
- 1.20. Ofgem continues to consider it appropriate to set symmetrical upside and downside sharing factors and symmetrical cap and floor values, as included in the Initial Proposals. Accordingly, the Final Proposals set the sharing factors at 50 per cent, the cap at £40 million and the floor at -£40 million. Ofgem proposes that these sharing factors should also be applied to NGC’s SO internal cost incentive.¹¹ Setting the same sharing factors for the internal and external SO incentives ensures that NGC’s interests are aligned with those of consumers.

Deep SO incentive arrangements

- 1.21. Ofgem continues to consider that a deep SO transmission capacity release incentive scheme, and the associated long-term firm tradable rights for transmission users, should be introduced as soon as possible, because of the direct and indirect benefits they can bring for industry participants and consumers. A recent amendment¹² to the Connection and Use of System Code (CUSC) has more clearly defined existing transmission rights. Ofgem considers that reform of the contractual framework and charging methodologies relating to use of NGC’s transmission system and the associated introduction of a deep SO transmission capacity release incentive scheme should continue to be progressed to deliver further benefits to industry participants and consumers.

¹¹ The other parameters of the internal cost incentive (targets, caps and floors) have been set until March 2006.

¹² CUSC Amendment Proposal CAP043: “Transmission Access – Definition”. Alternative Amendment CAP043 was approved by the Authority on 6 February 2003 with effect from 1 April 2003.

1.22. In its Initial Proposals, Ofgem proposed the introduction of a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system. NGC has advised Ofgem that it does not consider this obligation to be necessary in light of its current obligations. Furthermore, NGC has committed to use all reasonable endeavours to review and, if appropriate, bring forward further proposals for reform of its contractual framework and charging methodologies, for implementation in April 2004.¹³ NGC considers that such a commitment is consistent with its existing licence conditions relating to obligations in respect of its charging methodologies and system operation. Having considered the representations made by NGC, Ofgem has accepted NGC's assurances, and expects NGC to make substantial progress in updating the contractual framework and charging methodologies in the next year. Ofgem will also be undertaking its own review of NGC's charging methodologies over the same timescales. Therefore, in light of NGC's commitment, and Ofgem's intention to undertake an independent review of NGC's charging methodologies, Ofgem is not now seeking to introduce a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system.

Related issues

British Electricity Trading and Transmission Arrangements ("BETTA")

1.23. Ofgem and the Department of Trade and Industry ("DTI") are committed to working towards the introduction of BETTA in accordance with the timetable announced by the DTI. On 16 January 2003, the DTI confirmed¹⁴ that it intends to have new electricity trading and transmission arrangements covering Great Britain ("GB") in place by April 2005 noting that the Government is committed

¹³ NGC's commitments are detailed in paragraphs 6.14 to 6.16.

¹⁴ See DTI press release "DTI establishes timetable for introduction of British Electricity Transmission and Trading Arrangements (BETTA), 16 January 2003.

to the creation of a GB market as soon as possible so that the benefits of the new system can be quickly realised. It was also indicated that, subject to Parliamentary time being available, Ofgem and the DTI were working towards the introduction of a GB-wide electricity market in October 2004. On 31 January 2003, the draft Bill to introduce these arrangements (the “Electricity (Trading and Transmission)” Bill) was published and it was announced that the Trade and Industry Committee will undertake pre-legislative scrutiny of the draft Bill.¹⁵

- 1.24. Ofgem and DTI have already issued a number of consultation papers concerning the development of BETTA. The background to, and rationale for, the BETTA reforms is set out in a consultation paper of December 2001¹⁶ (the “December 2001 consultation paper”) and a report of May 2002¹⁷ (the “May 2002 report”). Since the publication of the May 2002 report, other consultation papers have been issued by Ofgem/DTI associated with progressing more detailed aspects of the BETTA reforms and related matters.
- 1.25. In June 2002 Ofgem/DTI issued a consultation paper, and in August 2002 a conclusion paper¹⁸, on the process to be followed for identifying the party that is to be the GB system operator. On 17 December 2002, the Minister for Energy and Construction (Mr Brian Wilson) stated that “Licensing of the GB system operator cannot take place until the necessary legislation has received Royal Assent. I am minded to accept the recommendation of the GB system operator Selection Panel that the National Grid Company plc’s application for the role of GB system operator should be accepted.”
- 1.26. In December 2002, Ofgem/DTI issued a series of consultations on matters associated with: the development of the GB Grid Code¹⁹; a Connection and Use

¹⁵See Trade and Industry, Committee Office press notice PN52 – pre-legislative scrutiny of the draft Electricity (Trading and Transmission) Bill.

¹⁶ ‘The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper’, Ofgem, December 2001, 74/01.

¹⁷ ‘The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps’, Ofgem, May 2002, 38/02.

¹⁸ ‘The process for identifying the GB system operator. Key conclusions and invitations for applications. DTI/Ofgem conclusions document’, Ofgem/DTI, August 2002.

¹⁹ ‘The Grid Code under BETTA. Ofgem/DTI consultation on the development of a grid code to apply under BETTA.’, Ofgem/DTI, December 2002, 78/02.

of System Code to apply under BETTA²⁰; a Balancing and Settlement Code to apply under BETTA²¹; the impact of BETTA on the Settlement Agreement for Scotland²²; and the proposed regulatory framework for transmission licensees under BETTA²³.

- 1.27. The activities undertaken by the GB system operator may not be identical to the activities that are remunerated under NGC's SO incentive scheme. Similarly, the activities undertaken by transmission owners under BETTA, including NGC, may not be identical to the activities that are remunerated under NGC's TO price control.
- 1.28. Whilst it is intended that the incentive arrangements applying to NGC in England and Wales will be used as a basis for the incentives to apply to the GB system operator under BETTA, it is recognised that it will be necessary to consider modification to these arrangements in order to reflect the scope of activities, organisational separation and the externalisation of the SO-TO interface under BETTA. Since Ofgem is planning to introduce deep SO arrangements in England and Wales from April 2004, before BETTA is introduced, the proposals will have to be developed on an England and Wales basis although Ofgem will be mindful of the BETTA proposals in developing NGC's deep incentives. Ofgem is also planning to consult on the adjustments to the deep SO incentive scheme for its GB application. In addition, there will be consultations on the extension of the CUSC to GB and the creation of a GB transmission charging methodology.

²⁰ 'The Connection and Use of System Code under BETTA – Ofgem/DTI consultation on a CUSC to apply throughout GB.', Ofgem/DTI, December 2002, 79/02.

²¹ 'The Balancing and Settlement Code under BETTA – Ofgem/DTI consultation on a BSC to apply throughout GB.', Ofgem/DTI, December 2002,80/02.

²² 'The impact on BETTA on the Settlement Agreement for Scotland (SAS) – An Ofgem/DTI consultation.', Ofgem/DTI, December 2002, 81/02.

²³ 'Regulatory framework for transmission licensees under BETTA. Volumes 1-4" Ofgem/DTI consultation paper.', Ofgem/DTI, December 2002, 88/02.

- 1.29. Ofgem considers that the proposals for the role of the GB system operator and transmission owners under BETTA will be compatible with incentive arrangements based upon those currently applying to NGC in England and Wales or upon those relating to deep incentives set out in the Initial Proposals, and that furthermore, the issues to be addressed are similar in each case. Nonetheless, there are likely to be a number of GB specific issues that will need to be taken into account.

The way forward

Licence modification

- 1.30. This document incorporates a statutory notice of the proposed licence modification under section 11 of the Electricity Act 1989 in order to amend NGC's transmission licence to take account of the proposed changes to the SO incentive scheme as of 1 April 2003, covering the period to 31 March 2004.
- 1.31. The statutory notice under section 11 of the Electricity Act 1989 specifies a period of 28 days during which interested parties can make representations or objections to the proposed licence modification, following which revisions to the proposed licence modification will be made if they are considered appropriate.
- 1.32. The consultation process in relation to NGC's SO incentive scheme to apply from 1 April 2003 until 31 March 2004 will not be completed until after 1 April 2003. However, subject to consideration of responses to the statutory notice and NGC's consent to the making of the proposed licence modification, the proposed modification to the transmission licence introduced will apply from 1 April 2003, notwithstanding the date of the direction to modify NGC's licence (i.e. it will have retrospective effect to 1 April 2003 notwithstanding the date of introduction).
- 1.33. If NGC does not accept Ofgem's Final Proposals, the proposed SO incentive scheme for the period 1 April 2003 to 31 March 2004 will be referred by Ofgem to the Competition Commission for final adjudication.

1.34. If you wish to discuss any aspect of this document, please contact any of the following people who will be pleased to help:

- ◆ Sonia Brown – telephone number: 020 7901 7412, fax number: 020 7901 7452, email: sonia.brown@ofgem.gov.uk; or
- ◆ Simon Bradbury – telephone number: 020 7901 7249, fax number: 020 7901 7452, email: simon.bradbury@ofgem.gov.uk.

Outline of this document

1.35. In detail, this document is structured as follows. Chapter 2 discusses the rationale for the Phase 1 proposals. Chapter 3 provides background information in relation to NGC's SO incentive schemes since the implementation of NETA and NGC's performance under these incentive schemes. Chapter 4 summarises respondents' views on Ofgem's Initial Proposals for Phase 1. Chapter 5 discusses NGC's revised forecast of its balancing costs for 2003/04. Chapter 6 contains Ofgem's Final Proposals relating to the incentive scheme to apply from 1 April 2003 to 31 March 2004. Chapter 7 highlights responses to the information and transparency issues included in the Initial Proposals and outlines Ofgem's recommendations going forward. Chapter 8 discusses the statutory notice of proposals for modification to NGC's electricity transmission licence in order to implement the Final Proposals for the SO incentive scheme to apply from 1 April 2003 and until 31 March 2004.

1.36. Appendix 1 contains the statutory notice of the licence modification. Appendix 2 provides a marked-up version of proposed licence modification. Appendix 3 lists the respondents to the Initial Proposals. Appendix 4 provides a breakdown of Incentivised Balancing Cost components since NETA started. Appendix 5 lists those Balancing and Settlement Code (BSC) Modification Proposals and CUSC Amendment Proposals for which Income Adjusting Event provisions will not be applicable. Appendix 6 summarises the current regulatory framework within which the SO incentives are set. Appendix 7 provides details of enhanced information provision requests and possible developments to the transparency of the special condition AA4 reports and the Balancing Principles Statement audit suggested by respondents to the Initial Proposals.

2. Rationale

Issue

- 2.1. NGC's existing incentive scheme was introduced on 1 April 2002 to run until 31 March 2003. Therefore, a new incentive scheme needs to be put in place from 1 April 2003. For the reasons set out in Chapter 1, following consultation, the modification to the transmission licence will apply from 1 April 2003, notwithstanding the date of the direction to modify NGC's licence (i.e. it will have retrospective effect to 1 April 2003 notwithstanding the date of introduction). As discussed in Ofgem's October 2002 Initial Consultation and the December 2002 Initial Proposals document, there are wide ranging issues to take into account when developing new SO incentives.
- 2.2. The Initial Consultation outlined three options for NGC's SO incentive arrangements from 1 April 2003. The three options²⁴ presented were:
- ◆ **Option 1**
a rollover of the current shallow SO incentive scheme for another year;
 - ◆ **Option 2**
a review of the external costs that NGC incurs as SO to provide an enhanced shallow SO incentive scheme perhaps with a longer duration than the first two schemes under NETA; and
 - ◆ **Option 3**
a full review of the scope and parameters of the current shallow SO incentive and the introduction of a deep SO incentive scheme that will provide an enduring framework for NGC's incentives.
- 2.3. Ofgem's stated preference was for Option 3; the implementation of a new deep SO incentive scheme together with a full review of balancing costs under NETA. Ofgem considered that Option 3 would improve the incentives on NGC to

²⁴ Additional details regarding the three options can be found in the Initial Consultation document.

operate the transmission system economically, efficiently and in a co-ordinated manner in accordance with its licence. Additionally, Ofgem considered that it would ensure consistency in the arrangements for gas and electricity transmission access arrangements since deep incentives were introduced on Transco, as gas system operator, from April 2002.²⁵ Transco's SO incentives were outlined in Appendix 2 of the Initial Proposals.

- 2.4. Respondents to the Initial Consultation were concerned by the intention to put deep SO incentive arrangements in place by 1 April 2003. Respondents were of the view that it would not be possible to reform the transmission access arrangements by April 2003 in the ways required in order to implement a deep SO incentive scheme. Largely linked to their concerns related to the timetable for implementation, most respondents supported Option 2 (a new shallow incentive).
- 2.5. Following consideration of respondents' views to the Initial Consultation, Ofgem considered it appropriate to adopt a phased approach to introducing "deep" SO incentives for NGC. The first stage (Phase 1), intended to apply from 1 April 2003 to 30 September 2003, was to introduce a new 6 month "shallow" incentive scheme. Phase 2 would apply from 1 October 2003 onwards. Subject to the introduction of contractually firm tradable entry and exit transmission rights by 1 October 2003, Ofgem would introduce a SO balancing incentive and a SO transmission capacity buy-back incentive, both of which would last until 31 March 2006. In addition, as soon as possible after 1 October 2003 and no later than 1 April 2004, Ofgem intended to deepen the SO incentives by introducing a SO transmission capacity release incentive.
- 2.6. Most respondents to the Initial Proposals supported the extension of the present shallow SO balancing incentive scheme. Respondents additionally supported putting in place a shallow scheme for one year rather than the 6 month scheme proposed by Ofgem. This was due, in particular, to the view that more time was needed to consider reforms to transmission access arrangements. NGC continued to support the introduction of a deep SO incentive scheme and

²⁵ Transco's NTS SO incentives were implemented on 27 September 2002 and following implementation apply retrospectively from 1 April 2002.

considered that deep incentives could be introduced from 1 April 2003, decoupled from reforms to transmission access arrangements.

- 2.7. Ofgem has carefully considered the views of respondents and NGC in developing the Final Proposals. Ofgem now considers that, in light of respondents' views, the incentive scheme should be in place for one year rather than six months. Consequently, Ofgem's final proposal is that the Phase 1 SO incentive scheme should apply for the period 1 April 2003 to 31 March 2004. Additionally, Ofgem initially considered, given NGC's initial forecast of its balancing costs for 2003/04 and respondents' views to the Initial Proposals, that a target in the middle of the £376 million to £436 million range consulted upon would be appropriate. However, in February 2003 NGC provided Ofgem with new information, which it believed needed to be considered by Ofgem before setting any incentive target.
- 2.8. In particular, NGC argued that, though its forecast for overall 2002/03 outturn costs remains at around £404 million, the plant margin for 2003/04 is likely to be approximately 1.8 GW lower than it had assumed in its original November 2002 forecast. Of this reduction, 1.1 GW arises from an increase in the forecast peak demand whilst the remainder is attributed to additional plant closures and mothballing. As a result of this decrease in plant margin, NGC argued that it would have to contract for additional volumes of reserve (compared with its original November 2002 forecast) to secure the necessary operating margin. NGC translated the increase in operating margin associated with the change in plant margin into an increase in incentivised balancing costs of between £5 million and £22 million, depending on the scenario being considered.
- 2.9. In light of Ofgem's and NGC's statutory duties in relation to security of supply and NGC's position as system operator, Ofgem has carefully considered NGC's new submission and has concluded, based on NGC's latest information, that the plant margin is likely to be lower than NGC originally forecast and, as such, a higher level of reserve holdings is justified.

Objective

- 2.10. Ofgem continues to consider that a deep SO transmission capacity release incentive scheme and the associated long-term firm tradable rights for transmission users, should be introduced as soon as possible, because of the direct and indirect benefits they can bring for industry participants and consumers. However, it is important that sufficient time is allowed for consultation on the changes to the contractual framework and charging methodologies required to implement such a scheme.
- 2.11. Accordingly, Ofgem continues to consider that it is appropriate to develop a phased approach to introducing a deep SO incentive scheme for NGC, with specific objectives associated with each phase of the new incentive arrangements. Implementing an interim shallow incentive to apply during Phase 1 is intended to allow for the development and subsequent implementation of Phase 2. Additionally, implementing an interim shallow incentive ensures that NGC continues to be appropriately incentivised during Phase 1 to manage the costs of system operation so participants, and ultimately consumers, benefit.

Policy

- 2.12. NGC's revised forecast, together with the operational experience from 1 April 2002 to 31 January 2003 and NGC's forecast for overall 2002/03 outturn costs, which remains at £403.7 million (the same value as it provided for the Initial Proposals), have all been taken into account in setting the final proposals.
- 2.13. Ofgem's Final Proposals are that the shallow incentive scheme shown in Table 2.1 should last for 12 months from 1 April 2003 to 31 March 2004.

Table 2.1 – Ofgem's Final Proposals for the SO incentive scheme from 1 April 2003 to 31 March 2004 (money of the day)

| Parameter | 2002/03 | 2003/04 |
|-------------------------|----------------|----------------|
| Target | £460 million | £416 million |
| Upside sharing factor | 60% | 50% |
| Downside sharing factor | 50% | 50% |
| Cap | £60 million | £40 million |
| Floor | -£45 million | -£40 million |

- 2.14. Overall, Ofgem considers that the parameters of the incentive scheme provide NGC with an appropriate balance of risk and reward which is in the interest of consumers, who ultimately pay for the costs of system operation.
- 2.15. Ofgem also continues to consider it appropriate to set symmetrical upside and downside sharing factors and symmetrical cap and floor values, as included in the Initial Proposals. Accordingly, the Final Proposals set the sharing factors at 50 per cent, the cap at £40 million and the floor at -£40 million. Ofgem proposes that these sharing factors should also be applied to NGC's SO internal cost incentive²⁶. Setting the same sharing factors for the internal and external SO incentives ensures that NGC's interests are aligned with those of consumers.
- 2.16. For the reasons outlined above, Ofgem continues to consider that deep SO incentives should be introduced as soon as possible. A recent amendment²⁷ to the CUSC has more clearly defined existing transmission rights. Ofgem considers that reform of the contractual framework and charging methodologies relating to use of NGC's transmission system and the associated introduction of a deep SO transmission capacity release incentive scheme should continue to be progressed to deliver further benefits to industry participants and consumers.
- 2.17. In its Initial Proposals, Ofgem proposed the introduction of a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system. NGC has advised Ofgem that it does not consider this obligation to be necessary in light of its current obligations. Furthermore, NGC has committed to use all reasonable endeavours to review and, if appropriate, bring forward further proposals for reform of its contractual framework and charging methodologies, for implementation in April 2004.²⁸ NGC considers that such a commitment is consistent with its existing licence conditions relating to obligations in respect of its charging methodologies and system operation. Having considered the representations made by NGC, Ofgem has accepted

²⁶ The other parameters of the internal cost incentive (targets, caps and floors) have been set until March 2006.

²⁷ CUSC Amendment Proposal CAP043: "Transmission Access – Definition". Alternative Amendment CAP043 was approved by the Authority on 6 February 2003 with effect from 1 April 2003.

²⁸ NGC's commitments are detailed in paragraphs 6.14 to 6.16.

NGC's assurances, and expects NGC to make substantial progress in updating the contractual framework and charging methodologies in the next year. Ofgem will also be undertaking its own review of NGC's charging methodologies over the same timescales. Therefore, in light of NGC's commitment, and Ofgem's intention to undertake an independent review of NGC's charging methodologies, Ofgem is not now seeking to introduce a new licence obligation on NGC to use all reasonable endeavours to put in place a revised contractual framework and revised charging methodologies relating to use of its transmission system.

- 2.18. Ofgem has therefore issued a statutory notice proposing to modify NGC's transmission licence to implement the scheme discussed above.

Conclusions

- 2.19. Ofgem considers that the Final Proposals will enhance the incentives on NGC, in its role as SO, to reduce the costs of system operation and to operate the transmission system economically, efficiently and in a co-ordinated manner over the 12 month period from 1 April 2003 to 31 March 2003. This, in turn, will provide benefits to consumers, who ultimately pay for the costs of system operation.

3. NGC's external SO incentive schemes since the implementation of NETA

Introduction

- 3.1. This chapter provides a background to the proposals set out in this document by outlining NGC's first two external cost incentive schemes under NETA. In addition to describing the details of the external cost incentive schemes, it also discusses NGC's performance under them. Further details are provided in Appendix 4.

Background

- 3.2. Under the external SO incentive schemes that have been in place since NETA was introduced, NGC is allowed to recover the actual costs of electricity balancing and system balancing, adjusted by incentive payments or receipts relating to these costs. The value of any incentive payments or receipts depends upon NGC's performance in relation to a cost target set in advance.
- 3.3. If NGC's costs are below the target, it keeps a proportion (set by the upside sharing factor) of the reduction in costs as an incentive payment. Conversely, if its costs are above the target, NGC is charged a proportion (set by the downside sharing factor) of the costs in excess of the target. NGC's overall gains or losses on its balancing costs are limited by applying a cap on payments and a floor on losses. This type of scheme is called a sliding scale or profit sharing scheme. In setting incentive scheme targets, sharing factors, caps and floors, Ofgem aims to provide NGC with an appropriate balance of risk and reward in the interests of customers.

Details of the incentive schemes under NETA

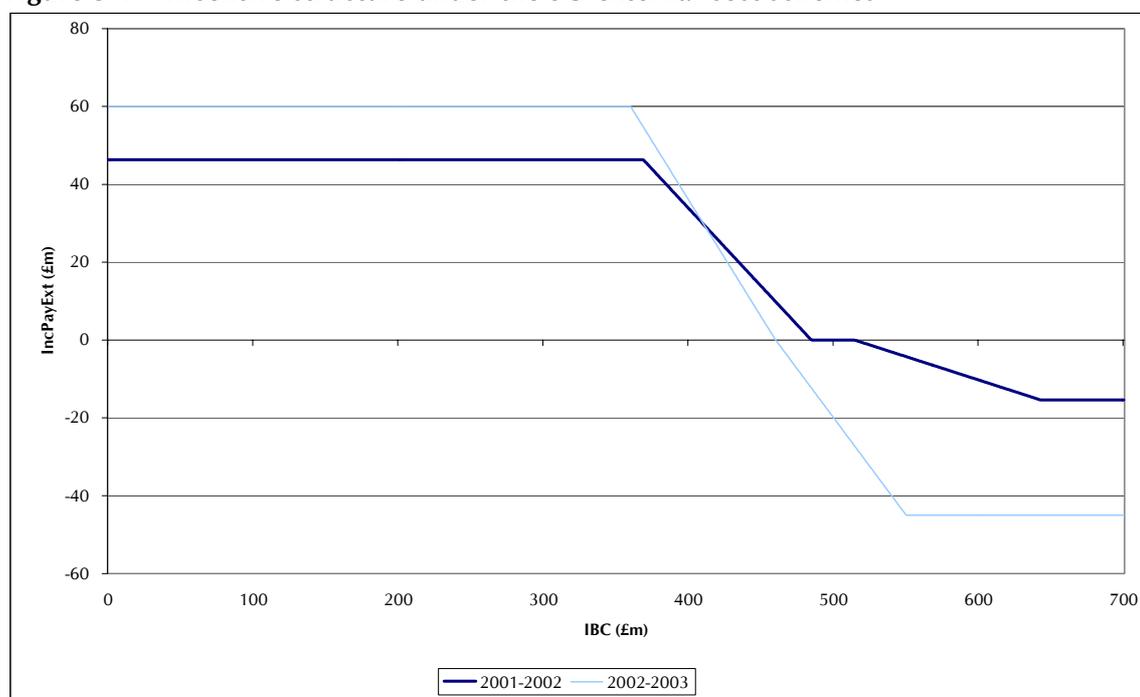
- 3.4. There have been two incentive schemes under NETA. The initial incentive scheme ran from 27 March 2001 (the Go-Live date for NETA) to 31 March 2002. The current SO incentive scheme started on 1 April 2002 and is due to expire on

31 March 2003. NGC's current external cost incentive has substantially the same form as the initial scheme under NETA, but with a lower cost target. The parameters of both the initial and the current external cost incentive schemes are outlined in Table 3.1. The structure of the external cost incentive schemes is shown graphically in Figure 3.1.

Table 3.1 – SO external cost incentive parameters since Go-Live (money of the day)

| Parameter | Initial scheme ²⁹ | Current scheme |
|-------------------------|----------------------------------|----------------|
| Target | £484.6 million to £514.4 million | £460 million |
| Upside sharing factor | 40% | 60% |
| Downside sharing factor | 12% | 50% |
| Cap | £46.3 million | £60 million |
| Floor | -£15.4 million | -£45 million |

Figure 3.1 – Incentive structure under the SO external cost schemes



3.5. The lower target for the current incentive scheme reflects NGC's improved understanding of operating the system under NETA gained during the first year of NETA.

²⁹ The figures presented in relation to the initial incentive scheme represent the finalised parameters for the scheme following adjustments to reflect that the scheme was 370 days in duration, not 365 days, and inflation indexation at 1.5%.

3.6. NGC's incentive payment under the scheme is determined by the level of its Incentivised Balancing Costs (IBC) at the end of the incentive period. IBC are calculated from a number of different components:

- ◆ the cost of bids and offers in the Balancing Mechanism accepted in the relevant period less the total non-delivery charge³⁰ for that period. This is referred to as Daily System Operator Balancing Mechanism Cashflow (CSOBM);
- ◆ the costs of contracts for the availability or use of balancing services, excluding costs within CSOBM (but including charges made by the SO for the provision of balancing services to itself), i.e. this component consists of the costs of balancing services not procured through the Balancing Mechanism;
- ◆ the volume of transmission losses multiplied by the Transmission Losses Reference Price (TLRP) for each Settlement Period, summed across all Settlement Periods; and
- ◆ the system imbalance volume multiplied by the Net Imbalance Volume Reference Price (NIRP) for each Settlement Period, summed across all Settlement Periods. This factor, the Net Imbalance Adjustment (NIA) is deducted from CSOBM to reflect the fact that NGC has little control over the extent to which participants choose not to balance their positions.

3.7. In addition, there are two special provisions within NGC's Transmission Licence for allowed income adjustments³¹ and revenue from the provision of balancing services to others.

³⁰ Non-delivery charges relate to payments as a result of participants failing to deliver Balancing Mechanism bids or offers that have been accepted by NGC.

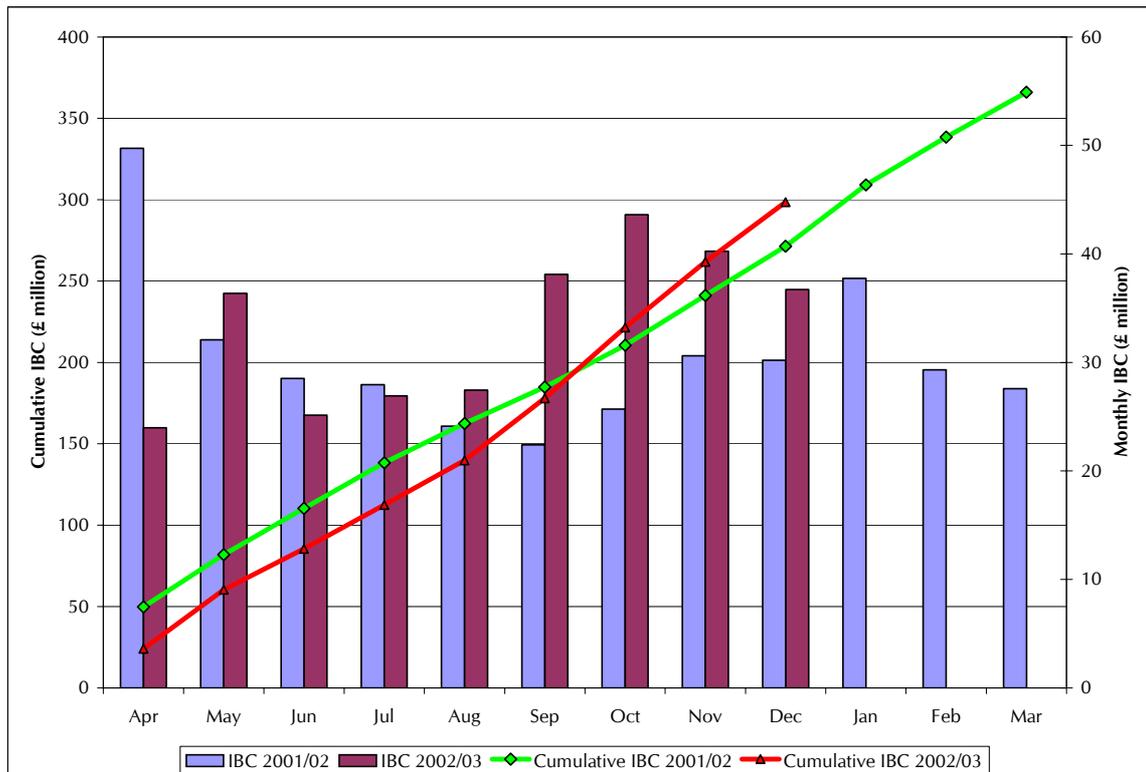
³¹ In certain circumstances, Ofgem may grant NGC entitlement to additional revenue following an Income Adjusting Event.

NGC's performance under the SO incentive schemes since the implementation of NETA

Incentivised balancing costs

3.8. NGC's total IBC, on a monthly and cumulative basis, under each incentive scheme are shown in Figure 3.2.

Figure 3.2 – Monthly and cumulative IBC under each incentive scheme³²



3.9. In the initial incentive period under NETA, IBC totalled approximately £366 million. As a result, NGC received the maximum (cap) payment of £46.3 million under its SO external cost incentive. This reflected the fact that, over the first year of NETA, NGC substantially reduced the level of SO costs and therefore its performance was rewarded under its incentive scheme. As a result of the substantial reduction in SO balancing costs, Ofgem was able to set the target for the current SO external cost incentive around £20 million lower than the original incentive scheme target.

- 3.10. Despite winter 2002/03 including the highest recorded demand, NGC's forecast of outturn IBC for the whole of 2002/03 remains unchanged from that included in the Initial Proposals document at £403.7 million, approximately £38 million higher than its costs in 2001/02. Such an outturn would result in an incentive payment to NGC of £33.8 million.
- 3.11. A straight line extrapolation of the IBC for the first nine months of the current incentive scheme (cumulative IBC was £298.5 million for this period) yields a cost of £396.2 million for the current incentive scheme, which would equate to NGC receiving a payment of £38.3 million.

Conclusions

- 3.12. NGC has made good progress in reducing the overall level of SO costs since Go-Live. This is likely, at least in part, to reflect NGC's improved understanding of operating the system under NETA and its response to the incentives.
- 3.13. In the first year under NETA, IBC totalled approximately £366 million and NGC received the maximum incentive payment of £46.3 million. Under the current scheme, both an extrapolation of the costs to date and NGC's forecast suggest that IBC will again be significantly lower than the target, resulting in NGC receiving a payment of £38.3 million or £33.8 million respectively for 2002/03.

³² Data for March 2001 is added to data for April 2001 in this graph.

4. Responses to Ofgem's Initial Proposals

Introduction

- 4.1. This chapter summarises Ofgem's Initial Proposals and then outlines respondents' views, including NGC, on those proposals.

Ofgem's Initial Proposals

- 4.2. Following consideration of the views of respondents, including NGC, to the Initial Consultation, Ofgem considered it appropriate to adopt a phased approach to introducing a deep SO incentive scheme for NGC.

Incentive scheme parameters

Duration

- 4.3. In Phase 1, Ofgem proposed a shallow incentive scheme to run for 6 months from 1 April 2003 until 30 September 2003. This was to allow time for the industry, including NGC, to develop proposals for new transmission access arrangements, which Ofgem consider necessary to implement deep SO incentives.

Target, sharing factors, cap and floor

- 4.4. To set the target for the incentive scheme in Phase 1, Ofgem analysed NGC's historic costs since the introduction of NETA and NGC's forecast costs. Ofgem's proposed options for the incentive scheme parameters, in the context of an annual scheme, are outlined in Table 4.1.

Table 4.1 – Ofgem’s Initial Proposals options, based on NGC’s cost forecasts, for the SO incentive scheme from 1 April 2003 to 30 September 2003 (money of the day, annualised basis)

| Parameter | 2002/03 | 2003/04 | | |
|-------------------------|--------------|---------------------------------------|--------------|--------------|
| | | Option 1 | Option 2 | Option 3 |
| Target | £460 million | Between £376 million and £436 million | | |
| Upside sharing factor | 60% | 50% | 50% | 55% |
| Downside sharing factor | 50% | 50% | 50% | 55% |
| Cap | £60 million | £50 million | £40 million | £50 million |
| Floor | -£45 million | -£50 million | -£40 million | -£50 million |

- 4.5. Ofgem’s initial proposal was that the 2003/04 annual target for NGC’s external costs should lie in the range £376 million to £436 million. This range was £84 million to £24 million below the current 2002/03 target of £460 million. £436 million was NGC’s mean forecast of its incentivised balancing costs whilst £376 million was linked to NGC’s “business as was” scenario³³ (one of six scenarios used by NGC to build up its forecasts, all of which included NGC’s forecast increase in the cost of transmission constraints from an estimated £28.4 million in 2002/03 to £48 million in 2003/04). In both cases, the only adjustment Ofgem made was to include an adjustment for a lower Transmission Losses Reference Price (TLRP) than that assumed by NGC (see below).
- 4.6. As Table 4.1 shows, Ofgem presented three possible sets of options for the sharing factors, cap and floor. Ofgem considered that symmetric cap and floor values and sharing factors would provide the best deal for customers and an appropriate balance of risk and reward for NGC. Accordingly, the cap and floor values and the sharing factors in the options presented were symmetric. Additionally, Ofgem considered that the sharing factors for the SO internal cost scheme should continue to be the same as those in the SO external incentive to align the interests of NGC with those of customers.

45 per cent adjustment to derive 6 month scheme parameters

- 4.7. As the proposed incentive scheme was intended to be 6 months in duration, Ofgem proposed that the monetary parameters (target, cap and floor) would be set at 45 per cent of the annual figures. The 45 per cent value was based upon historic cost patterns.

³³ This was based on system conditions as seen from October 2001 to September 2002.

Transmission Losses Reference Price

- 4.8. Ofgem continued to propose that the TLRP should be modified to reflect forward prices. On the basis of prevailing forward prices, Ofgem proposed a reduction in TLRP from £18.50/MWh, the current incentive scheme value, to £17.00/MWh. NGC had assumed a value of £17.50/MWh in its forecasts.

Modifications to the BSC and the CUSC

- 4.9. Ofgem proposed that the Income Adjusting Event (IAE)³⁴ provisions should not be applicable for BSC Modification Proposals and CUSC Amendment Proposals being progressed at the time when the Final Proposals in relation to Phase 1 are published. Ofgem indicated that the final incentive scheme parameters in relation to Phase 1 would take account of all the proposed changes to the BSC and the CUSC that are likely to have an impact on the SO incentive arrangements. This allowance would be made without prejudice to the Authority's decisions in respect of the modifications and amendments.

Transmission arrangements

- 4.10. Ofgem proposed the introduction of a new licence obligation on NGC similar to the licence condition which Transco has relating to reforming the gas exit arrangements. The licence condition would require NGC to use all reasonable endeavours to put in place transmission access arrangements based around the allocation of contractually firm, tradable entry and exit transmission capacity rights.
- 4.11. Additionally, Ofgem asked NGC to review those aspects of its connection charging methodology relating to shared assets and termination amounts to ensure that all connection charges are fully shallow, i.e., participants connecting to the transmission system only pay for the non-shared assets directly required to connect them to the system and not for any system reinforcement.

³⁴ It should be noted that raising an IAE generally requires a materiality threshold of £2 million to have been exceeded.

Respondents' views

Incentive scheme parameters

Duration

- 4.12. While supportive of the intention to implement an interim shallow SO incentive in Phase 1, the majority of respondents considered a scheme lasting 12 months to be more appropriate than a 6 month scheme. Respondents considered that a 12 month scheme would continue the effective annual incentivisation under which NGC has operated since Go-Live. Additionally, an annual scheme was considered to be more consistent with the annual cycle of costs. Furthermore, the general view was that 6 months was not a sufficiently long enough to develop the reforms required to implement Phase 2. Respondents considered that extending Phase 1 to 12 months would offer a more realistic timetable for progressing the implementation of these reforms.

Target

- 4.13. Respondents welcomed the proposal for a target within the range of £376 million to £436 million, as this would be tighter than the target of both the 2001/02 and 2002/03 SO external cost incentives. There was general support for a target in the lower half of the proposed range. Specific target values of £376 million, £390 million and £407 million were suggested.

Sharing factors, cap and floor

- 4.14. The majority of respondents who commented on this issue supported Ofgem's intention to set symmetrical upside and downside sharing factors and also symmetrical cap and floor values. These respondents were of the opinion that this would provide an appropriate balance of risk and reward for NGC.
- 4.15. Three respondents favoured the parameters suggested in Option 2 within the December 2002 Initial Proposals document (50 per cent sharing factors, £40 million cap and -£40 million floor). Another respondent suggested a scheme with 50 per cent sharing factors, with the largest possible cap and the smallest possible floor. A further respondent considered that the incentive should have

no cap or floor. This respondent also considered that the proposed sharing factors were higher than is actually necessary to create incentives for NGC and suggested 10 per cent as a more appropriate figure. One other respondent also endorsed lower sharing factors.

- 4.16. Additionally, respondents were supportive of the intention to set the sharing factors for NGC's SO internal cost incentive to be the same as for the SO external cost incentive.

45 per cent adjustment to derive 6 month scheme parameters

- 4.17. Whilst respondents were generally opposed to the implementation of a 6 month scheme, preferring instead a 12 month scheme, several provided comments in relation to Ofgem's proposal to set the monetary parameters for the 6 month scheme at 45 per cent of the annualised values. Three respondents were of the opinion that a 45 per cent adjustment would be appropriate in order to derive 6 monthly parameters. One respondent considered that a value of 45 per cent was inappropriate as it was based on limited historical data, but suggested no alternative value.

Transmission Losses Reference Price

- 4.18. Those who commented on this issue were supportive of the intention to reduce TLRP from its current level of £18.50/MWh. Two respondents supported Ofgem's proposal to set TLRP at £17.00/MWh while one respondent suggested a further reduction to set TLRP at £16.75/MWh based on prevailing forward prices.

Modifications to the BSC and the CUSC

- 4.19. Those who responded on this issue were supportive of the intention to continue with the current methodology for dealing with modifications to the BSC and amendments to the CUSC.
- 4.20. One respondent suggested that a more flexible approach would be to:

- ◆ publish the magnitudes of the adjustments to the target being made for “in progress” modifications (and the assumptions used to create these adjustments); and
- ◆ allow Ofgem to back out these adjustments should the modifications not be approved or not be approved in the previously anticipated timescale.

Transmission arrangements

- 4.21. The majority of respondents considered that it would be inappropriate to introduce a reasonable endeavours obligation for NGC to introduce a system of contractually firm, tradable entry and exit transmission rights by 1 October 2003. Several factors were cited as reasons for opposition to this measure.
- 4.22. Respondents were concerned that the proposal raised potential governance issues given that Ofgem, via the obligation, is requesting modifications in relation to transmission access reforms on which it will ultimately have to make a decision. Respondents considered that this could compromise Ofgem’s position when making such decisions.
- 4.23. Respondents also stated that the industry is yet to be convinced of the benefits of transmission access reforms. Until a convincing case is presented, they considered that it would be inappropriate to force NGC to deliver such reforms via the application of a licence obligation. If transmission access reforms are proven to be beneficial, respondents considered that it would be more appropriate to progress these reforms on a GB basis following the introduction of BETTA.³⁵
- 4.24. Finally, respondents considered that it would be inappropriate to require the introduction of contractually firm, tradable entry and exit transmission rights by 1 October 2003, given the complexity of the reforms required. Respondents considered such a timetable to be unrealistic and, in the event that a reasonable endeavours obligation is introduced, NGC should be allowed more time. An extension to at least 1 April 2004 was suggested.

- 4.25. In relation to the connection charging methodology review, two respondents supported the requirement for a consistently shallow connection charging methodology under a system of contractually firm, tradable transmission capacity rights. Two further respondents were unclear as to the intention of the connection charging methodology review in connection with deep SO incentives.

NGC's views

- 4.26. NGC continued to support a longer-term deep SO incentive but considered that such arrangements could be implemented without any extensive changes to the transmission access regime, other than those already brought forward, particularly CUSC Amendment Proposal CAP043: "Transmission Access – Definition".³⁶

Incentive scheme parameters

Duration

- 4.27. NGC was opposed to the introduction of a 6 month incentive scheme to run from 1 April 2003, regarding such a move as a retrograde step. It argued that implementing a 6 month scheme would not build upon the experience gained, and value delivered, through the annual incentive schemes since Go-Live. NGC additionally stated that it considered that implementing a 6 month scheme would be contrary to Ofgem's stated preference for longer term incentives. NGC reiterated its support for longer-term incentivisation and stated that it considered it to be feasible to introduce a 3 year balancing incentive from 1 April 2003.
- 4.28. NGC stated that its subsequent comments in relation to Phase 1 should be taken in the overall context that it disagrees with the notion of a 6 month incentive scheme.

³⁵ These responses were made before the DTI announcement on 16 January 2003 which stated the intention to implement BETTA in October 2004 and by April 2005 at the latest as opposed to 1 April 2004.

³⁶ Alternative Amendment CAP043 was approved on 6 February 2003 with effect from 1 April 2003.

Target

- 4.29. NGC remained of the view that its forecast of £438 million for 2003/04 is valid and represents the most appropriate target value to consider.

Sharing factors, cap and floor

- 4.30. NGC confirmed its view that the sharing factors and the cap and floor in the scheme should be asymmetric, unless an explicit risk premium is built into the target, with a lower downside sharing factor and floor representing an appropriate balance of risk and reward given the low risk nature of the business.

45 per cent adjustment to derive 6 month scheme parameters

- 4.31. NGC considered that the current outturn data since Go-Live is insufficient to establish a clear seasonal pattern upon which to set the adjustment at 45 per cent. NGC recommended, in light of this uncertainty, that a 50 per cent adjustment factor would be more appropriate. NGC considered that the same adjustment factor should be applied to the target, cap and floor.

Modifications to the BSC and the CUSC

- 4.32. NGC generally agreed with the continuation of the current methodology of dealing with modifications to the BSC and the CUSC. However, it did not consider that this methodology should be applied to BSC Modification Proposal P80: "Deemed Bid/Offer Acceptance for Transmission System Faults". NGC believed that, if implemented, this modification would result in a low probability of it incurring high costs, for which no allowance had been made in its forecast. Therefore, NGC considered that any impact related to Modification Proposal P80 should be dealt with via either the inclusion of a risk allowance in the target or the use of IAE provisions.

Transmission arrangements

- 4.33. NGC was not supportive of introducing a licence condition to deliver reforms to transmission access by a specified date. It expressed concern that it may find itself in a position of having to decide whether to accept a licence obligation as

part of the Phase 1 proposals prior to the Final Proposals for Phase 2 being established.

- 4.34. NGC also considered that the obligation could override existing governance procedures in an inappropriate manner. In particular, NGC was of the view that progressing reform of the transmission access arrangements in parallel with BETTA would be problematic.³⁷ The transmission access reforms would be changing the CUSC in relation to users' rights to access the system during the period when consultations regarding a GB CUSC would be taking place.
- 4.35. Finally, NGC did not consider October 2003 to be an achievable implementation date, given the extent of the changes to existing transmission access arrangements and the associated workload.
- 4.36. In relation to the connection charging methodology review, NGC assumed that the request made by Ofgem was for NGC to continue its ongoing connection charging methodology review, focusing its attention on methods that would remove sharing of connection assets.

Summary

- 4.37. Most respondents to the Initial Proposals supported the extension of the present shallow SO balancing incentive scheme. Respondents additionally supported putting in place a shallow scheme for one year rather than the 6 month scheme proposed by Ofgem. This was due, in particular, to the view that more time was needed to consider reforms to transmission access. NGC continued to support the introduction of a deep SO incentive scheme and considered that deep incentives could be introduced from 1 April 2003, de-coupled from reforms to transmission access.

³⁷ This response was made before the DTI announcement on 16 January 2003 which stated the intention to implement BETTA in October 2004 and by April 2005 at the latest as opposed to 1 April 2004.

5. NGC's revised forecasts

Introduction

- 5.1. In November 2002, NGC submitted to Ofgem forecasts of its balancing costs for 2003/04, which used historic data on balancing prices and volumes for the period October 2001 to September 2002 and a peak demand forecast from its 2002 Seven Year Statement to create a baseline. In February 2003, NGC informed Ofgem that it considered that its original November 2002 forecasts needed to be updated and submitted new information, based on changes in its projections of the likely plant/operating margin in 2003/04. NGC considered that this new information should be assessed by Ofgem before an incentive target was set. This chapter outlines NGC's new information, and Ofgem's views in light of this new information.

NGC's revised forecasts

- 5.2. In February 2003, NGC provided Ofgem with new information on three main cost drivers for next year's SO incentive scheme: the baseline costs and volumes, reserve costs and the plant margin. Each of these cost drivers is discussed below.

Baseline costs and volumes

- 5.3. NGC argued that, over the course of winter 2002/03, it experienced conditions on the transmission network that resulted in it having to take much higher volumes of balancing actions, and incur substantially higher costs, than during the previous winter. In part this was due to the winter of 2001/02 being particularly mild, with the only sustained cold snap occurring during the Christmas to New Year period. This year's winter has resulted in near average cold spell (ACS) conditions at certain times, with conditions in general close to average. NGC maintained that this increase in volumes and costs has occurred despite its continued efforts and innovative actions to contain, and in some instances, reduce these costs.

- 5.4. On the assumption that future winters will have characteristics more similar to winter 2002/03 than winter 2001/02, and an analysis of its costs over winter 2002/03, NGC has concluded that its original November 2002 forecast understated likely future costs. This is because the benign baseline adopted in its previous forecast did not take into account the impact of peak conditions similar to those experienced this winter. In considering what revisions should be applied, NGC has focused on the cost of reserve and the likely plant margin.

Reserve costs

- 5.5. NGC considered that its reserve costs for 2003/04 are likely to be higher than those included in its original November 2002 forecast. NGC argued that this view in part reflects the higher prices for standing reserve services sought by market participants in the 2003/04 standing reserve tender round. NGC stated that the 2003/04 tender round showed a £2 million increase in the standing reserve costs in comparison to its original November 2002 forecast.
- 5.6. In addition, NGC suggested that analysis of the balancing actions it has taken indicates that it has cost on average £75/MWh to procure reserve services. This average reserve price is more than double that assumed in the original November 2002 forecast, which was around £34/MWh.

Plant margin

- 5.7. In addition, NGC considered that the plant margin for 2003/04 is likely to be approximately 1.8 GW lower than it had assumed in the original November 2002 forecast. Of this reduction, 1.1 GW arises from an increase in NGC's forecast ACS³⁸ peak demand³⁹ and the remainder is attributed to likely additional plant closures or mothballing.

³⁸ ACS demand is corrected for weather patterns.

³⁹ This refers to 'restricted' demand, i.e. peak demand net of any notified load management.

5.8. NGC argued that this reduction in plant margin would in turn feed through to tighter operational margins, and therefore result in the holding of additional reserve on the system in order to secure the necessary operating margin. NGC estimated this additional volume to be around 320 GWh. Taking account of its expectation that reserve prices would be higher in 2003/04, NGC estimated that this additional volume would lead to an increase in costs of some £20 million to £30 million, based on an average reserve price of £75/MWh.

Revised forecasts

5.9. On the basis of a revised projection of the plant margin, but using its original reserve prices, NGC has revised its scenario costs as shown in Table 5.1 where they are compared to NGC's original November 2002 scenario costs. Overall, the impact of the revisions is to increase NGC's mean forecast of its incentivised balancing costs by approximately £9 million, with the scenario specific increases ranging between £5 million and £22 million.

Table 5.1 – Original and revised scenario costs for 2003/04 (£ million)

| | Scenario | | | | | | Mean |
|----------|----------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| Original | 376.6 | 408.8 | 389.5 | 425.5 | 555.3 | 701.6 | 436.3 |
| Revised | 386.3 | 416.8 | 394.5 | 430.3 | 572.0 | 723.5 | 445.0 |

5.10. Note that the original and revised forecasts presented in Table 5.1 both incorporate a reduction of £2 million in the allowance for transmission losses from that initially presented by NGC, to be consistent with the approach proposed by Ofgem in the Initial Proposals.⁴⁰

Ofgem's views on NGC's revised forecasts

5.11. Ofgem has carefully considered the new information presented by NGC in February 2003. In particular, Ofgem has analysed NGC's original November 2002 forecasts and examined the effect of NGC's new additional information.

⁴⁰ Ofgem suggested that the transmission losses reference price should be £17.00/MWh rather than the £17.50/MWh assumed by NGC. This change reduces the losses adjustment by £2 million.

- 5.12. Whilst forward prices for winter 2003/04 peak contracts have increased by around 7 per cent since September 2002, to around £19/MWh in February 2003, they remain very significantly below the reserve price that NGC is now suggesting is appropriate (£75/MWh). Ofgem accepts that the peak contract covers a wider range of periods than those in which NGC is likely to be buying additional reserve⁴¹, but it is not persuaded by NGC's argument that its allowance for reserve costs should be increased on price grounds. However, as discussed above, NGC's revised forecasts do not include an allowance for higher reserve prices.
- 5.13. Ofgem accepts NGC's assumption that tighter plant margins will result in tighter operational margins, and that this will result in the need to secure additional reserve holdings. Based on the information provided by NGC, Ofgem has concluded that the plant margin is likely to be lower than in NGC's original November 2002 forecast. In light of Ofgem's and NGC's statutory duties in relation to security of supply and NGC's position as system operator, Ofgem has carefully considered NGC's new submission and has concluded, based on NGC's latest information, that the plant margin is likely to be lower than NGC originally forecast and, as such, a higher level of reserve holdings is justified.

⁴¹ The peak contract covers the period 07:00 to 19:00.

6. Ofgem's proposals for 1 April 2003 - 31 March 2004

Introduction

- 6.1. This chapter outlines Ofgem's Final Proposals for NGC's SO shallow incentive scheme for the period from 1 April 2003 to 31 March 2004. The proposals are intended to enhance the incentives on NGC to operate the England and Wales transmission system in an economic, efficient and co-ordinated manner, which is in the interest of consumers, who ultimately pay for the costs of system operation.
- 6.2. In the Initial Proposals, Ofgem consulted on setting a six month incentive scheme based on an annual target in the range from £376 million to £436 million. The remainder of this chapter details Ofgem's Final Proposals, developed in light of operational experience between 1 April 2002 and 31 January 2003, respondents' views to the Initial Proposals (outlined in Chapter 4), and NGC's revised forecast.

Incentive scheme parameters

Duration

- 6.3. As discussed in Chapter 4, the majority of respondents were in favour of a 12 month scheme, rather than the 6 month scheme originally proposed by Ofgem. Having considered respondents' views on the time required to progress reform of the transmission arrangements, Ofgem has revised its proposals and considers that the new incentive scheme should last for 12 months from 1 April 2003 to 31 March 2004. This will serve to continue the effective annual incentivisation under which NGC has predominantly operated since 1994. The setting of an annual scheme will also allow additional time for the development of the incentive arrangements, to include deeper incentives and with a potentially longer duration.

Target

- 6.4. Ofgem's proposed new target value takes into account both respondents' views that NGC should face a more challenging target than the initial incentive scheme under NETA and the current SO incentive scheme, and the revised forecast of its balancing costs for 2003/04 submitted by NGC, which incorporates more up to date operational experience.
- 6.5. Ofgem originally considered, given NGC's initial forecast of its balancing costs for 2003/04 and respondents' views to the Initial Proposals, that a target in the middle of the £376 million to £436 million range consulted upon was appropriate. However, as discussed in the previous chapter, prior to the publication of these proposals NGC provided Ofgem with revised forecasts, which it believed needed to be considered by Ofgem when setting any incentive target, Ofgem's assessment of which was discussed in Chapter 5.
- 6.6. Applying the same methodology to the revised forecast as that adopted in the Initial Proposals to derive a range for the target value, yields a revised range of £386 million to £445 million. Ofgem still considers that a target in the middle of the revised range is appropriate and therefore proposes that the target value for NGC's balancing incentive from 1 April 2003 should be £416 million.⁴²

Sharing factors, cap and floor

- 6.7. The majority of respondents who commented on this issue supported Ofgem's intention to set symmetrical upside and downside sharing factors and symmetrical cap and floor values. Ofgem continues to consider that, in the absence of clear evidence of asymmetric cost distributions, symmetrical upside and downside sharing factors and symmetric cap and floor values reflect an appropriate balance between the interests of customers and NGC. Accordingly, the Final Proposals set the sharing factors at 50 per cent, the cap at £40 million and the floor at -£40 million.

⁴² As a one year scheme is now being proposed, it is no longer necessary to consider an adjustment factor to derive the monetary parameters for a 6 month scheme.

- 6.8. In order to ensure consistency between NGC's internal and external SO incentive schemes, Ofgem remains of the view that the sharing factors defined in relation to the internal scheme be modified in line with these proposals relating to the external scheme. Therefore, Ofgem proposes that the internal incentive scheme sharing factors be set at 50 per cent.

Transmission Losses Reference Price

- 6.9. Ofgem notes that respondents supported the intention to reduce TLRP from its current level of £18.50/MWh. Ofgem proposes that, in line with prevailing forward prices, TLRP be set at £17.00/MWh from 1 April 2003.

Modifications to the BSC and the CUSC

- 6.10. In light of support received from respondents, Ofgem proposes a continuation of the current methodology for dealing with modifications to the BSC and the CUSC which may affect the balancing costs faced by NGC. Therefore, the target value takes account of outstanding BSC Modification Proposals and CUSC Amendment Proposals. Where appropriate, subsequent modifications will be dealt with via Income Adjusting Events. Appendix 5 contains lists of those BSC Modification Proposals and CUSC Amendment Proposals for which Income Adjusting Event provisions will not be available.

Transmission arrangements

- 6.11. Ofgem's Initial Proposals suggested the introduction of a reasonable endeavours obligation into NGC's transmission licence for the creation and allocation of firm tradable capacity rights from 1 October 2003 and requested that NGC review those aspects of its connection charging methodology related to shared assets and termination amounts to ensure that its connection charges are fully shallow.
- 6.12. Ofgem notes that the majority of respondents considered that it would be inappropriate to introduce a reasonable endeavours obligation for NGC to introduce a system of contractually firm, tradable entry and exit transmission rights by 1 October 2003. Ofgem also notes, as discussed in the next section,

that NGC has advised that it does not consider this obligation to be necessary in light of its current obligations.

NGC's commitments

6.13. NGC has a number of existing obligations in respect of developing, maintaining, operating and charging for the transmission system as follows:

- ◆ under Section 9 of the Electricity Act, it has a duty to develop and maintain an efficient, co-ordinated and economical system of electricity transmission;
- ◆ under special condition AA4 of the Transmission Licence, it has an obligation to operate the transmission system in an efficient, economic and co-ordinated manner;
- ◆ under Conditions C7 and C7A of the Transmission Licence, it has an obligation to develop a use of system charging methodology and to keep it under review at all times and make such modifications as may be requisite for the purposes of better achieving the relevant objectives (these latter including compliance of the methodology with facilitation of competition and with cost reflectiveness); and
- ◆ under Condition C7B, it has analogous obligations with respect to connection charging methodology.

6.14. In light of these obligations, NGC has committed to use all reasonable endeavours to review and, if appropriate, bring forward proposals for reform of the contractual framework and charging methodologies, for implementation in April 2004, in respect of:

- ◆ charges for the provision of a connection to the transmission system that represent the cost of connection attributable to a single user, and that encourage competition in the provision of connections;
- ◆ the investment cost signals given by Transmission Network Use of System (TNUoS) charges, specifically looking at the marginal costing method and the locational signals provided by the charges;

- ◆ the time period over which TNUoS charges apply, looking specifically at charges applicable to periods of less than one year and greater than one year;
- ◆ the treatment of competing requests for new transmission capacity in the offer and modification processes set out in the CUSC;
- ◆ the treatment of licence exempt embedded generators and the appropriate recovery of costs which they impose on the transmission system, against the background of policies designed to encourage the development of such generation; and
- ◆ the provision of firm transmission rights, compensation for disconnection and remedies for breach of access rights.

6.15. Whilst NGC will be considering firm transmission rights in respect of both entry and exit, the Transmission Access Standing Group during 2002, and recent Charging Methodology discussions on modifying the triad charging mechanism, have identified a number of complex issues associated with exit capacity, including those associated with the facilitation of competition in supply. Given these issues, NGC believes that the identification of a solution for exit arrangements is likely to be more problematic than for entry, with implementation of any comprehensive solution by April 2004 unlikely.

6.16. However, NGC recognises that it is important that, as far as is possible, progress is made on the exit arrangements, in line with its commitments on other elements of the contractual framework and charging methodologies. NGC will therefore initially focus on, and, if appropriate, bring forward proposals in respect of:

- ◆ the charging base upon which to levy demand TNUoS charges; and
- ◆ the basis for the calculation of demand TNUoS charges.

6.17. In addition to and in parallel with NGC's review, Ofgem intends to invite views on NGC's transmission charging methodology, so as to be in a position to assess any proposals for change that NGC brings forward. It is Ofgem's view that the

combination of NGC's existing licence obligations, NGC's commitments and Ofgem's own charging methodology review provide sufficient assurance that significant developments, consistent with the thrust of Ofgem's reform principles, will be in place by 1 April 2004, in time for the introduction of revised incentive arrangements, i.e. Phase 2.

Connection assets

- 6.18. Ofgem additionally requested that NGC review its charging methodology in relation to connections involving shared assets and the terms applying to early termination of a connection. Ofgem is aware that NGC is currently conducting a review, which started in April 2002, of its connection charging methodology. As outlined above, under Condition C7B of the Transmission Licence, NGC is obliged to keep the methodology under review at all times and make such modifications as may be requisite for the purposes of better achieving the relevant objectives.
- 6.19. Ofgem considers, consistent with these obligations, that NGC should continue its review in order to be in a position to put in place revised arrangements, where appropriate, for 1 April 2004.

The way forward

- 6.20. Implementing the scheme to apply from 1 April 2003 to 31 March 2004 requires NGC's transmission licence to be modified. As discussed further in Chapter 8, this document incorporates a statutory notice of licence modification under section 11 of the Electricity Act 1989. The statutory notice specifies a period of 28 days during which interested parties can make representations or objections to the proposed licence modification, following which revisions to the proposed licence modification will be made if they are considered appropriate.
- 6.21. This timetable means that the consultation process in relation to NGC's SO incentive scheme to apply from 1 April 2003 until 31 March 2004 will not be completed until after 1 April 2003. However, the amendments to the transmission licence introduced via the licence modification will apply from 1 April 2003, notwithstanding the date of the direction to modify NGC's licence

(i.e. it will have retrospective effect to 1 April 2003 notwithstanding the date of introduction).

Summary

6.22. In this chapter, Ofgem has outlined its Final Proposals for NGC's SO external costs incentive scheme, similar to the present scheme, to run for one year from 1 April 2003 to 31 March 2004. Overall, Ofgem considers that the parameters of the proposals for the new incentive scheme provide NGC with an appropriate balance of risk and reward which is in the interest of consumers, who ultimately pay for the costs of system operation.

6.23. Ofgem's Final Proposals for the parameters for NGC's new shallow SO external cost incentive are as follows:

- ◆ an annual target value of £416 million;
- ◆ symmetric sharing factors of 50 per cent;
- ◆ symmetric cap and floor values of £40 million and -£40 million respectively; and
- ◆ a Transmission Losses Reference Price value of £17.00/MWh.

6.24. These proposals are summarised in Table 6.1, which also includes the current incentive parameters for comparison

Table 6.1 – Ofgem's Final Proposals for the SO incentive scheme from 1 April 2003 to 31 March 2004 (money of the day)

| Parameter | 2002/03 | 2003/04 |
|-------------------------|----------------|----------------|
| Target | £460 million | £416 million |
| Upside sharing factor | 60% | 50% |
| Downside sharing factor | 50% | 50% |
| Cap | £60 million | £40 million |
| Floor | -£45 million | -£40 million |

6.25. The target value takes account of outstanding BSC Modification Proposals and CUSC Amendment Proposals, with subsequent modifications dealt with via Income Adjusting Events (where appropriate).

7. Information and transparency

Introduction

- 7.1. In the Initial Proposals document, Ofgem highlighted a number of issues concerning the provision of information by NGC. NGC's transmission licence contains several provisions relating to information provision and transparency. It is obliged, under special condition AA4 of the transmission licence, to have in place two documents; the Procurement Guidelines ("PGs") and the Balancing Principles Statement ("BPS"). Further details on the purposes of these two documents are provided in Appendix 6, which provides an overview of the regulatory framework. The PGs⁴³ contain details of the information provided by NGC.
- 7.2. Special condition AA4 also requires NGC to prepare and publish annually both a report in respect of the balancing services it has bought or acquired in the previous 12 months and a report on the manner in which, and the extent to which, it has complied with the BPS in the previous 12 months.⁴⁴ NGC's auditors are required to prepare a statement to accompany the BPS report, in which the auditors must provide their opinion as to the extent to which the licensee has complied with the BPS.
- 7.3. In the Initial Proposals, Ofgem invited views on whether NGC, in its role as SO, should make more information available and if so which information should be released. This chapter reflects respondents' views on these issues and, in the light of those views, Ofgem's recommendations.

⁴³ Table 3 in Section E of the PGs comprehensively lists the information that NGC makes available to parties regarding its use of balancing services.

⁴⁴ A 6 month report was prepared to cover the period between 1 April 2002 and 30 September 2002, however, future reports will cover a 12 month period and will be produced annually.

Issues raised in the Initial Proposals

National Grid Group/Lattice merger

- 7.4. At the time that the merger between National Grid Group plc (“NGG”)⁴⁵ and Lattice⁴⁶ was proposed, Ofgem recognised that, as a result of the merger, NGC and Transco may have access to information that was not previously available to them as separate businesses. Ofgem undertook to review this issue as part of its review of NGC’s SO incentives. Ofgem invited views in relation to this issue.

Enhancing information provision

- 7.5. Ofgem asked for views regarding the current provision of information and suggestions on how this could be improved.

Special condition AA4 reports and audit

- 7.6. Ofgem considered that the value of the special condition AA4 reports and the auditors’ statement, as tools to provide transparency in relation to NGC’s actions, could be enhanced by, for example, allowing market participants to:
- ◆ comment upon and make suggestions to develop the content of the reports, with comments considered by NGC for future reports; and
 - ◆ comment on the scope and objective of the audit, with comments considered by NGC for future audits.
- 7.7. Ofgem invited respondents’ views and suggestions in relation to developing the special condition AA4 reports and audit.

Respondents’ views

⁴⁵ NGG is the owner of NGC.

⁴⁶ Lattice is the owner of Transco plc (Transco). Transco is the SO of the gas National Transmission System IN Great Britain.

NGG/Lattice merger

- 7.8. Several respondents recognised the potential for efficiency gains created by the merger between NGG and Lattice to lead to reductions in costs. Other respondents expressed concern in relation to information sharing between NGC and Transco. One respondent considered that the internal rules governing information exchanges between Transco and NGC should be in the public domain in order to allay any concerns held by market participants. This respondent further considered that NGC's auditors should prepare a statement for publication on an annual basis confirming the extent to which it has complied with the internal rules for information exchanges. Another respondent considered that appropriate safeguards, such as restricting, monitoring and auditing the information exchanges between the SOs, should be implemented in order to reduce concerns associated with information sharing between NGC and Transco.

Enhancing information provision

- 7.9. In general, respondents requested additional or enhanced information provision in relation to the release of disaggregated information relating to NGC's forward trades, enhanced pre-Gate Closure Balancing Mechanism Unit Transactions ("PGBT") information and information relating to frequency response provision and warming contracts. Several respondents provided specific comments relating to particular areas of information provision and these are included in Appendix 7. One respondent stated that if information provision is enhanced, there should be flexibility in NGC's income stream to provide funding for the costs associated with providing the additional data.

Special condition AA4 reports and BPS audit

- 7.10. The majority of those who responded on this issue were supportive of greater market participant involvement with the content of the AA4 reports and the scope and objective of the BPS audit, on the basis that this would increase transparency. One respondent suggested specific areas for improvement and possible developments to enhance the AA4 reports and BPS audit. Details of these suggestions are provided in Appendix 7.

- 7.11. Another respondent stated that it would welcome greater consistency between the change procedures for the special condition AA4 statements and those of the BSC, in terms of the transparency and opportunities for participants to contribute to the development of change proposals.

NGC's views

NGG/Lattice merger

- 7.12. NGC acknowledged that, following the merger, both NGC and Transco might have access to information that was not available to them as separate businesses. NGC reiterated that there are contractual and statutory governing rules⁴⁷ that place restrictions on the ability of each licensee to disclose information provided to it.
- 7.13. NGC considered that information sharing could deliver benefit to customers through increased efficiency of system operation and improved security of supply. NGC was of the opinion that changes may be required to the existing governance arrangements in order to realise these benefits.

Enhancing information provision

- 7.14. NGC acknowledged the importance of information and transparency in respect of its procurement and use of balancing services. NGC considered that an appropriate balance must be struck between the right level of transparency and its ability to achieve efficient and economic balancing of the transmission system via the procurement and use of balancing services. NGC also highlighted that the costs it would incur in providing extra information must be considered against the value that this information delivers.
- 7.15. As was the case in the October 2002 PGs consultation⁴⁸ related to transparency, NGC continued to consider that there is not sufficient justification for

⁴⁷ Section 105 of the Utilities Act 2000 and contractual confidentiality provisions in Core Industry Documents.

⁴⁸ NGC went out to consultation, in accordance with the process laid out in special condition AA4, on 3 October 2002. Its consultation report is available on its website www.nationalgrid.com/uk/indinfo.

disaggregation of its forward trades at this time. However, NGC is committed to keeping this issue under review and will seek views again at the time of the annual review of the PGs and the BPS.

- 7.16. NGC noted that its review of the PGBT process is ongoing. This issue was included in the October 2002 PGs consultation and was discussed at a dedicated industry workshop on 23 January 2003. At this workshop, market participants provided views on how the PGBT process could be made more efficient and transparent and NGC is considering these views as part of its annual review of the PGs and the BPS.
- 7.17. NGC pointed out that further opportunities to comment on transparency issues would be available during the annual consultation and review of the PGs and BPS during March 2003.

Special condition AA4 reports and BPS audit

- 7.18. NGC considered that participants are able to comment and make suggestions in relation to the AA4 reports and the BPS audit via the Authority, which must approve the content and/or scope and objectives of these documents. Any perceived shortcomings can therefore be made known to the Authority and addressed during the approval process. Therefore, NGC considered the current arrangements to be appropriate and that the benefit of any additional requirements would need to be assessed against the costs involved.

Ofgem's recommendations

NGG/Lattice Merger

- 7.19. Ofgem agrees with the respondents who considered that there are a number of potential advantages from the merger in terms of information sharing between NGC and Transco. Ofgem's position remains as stated in the Decision document on regulatory issues arising from the NGG/Lattice merger⁴⁹, namely

⁴⁹ 'Regulatory issues arising from the merger of National Grid Group plc and Lattice Group plc to create National Grid Transco plc. Decision document and notices under sections 11 and 11A of the Electricity Act 1989 and section 23 of the Gas Act 1986.', Ofgem, September 2002.

that such information exchanges should bring benefits to customers through increasing the efficiency of system operation and improving the security of supply. Consequently, such information exchanges do not concern Ofgem provided that they take place within the rules governing the exchange and use of information.

- 7.20. The framework of the rules regarding information exchange are already in the public domain since they are contained in NGC's and Transco's special licence conditions and the Financial Services Authority ("FSA") Code of Market Conduct.⁵⁰ Ofgem does not consider that it would be appropriate for internal rules, which enable NGC and Transco to comply with these regulations, to be placed in the public domain. In terms of audits, again Ofgem's position has not changed from that stated in the Decision document, namely that it is unnecessary to put in place specific audit arrangements concerning the exchange of information between NGC and Transco. However, Ofgem will continue to monitor the situation and it may be appropriate to revisit this issue in the future.

Enhancing information provision

- 7.21. Ofgem expects NGC, within the framework of the forthcoming annual reviews of the PGs and BPS, to consider and consult upon the requests for enhanced information provision raised by respondents to the Initial Proposals.
- 7.22. Ofgem notes that, as stated above, a number of respondents were keen for NGC to release more information particularly relating to the disaggregation of forward trades, PGBTs and frequency response and warming contracts. Ofgem notes that NGC is currently in the process of developing proposals to improve the distribution of information relating to PGBTs. Additionally, Ofgem notes that NGC is committed to keeping the issue of providing disaggregated forward trade information under review and will seek views again at the time of the next

⁵⁰ Special condition AA4 of NGC's licence and special condition 27 of Transco's licence prohibit Transco from discriminating in the procurement of balancing services. Furthermore NGC and Transco are subject to other statutory and licence obligations, such as special condition SLCC7C (Non-discrimination) for NGC and special condition 26 and SLC 4D (Conduct of transportation business for Transco. The provision of the Competition Act 1998 and the FSA Code of Market Conduct may also apply.

annual review of the PGs and the BPS. In addition to this commitment, Ofgem also recommends that the level of information provided by NGC regarding frequency response and warming contracts is revisited and considered by NGC as part of the next annual review of the PGs and the BPS.

Special condition AA4 reports and BPS audit

- 7.23. Ofgem notes that NGC considered that participants are able to comment and make suggestions in relation to the special condition AA4 reports and the BPS audit via the Authority, which must approve the content and/or scope and objectives of these documents. Ofgem reiterates that this opportunity is available to market participants. However, Ofgem considers that measures should be taken by NGC to highlight to the industry when this opportunity is available in order to enhance the ability of market participants to comment and make suggestions via the Authority. Ofgem suggests that whenever NGC provides the Authority with documents outlining the scope and objectives of the special condition AA4 reports and audit, NGC grants the industry access to these documents via, for example, the NGC website.
- 7.24. Ofgem will continue to monitor the effectiveness of the special condition AA4 reports and audit as tools that provide transparency in relation to NGC's actions. If appropriate, Ofgem will consider whether it is necessary to change the requirements of special condition AA4 to increase the level of participants' involvement.

Summary of recommendations

- ◆ Ofgem considers that the additional information sharing ability resulting from NGG/Lattice merger is of benefit to customers and that the regulations currently in place regarding the sharing of such information are adequate protection for customers;
- ◆ Ofgem considers that it may be necessary to review the rules governing information exchange in the future;

- ◆ Ofgem expects NGC, within the framework of the forthcoming annual reviews of the PGs and BPS, to consider and consult upon the requests for enhanced information provision raised by respondents to the Initial Proposals. Ofgem notes that NGC is considering the release of more information relating to PGBTs and that NGC is committed to considering the release of more information relating to disaggregated forward trades during the forthcoming annual reviews of the PGs and the BPS; and
- ◆ Ofgem considers that measures should be taken by NGC to highlight to the industry when the opportunity to comment, via the Authority, on the scope and objectives of the special condition AA4 reports and audit is available in order to enhance the ability of market participants to comment and make suggestions via the Authority. Ofgem will continue to monitor the effectiveness of the special condition AA4 reports and audit and, if appropriate, will consider whether it is necessary to change the requirements of special condition AA4 to increase the level of participants' involvement following this consultation.

8. Licence modification

- 8.1. Implementation of Phase 1 of the SO incentive arrangements to apply to NGC from 1 April 2003 requires modification of NGC's transmission licence. In order to amend NGC's transmission licence to take account of the proposed changes to the SO incentive scheme associated with Phase 1, a statutory notice of licence modification under section 11 of the Electricity Act 1989 is required. The statutory notice is contained within Appendix 1. Appendix 2 contains a marked-up version of the modification proposals in respect of NGC's transmission licence.
- 8.2. The statutory notice under section 11 of the Electricity Act 1989 specifies a period of 28 days during which interested parties can make representations or objections to the proposed licence modification, following which revisions to the proposed licence modification will be made if it is considered appropriate. Ofgem invites any representations on or objections to the proposed licence modification. Responses should be submitted in writing by 17 April 2003 addressed to:

Sonia Brown

Director, Electricity Trading Arrangements

Office of Gas and Electricity Markets

9 Millbank

London

SW1P 3GE

- 8.3. Electronic responses may be sent to: tracey.hunt@ofgem.gov.uk
- 8.4. Respondents are free to mark their replies as confidential although Ofgem would prefer, as far as possible, to be able to place responses to this paper in the Ofgem library. Unless clearly marked 'confidential', responses will be published by placing them in the Ofgem library and on the Ofgem website.

- 8.5. This timetable means that the consultation process in relation to NGC's SO incentive scheme to apply from 1 April 2003 until 31 March 2004 will not be completed until after 1 April 2003. However, subject to consideration of responses to the statutory notice and NGC's consent to the making of the proposed licence modification, the proposed modification to the transmission licence introduced will apply from 1 April 2003, notwithstanding the date of the direction to modify NGC's licence (i.e. it will have retrospective effect to 1 April 2003 notwithstanding the date of introduction).
- 8.6. In order for the proposed licence modification to be made, NGC is required to provide its written consent to the modification. If this is received, and subject to consideration of any response to the statutory notice, Ofgem will direct the modification of NGC's Transmission Licence in line with the proposed licence modification. If NGC does not accept Ofgem's Final Proposals, the proposed SO incentive scheme for the period 1 April 2003 to 31 March 2004 will be referred by Ofgem to the Competition Commission for final adjudication.

Appendix 1 Statutory modification notice

This appendix sets out the statutory notice published under section 11 of the Electricity Act 1989 to make modifications to the licence of NGC in order to implement Phase 1 of NGC's System Operator incentive arrangements to apply from 1 April 2003.

NOTICE UNDER SECTION 11(2) OF THE ELECTRICITY ACT 1989

The Gas and Electricity Markets Authority ("the Authority") hereby gives notice pursuant to section 11(2) of the Electricity Act 1989 ("the Act") as follows:

1. The Authority proposes to modify the conditions of the transmission licence treated as granted to National Grid Company plc ("NGC") under section 6(1)(b) of the Act by introducing the following licence conditions and Schedule provisions:
 - a. **Part III. Amended Standard Conditions;**
 - b. **Special Condition AA5A: Revised Restrictions on Revenue – paragraphs 5 – 12 inclusive of that Special Condition;**
 - c. **Special Condition AA5E: Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction;** and
 - d. **Schedule A Part B: Terms used in the balancing services activity revenue restriction**

in substitution for the existing special licence conditions and Schedule provisions bearing these numbers and titles which shall be deleted.

2. For the avoidance of doubt, no amendments are being proposed to paragraphs 1-4 inclusive, 13 – 16 inclusive of Special Condition AA5A or to Schedule A Part A. As such, nothing in these proposed modifications alters the text of these paragraphs.

3. Subject to the outcome of this statutory consultation and consideration of respondents views, it is the intention of the Authority that these proposed licence modifications shall be deemed to take effect from 00:00 hours on 1 April 2003 notwithstanding the date of any direction to implement the proposed licence modifications.
4. The reason why the Authority proposes to make the licence modifications appearing in paragraph 1(a) is to perform housekeeping amendments to correct two spelling mistakes. The licence modifications appearing in paragraph 1(d) also perform further housekeeping amendments.
5. The reasons why the Authority proposes to make the licence modifications appearing in paragraphs 1(b) – (d) inclusive and their effect are set out by the Authority in the following documents:
 - i. “NGC system operator incentive schemes from April 2003, Initial proposals, Ofgem, December 2002”; and
 - ii. “NGC system operator incentive scheme from 1 April 2003 – 31 March 2004, Final proposals and statutory licence consultation, Ofgem, March 2003”, which the Authority published earlier today, 20 March 2003.
6. In summary, the effects of the proposed licence modifications are as follows:
 - a. **Proposed licence modifications relating to proposed Part III. Amended Standard Conditions**

The proposed amendments seek to perform housekeeping changes via the correction of two spelling mistakes in the existing drafting.
 - b. **Proposed licence modifications relating to proposed special conditions AA5A, AA5E and Schedule A Part B**

The proposed amendments seek to revise the relevant sections in order to accommodate the final proposals relating to the NGC System Operator (“SO”) incentive scheme from 1 April 2003. They also perform

housekeeping changes via the correction of six grammatical mistakes in the existing drafting.

The incentive scheme parameters of the NGC SO incentive scheme intended to run from 1 April 2003 until 31 March 2004 are set out in the table below:

| Parameter | 2003/04 values |
|-------------------------|-----------------------|
| Incentive scheme target | £416 million |
| Upside sharing factor | 50% |
| Downside sharing factor | 50% |
| Cap | £40 million |
| Floor | -£40 million |

The transmission losses reference price (TLRP) is to be redefined in line with the Final Proposals. TLRP is to be set at £17.00/MWh. The redefinition of TLRP is included in the proposed licence amendments.

The final proposals also expose NGC to a potential increase in system operation costs associated with Balancing and Settlement Code (BSC) Modification Proposals or Connection and Use of System (CUSC) Amendment Proposals, as of 14 March 2003, being consulted on by the BSC or CUSC Panels and which may be implemented in the future following a decision by the Authority. The inclusion of this allowance is made without prejudice to the Authority's decision in respect of these modifications. The utilisation of the allowance will be taken into account at the next periodic review of NGC's SO incentives (2004/05).

In addition, the proposed amendments seek to modify the upside and downside sharing factors relating to the incentive payments on internal costs in respect of the relevant years commencing on 1 April 2003, 1 April 2004 and 1 April 2005. The proposed licence amendment aims to set the internal costs incentive scheme sharing factors for these years equal to the proposed external costs incentive scheme sharing factors for the relevant year commencing on 1 April 2003.

7. The existing incentive scheme set out in Part 2(i) of special condition AA5A and Schedule A part B will terminate with effect from 31 March 2003 on NGC giving its consent to the proposed modifications and issuing a relevant disapplication

request in relation to the existing scheme under the terms of special condition AA5E.

8. A copy of the proposed licence modifications and other documents referred to in this notice are available (free of charge) from the Ofgem library (telephone 020 7901 1600) or on the Ofgem website (www.ofgem.gov.uk).
9. Any representations or objections to the proposed licence modifications may be made in writing before 17 April 2003 to:

Sonia Brown
Director, Electricity Trading Arrangements
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

or by email to tracey.hunt@ofgem.gov.uk



Sonia Brown

Duly authorised on behalf of the Authority

20 March 2003

Appendix 2 Proposed licence modification

This appendix sets out the proposed modification to the licence of NGC in order to implement Phase 1 of NGC's SO incentive arrangements to apply from 1 April 2003 (the proposed licence modifications are highlighted).

PART III. AMENDED STANDARD CONDITIONS

1. Supplementary standard condition C1 shall be amended by the addition of the following definitions:

“permitted purpose”

means the purpose of any or all of the following:

- (a) the transmission business, the interconnector(s) business or any business or activity within the limits of paragraph 4 of special condition AA6;
- (b) any business or activity to which the Authority has given its consent in writing in accordance with paragraph 3(d) of special condition AA6; and
- (c) without prejudice to the generality of subparagraphs (a) and (b), any payment or transaction lawfully made or undertaken by the licensee for a purpose within

subparagraphs (i) to (vii) of special condition AA10 1(b).

“transmission owner activity” means:

- (i) the activity of the licensee or any affiliate or related undertaking relating to the medium to long term planning, development, construction, maintenance and commercial management of the licensee’s transmission system which is remunerated under special condition AA5A Part 1 and
- (ii) excluded services.

“transmission services activity” means the activity undertaken by the licensee prior to the effective time in the development and operation of the licensee’s transmission system for the purpose of optimising the costs arising from the operation of that system.

“ultimate controller” means:

- (a) a holding company of the licensee which is not itself a subsidiary of another company; and

(b) any person who (whether alone or with a person or persons connected with him) is in a position to control, or to exercise significant influence over, the policy of the licensee or any holding company of the licensee by virtue of:

(i) rights under contractual arrangements to which he is a party or of which he is a beneficiary; or

(ii) rights of ownership (including rights attached to or deriving from securities or rights under a trust) which are held by him or of which he is a beneficiary

but excluding any director or employee of a corporate body in his capacity as such.

(c) for the purposes of subparagraph (b), a person is connected with another if they are party to any arrangement regarding the exercise of any such rights as are described in that paragraph.

2. In respect of the terms “balancing services activity” and “transmission business”, the existing definitions of these terms in supplementary standard condition C1 shall be

superseded and replaced with the definitions set out below:

“balancing services activity” means the activity undertaken by the licensee as part of the transmission business including the operation of the licensee’s transmission system, the procuring and using of balancing services for the purpose of balancing the licensee’s transmission system and for which the licensee is remunerated under Part 2 of special condition AA5A.

“transmission business” means the authorised business of the licensee or any affiliate or related undertaking in the planning, development, construction, maintenance and commercial management of the licensee’s transmission system (whether or not pursuant to directions of the Secretary of State made under section 34 or 35 of the Act) and the operation of such system for the transmission of electricity, including the transmission owner activity, the balancing services activity and any business in providing connections to the licensee’s transmission system; but shall not include

- (i) any other separate business

- (ii) any business of the licensee or any affiliate or related undertaking in the provision of settlement services in connection with the

BSC or the Pooling and Settlement
Agreement or

- (iii) any other business (not being a separate business) of the licensee or any affiliate or related undertaking in the provision of services to or on behalf of any one or more persons.

Special Condition AA5A: Revised Restrictions on Revenue

Part 1

No amendments are proposed to paragraphs 1 – 4 inclusive of this Special Condition.

Nothing in this text alters the operation of Part 1 of this Special Condition (paragraphs 1-4 inclusive).

Part 2 (i): Balancing services activity revenue restriction on external costs

5. The licensee shall use its best endeavours to ensure that in the relevant period t the revenue derived from and associated with procuring and using balancing services (being the external costs of the balancing services activity) shall not exceed an amount calculated in accordance with the following formula:

$$BXext_t = CSOBM_t + BSCC_t + ET_t - OM_t + IncPayExt_t$$

where:

$BXext_t$ which represents the maximum allowed revenue derived in relevant period t from and associated with procuring and using balancing services, is the aggregate of the following components:

$CSOBM_t$ which represents the cost to the licensee of bids and offers in the balancing mechanism accepted by the licensee in relevant period t less the total

non-delivery charge for that period, is the sum across relevant period t of the values of $CSOBM_t$; (being the daily system operator BM cashflow as defined in Table X-2 of Section X of the BSC in force immediately prior to 1 April 2001);

$BSCC_t$ means the costs to the licensee of contracts for the availability or use of balancing services during the relevant period t , excluding costs within $CSOBM_t$ but including charges made by the licensee for the provision of balancing services to itself in the relevant period t ;

ET_t means the amount of any adjustment to be made during the relevant period t in respect of a previous relevant year as provided in paragraph 6;

OM_t means an amount representing the revenue from the provision of balancing services to others during relevant period t , calculated in accordance with paragraph 7;

$IncPayExt_t$ means an incentive payment for relevant period t calculated in accordance with paragraph 8.

6. Balancing services activity adjustments

For the purposes of paragraph 5, the term ET_t which relates to prior year adjustments in respect of the relevant period t shall mean:

- (a) the costs, whether positive or negative, to the licensee of
- bids and offers in the balancing mechanism accepted by the licensee in any relevant year before relevant period t less the total non-delivery charge for the period; and
 - contracts for the availability or use of balancing services during any relevant year before relevant period t , excluding costs within $CSOBM_t$ for any relevant year, but including charges made by the licensee for the provision of balancing services to itself in any relevant year before relevant period t

in each case after deducting such costs to the extent that they have been taken into account in any relevant year in computing the terms $CSOBM_t$ or $BSCC_t$; and

- (b) any amount within the term ET_t as defined in this licence in the form it was in on 1 April 2000 whether as then defined or as now defined.

7. Provision of balancing services to others

For the purpose of paragraph 5, OM_t (the amount representing the revenue from the provision of balancing services to others) shall be the sum of:

- (a) the total amount (exclusive of interest and value added tax attributable thereto) recovered by the licensee in respect of the relevant period t under any agreements entered into between an electricity supplier (being the holder of a supply licence granted or treated as granted under Section 6(1)(d) of the Act) or network operator (as defined in the grid code) and the licensee pursuant to which the costs of operation or non-operation of generation sets which are required to support the stability of a user system (as defined in the grid code) are charged to such electricity supplier (as defined above) or network operator (as defined in the grid code); and
- (b) the total costs (exclusive of interest and value added tax attributable thereto) incurred by the licensee in respect of the relevant period t which arise by reason of the operation or non-operation of generation sets and which result directly or indirectly from works associated with the licensee's transmission system or works thereon being carried out, rescheduled or cancelled by reason of any agreement with, or request of, any third party other than an electricity supplier (as defined in paragraph 7 (a) of this special condition) or network operator (as defined in the grid code).

8. Determination of incentive payments on external costs

For the purposes of paragraph 5, the term $IncPayExt_t$ shall be derived from the following formula:

$$IncPayExt_t = [SF_t(MT_t - IBC_t) + CB_t]$$

where:

SF_t which is a balancing services activity sharing factor in respect of relevant period t , has the value specified either against the value of IBC_t for the relevant period t in the column headed SF_t in the table in paragraph B1 (a) of Part B of Schedule A or in paragraph B1 (b) of Part B of Schedule A.

MT_t which is a target for balancing services activity incentivised external costs in respect of relevant period t , has the value specified either against the value IBC_t for relevant period t in the column headed MT_t in the table in paragraph B1 (a) of Part B of Schedule A or in paragraph B1 (b) of Part B of Schedule A.

IBC_t which is the cost of balancing services on which the licensee is incentivised during the relevant period t , is calculated in accordance with the formula given in paragraph 9.

CB_t which is a balancing services sharing factor offset in respect of the relevant period t , has the value either specified against the value of IBC_t for the relevant period t in the column headed CB_t in the table in paragraph B1 (a) of Part B of Schedule A or in paragraph B1 (b) of that Part.

9. For the purposes of paragraph 8, the term IBC_t in respect of relevant period t shall be calculated in accordance with the following formula:

$$IBC_t = CSOBM_t + BSCC_t + \sum_j (TL_j [TLRP_j]) + \sum_j (TQEI_j [NIRP_j]) - RT_t - OM_t$$

where:

j in all cases shall mean a settlement period (being a half an hour) as defined in the BSC.

$\sum_j (TL_j [TLRP_j])$ is the volume of transmission losses (TL_j) multiplied by the transmission losses reference price ($TLRP_j$) for each settlement period, summed across all settlement periods in the relevant period t .

$\sum_j (TQEI_j [NIRP_j])$ is the total net imbalance volume ($TQEI_j$) as defined in the BSC in force immediately prior to 1 April 2001 multiplied by the net imbalance volume reference price ($NIRP_j$) for each settlement period, summed across all settlement periods in the relevant period t .

TL_j which is the volume of transmission losses, is given by the sum of BM unit metered volumes (as from time to time defined in the BSC) during the settlement period j for all BM units (as from time to time defined in the BSC), being the difference between the quantities of electricity delivered to the licensee's transmission system and the quantity taken from the licensee's transmission system during that settlement period, but excluding all generator transformer losses.

TLRP_j which is the transmission losses reference price, has the value specified for each settlement period set out in paragraph B3 of Part B of Schedule A.

NIRP_j which is the net imbalance volume reference price for each settlement period j, has the values set out in paragraph B4 in Part B Schedule A.

RT_t means the amount of any allowed income adjustments given by paragraph 12 (b) in respect of relevant period t.

10. Income adjusting events under the balancing services activity

(a) An income adjusting event is any of the following:

- (i) an event or circumstance constituting force majeure under the BSC;
- (ii) an event or circumstance constituting force majeure under the CUSC made between the licensee and others and providing for connection to and use of the licensee's transmission system;
- (iii) a security period as defined in special condition AA5D; and
- (iv) an event or circumstance which is, in the opinion of the Authority, an income adjusting event and approved by it as such.

(b) For the purpose of relevant year t commencing on 1 April 2003 and ending on 31 March 2004, the following items listed in Tables 1 and 2 below shall not qualify as an income adjusting event for the purpose of sub-paragraph (a) above:

Table 1:

| Modification No. | Modification Title |
|-------------------------|---|
| P80 | Deemed Bid/Offer Acceptance for Transmission System Faults |
| P87 | Removal of market risk associated with operation of a Generator Inter-trip Scheme |
| P89 | Clarification of the Timescales for Submitting MEL/MIL Data to the BMRA |
| P98 | Dual Notification Of Contract Positions |
| P100 | Extension of Demand-side Trading Units in order to increase the competitiveness of the market for embedded benefits |
| P102 | Entitlement of Licence Exemptable Generators ("LEGs") to BSC Membership Without Evidence of Trading |
| P103 | Respecification of Trading Data |
| P106 | Amendment to the BSC to allow Multiple Supplier Ids. |
| P107 | Data Retention Requirements for Post-Final Trading Disputes |
| P109 | A Hedging Scheme for changes to TLF in Section T of the code |
| P110 | Nullification of Volume Notifications Where No Notification Authorisations Are in Place |
| P111 | Procedure to allow the BSC Panel to refuse to accept Contingent Modification Proposals |
| P112 | Removing the obligation on new BSC Parties acceding to the BSC Framework Agreement to comply with Section A 2.2.5 |
| P113 | E-mail communications under the code |
| P114 | Entitlement of Licence Exemptable Generators ("LEGs") and other Non-trading Parties to BSC Membership Without Evidence of Trading |
| P115 | Disapplication of Supplier Charges Under Certain Circumstances |
| P116 | Changes to Allow Line Loss Factor Data from BSC Website to be used in Settlement |
| P117 | Rectification of Past Notification Errors (PNEs) |
| P118 | Increased efficiency in the reporting of Credit Default statements |
| P119 | Increased flexibility in the reporting of upheld Trading Disputes relating to Credit Default |
| P120 | Credit Cover during Holiday Periods |
| P121 | Credit Cover following a change in a Party's Portfolio |

Table 2:

| Amendment No. | Amendment Title |
|----------------------|--|
| CAP002 | Clause 6.5.1 |
| CAP044 | Extension of Election Arrangements to Panel Alternates |
| CAP045 | Cost-reflective reactive power default payment rate indexation |
| CAP046 | Mandatory Frequency Response - Calculation of Volumes |

- (c) The Authority's approval of an income adjusting event shall be in writing, shall be copied to the licensee and shall be in the public domain; and the Authority may revoke this approval with the consent of the licensee.

11. (a) Where it appears to the licensee that there have been in respect of relevant period t costs and/or expenses which:

(i) have been caused or saved by an income adjusting event; and

(ii) have, for relevant period t , increased or decreased by more than £2,000,000 the value of IBC_t save that in the case of paragraph 10(a)(iii) only the threshold of £2,000,000 shall not apply

then the licensee shall give notice thereof to the Authority.

(b) Where it appears to any other Party (as defined in the BSC) that there have been in respect of relevant year t costs and/or expenses which:

(i) have been caused or saved by an income adjusting event; and

(ii) have, for the relevant period t , increased or decreased by more than £2,000,000 the value of IBC_t save that in the case of paragraph 10(a)(iii) only the threshold of £2,000,000 shall not apply

then that Party (as defined in the BSC) may give notice thereof to the Authority.

- (c) The notice provided for in subparagraphs (a) and (b) shall give particulars of:
 - (i) the income adjusting event to which the notice relates;
 - (ii) the amount of any change in costs and/or expenses which appear to the person giving the notice to have been caused or saved by the event and the method of calculating such costs and/or expenses; and
 - (iii) the amount of any allowed income adjustment proposed as a consequence of that income adjusting event.
 - (d) A notice of an income adjusting event shall be given as soon as is reasonably practicable after the occurrence of the income adjusting event, and may not be given more than 3 months after the end of the relevant period in which it occurs.
12. (a) The Authority shall determine (after consultation with the licensee and such other persons as it considers desirable):
- (i) whether any or all of the costs and/or expenses given in a notice pursuant to paragraph 11 are caused or saved by an income adjusting event;

- (ii) whether the amount specified for the purpose of paragraph 11(c)(iii) has increased or decreased the value of IBC_t by more than £2,000,000 save that in the case of paragraph 10(a)(iii) only, the threshold of £2,000,000 shall not apply; and
 - (iii) if so, whether the amount of the proposed income adjustment ensures that the financial position and performance of the licensee are, insofar as is reasonably practicable, the same as if that income adjusting event had not taken place, and if not, what allowed income adjustment would secure that effect.
- (b) In relation to the relevant period t , the allowed income adjustment RT_t shall be
- (i) the value determined by the Authority under subparagraph (a);
 - (ii) if the Authority has not made a determination in accordance with subparagraph (a) within 3 months of the date of the notice under paragraph 11, the respective values given to them in that notice; or
 - (iii) in any other case, zero.

Part 2 (ii): Balancing services activity revenue restriction on internal costs

No amendments are proposed to paragraphs 13 – 16 inclusive of this Special condition.

Nothing in this text alters the operation of Part 1 of this Special Condition (paragraphs 13-16 inclusive).

Special Condition AA5E: Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction

1. The balancing services activity revenue restriction and the transmission network revenue restriction shall apply so long as this licence continues in force but shall cease to have effect in such circumstances and at such times as are described in paragraphs 2 to 6 below.

2. The transmission network revenue restriction and the balancing services activity revenue restriction (or any of them) shall cease to have effect (in whole or in part, as the case may be) if the licensee delivers to the Authority a disapplication request made in accordance with paragraph 3 or notice is given to the Authority by the licensee in accordance with either paragraph 5 or paragraph 6.

3. A disapplication request shall
 - (i) be in writing addressed to the Authority,

 - (ii) specify whether it relates to the balancing services activity revenue restriction and/or to the transmission network revenue restriction (or to both or any of them or to any part or parts thereof) and

 - (iii) state the date (being not earlier than the date referred to in paragraph 4) from which the licensee wishes the Authority to agree that those conditions shall cease to have effect.

4. No disapplication following delivery of a disapplication request shall have effect until a date being the earlier of not less than 18 months after delivery of the disapplication request or the following date:

- (i) in the case of a disapplication request which relates to the transmission network revenue restriction, 31 March 2006;
- (ii) in the case of a disapplication request which relates to the balancing services activity revenue restriction set out in Part 2(i) of special condition AA5A, 31 March 2004; and
- (iii) in the case of a disapplication request which relates to the balancing services activity revenue restriction set out in Part 2(ii) of special condition AA5A, 31 March 2006.

Provided that in the event of a disapplication request being served by the licensee in the absence of agreeing any or all of the transmission network revenue and the balancing services activity revenue restriction the following default position shall apply:-

- (A) for the transmission network revenue restriction, the maximum allowable revenue for the relevant year commencing 1 April 2006 shall be defined in accordance with the formula in Part 1 of special condition AA5A where X_g equals zero and GW_{ref} , Rate_i and L_i shall have the same values as those given in paragraphs 3 and 4 of Part 1 of special condition AA5A for the relevant year commencing on 1 April 2005;
- (B) for the balancing services activity revenue restriction set out in Part 2(ii) of special condition AA5A, the values set out in Schedule A, Part B for the relevant year commencing on 1 April 2005 shall apply; and

- (C) for the balancing services activity revenue restriction set out in Part 2(i) of special condition AA5A, the values set out in Schedule A, Part B shall apply.

- 5. If the Authority has not made a reference to the Competition Commission under section 12 of the Act relating to the modification of the Conditions or the part of parts thereof specified in the disapplication request before the beginning of the period of 12 months which will end with the disapplication date, the licensee may deliver written notice to the Authority terminating the application of such Conditions (or any part or parts thereof) as are specified in the disapplication request with effect from the disapplication date or a later date.

- 6. If the Competition Commission makes a report on a reference made by the Authority relating to the modification of the Conditions (or any part or parts thereof) specified in the disapplication request and such report does not include a conclusion that the cessation of those Conditions, in whole or in part, operates or may be expected to operate against the public interest, the licensee may within 30 days after the publication of the report by the Authority in accordance with section 13 of the Act deliver to him written notice terminating the application of those conditions or any part or parts thereof with effect from the disapplication date or later.

**SCHEDULE A : SUPPLEMENTARY PROVISIONS OF THE CHARGE
RESTRICTION CONDITIONS**

PART A

No changes are proposed to Part A of Schedule A.

Nothing in this text alters the operation of Part A of Schedule A to this Special Condition.

PART B

Terms used in the balancing services activity revenue restriction

B1. For the purpose of paragraph 8 of Part 2(i) of special condition AA5A, the terms MT_t , SF_t and CB_t shall be selected against the appropriate value of IBC_t (which shall be determined in accordance with paragraph 9 of special condition AA5A):

- (a) in respect of the relevant year t commencing on 1 April 2003, from the following table:

| IBC_t (£) | MT_t (£) | SF_t | CB_t (£) |
|--|-------------|--------|-------------|
| $< 336,000,000$ | 0 | 0 | 40,000,000 |
| $336,000,000$ $\leq IBC_t <$ $416,000,000$ | 416,000,000 | 0.50 | 0 |
| $416,000,000$ $\leq IBC_t <$ $496,000,000$ | 416,000,000 | 0.50 | 0 |
| $\geq 496,000,000$ | 0 | 0 | -40,000,000 |

(b) in respect of the relevant year t commencing on 1 April 2004 and each relevant year thereafter, the terms MT_t , SF_t and CB_t shall be set to zero.

B2. Not used.

B3. For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term $TLRP_j$ in respect of each settlement period during relevant period t shall have the value in £ per megawatt hour of 17.00.

B4. For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term $NIRP_j$, which is the net imbalance volume reference price for each settlement period j , during relevant period t , shall be derived as follows:

(a)(i) when $UKPX_j$ and APX_j data are published in respect of the relevant settlement period j then:

$$SPNIRP_j = (0.5 * UKPX_j) + (0.5 * APX_j)$$

- (ii) when UKPX_j data are published and APX_j data are not published in respect of the relevant settlement period j then:

$$SPNIRP_j = UKPX_j$$

- (iii) where UKPX_j data are not published in respect of the relevant settlement period j and APX_j data are published in respect of the relevant settlement period j then:

$$SPNIRP_j = APX_j$$

- (iv) where neither UKPX_j data and APX_j data have been published in respect of the relevant settlement period j then:

$$SPNIRP_j = SPNIRP_{j-1}$$

where:

SPNIRP_j means the single price net imbalance volume reference price for each settlement period j.

j in all cases shall mean a settlement period (being a half an hour) as defined in the BSC.

j-1 the settlement period immediately preceding the relevant settlement period j.

UKPX_j means the United Kingdom Power Exchange (UKPX) volume weighted reference price for each settlement period j based on the traded prices of half hourly spot contracts.

EFA block means the six four hourly blocks within the EFA day (being 23.00 hours to 23.00 hours in the immediately following day) set out in the table below:

| Block | Time |
|--------------|----------------|
| 1 | 23:00 to 03:00 |
| 2 | 03:00 to 07:00 |
| 3 | 07:00 to 11:00 |
| 4 | 11:00 to 15:00 |
| 5 | 15:00 to 19:00 |
| 6 | 19:00 to 23:00 |

APX_j means the Automated Power Exchange (UK APX) weighted average price in respect of all half hourly spot market and four (4) hour block market contracts delivered within the EFA block applying to those settlement periods j. In order to derive the APX

t_j price in respect of each relevant settlement period j the EFA block containing the relevant j shall be used.

(b) The term $NIRP_j$ shall be derived as follows:

(i) when $TQEI_j < 0$

$$NIRP_j = SPNIRP_j + (SPNIRP_j * PA1)$$

(ii) when $TQEI_j > 0$

$$NIRP_j = SPNIRP_j - (SPNIRP_j * PA2)$$

(iii) when $TQEI_j = 0$

$$NIRP_j = 0$$

where in respect of the relevant period t , the terms PA1 and PA2 shall have the value ascribed to those terms in the following table:

| | |
|------------|-----|
| PA1 | 1.5 |
| PA2 | 0.5 |

B5. For the purposes of paragraph 15 of Part 2(ii) of special condition AA5A, the term ISF_t shall be selected against the value of $CSOC_t$ (which shall be determined in accordance with paragraph 14 of Part 2(ii) of special condition AA5A):

(a) in respect of the relevant period t commencing on the day on which the effective time occurs, from the following table:

| (CSOC_t) (£) | ISF_t |
|--------------------------------|------------------------|
| < 56,880,216 (R_t / Z_t) | 0.40 |
| = > 56,880,216 (R_t / Z_t) | 0.12 |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

(b) in respect of the relevant year t commencing on 1 April 2002, from the following table:

| (CSOC_t) (£) | ISF_t |
|--------------------------------|------------------------|
| < 55,869,013 (R_t / Z_t) | 0.60 |
| = > 55,869,013 (R_t / Z_t) | 0.50 |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- (c) in respect of the relevant year t commencing on 1 April 2003, from the following table:

| (CSOC_t) (£) | ISF_t |
|-------------------------------|------------------------|
| $< 57,753,517 (R_t / Z_t)$ | 0.50 |
| $= > 57,753,517 (R_t / Z_t)$ | 0.50 |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- (d) in respect of the relevant year t commencing on 1 April 2004, from the following table:

| (CSOC_t) (£) | ISF_t |
|-------------------------------|------------------------|
| $< 57,567,216 (R_t / Z_t)$ | 0.50 |
| $= > 57,567,216 (R_t / Z_t)$ | 0.50 |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- (e) and in respect of the relevant year t commencing on 1 April 2005, from the following table:

| (CSOC_t) (£) | ISF_t |
|---|------------------------|
| < 60,656,843 (R _t / Z _t) | 0.50 |
| = > 60,656,843 (R _t / Z _t) | 0.50 |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- B6. For the purposes of paragraph 15 of Part 2(ii) of special condition AA5A, the term IMT_t in respect of the relevant year t shall be derived from the following table:

| Relevant Year Commencing 1 April | IMT_t (£) |
|---|---|
| 2001 | 56,880,216 (R _t / Z _t) |
| 2002 | 55,869,013 (R _t / Z _t) |
| 2003 | 57,753,517 (R _t / Z _t) |
| 2004 | 57,567,216 (R _t / Z _t) |
| 2005 | 60,656,843 (R _t / Z _t) |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- B7. For the purposes of paragraph 14 of Part 2(ii) of special condition AA5A, the term NSOC_t in respect of the relevant year t shall be derived from the following table:

| Relevant Year Commencing 1 April | NSOC_t |
|---|---|
| 2001 | 21,698,749 (R _t / Z _t) |
| 2002 | 21,165,761 (R _t / Z _t) |
| 2003 | 20,602,773 (R _t / Z _t) |
| 2004 | 20,120,580 (R _t / Z _t) |
| 2005 | 19,496,842 (R _t / Z _t) |

where R_t and Z_t shall have the meaning ascribed to them in paragraph B12.

- B8. For the purpose of paragraph 14 of Part 2(ii) of special condition AA5A, the term SOBR_t (being an allowance for non-domestic rates incurred by the licensee in operating the licensee's transmission system during relevant year t) shall be given by the following formula:

$$SOBR_t = SORate_t + \left(SORateDiff_t \left(1 + \frac{I_t}{100} \right) \right)$$

where:

SORate_t is given by the table below;

| Relevant Year commencing 1 April | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|------|-----------|-----------|-----------|-----------|-----------|
| SORate_t | 0 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,100,000 |

and:

SORateDiff_t is the difference between the non-domestic rates payable by the licensee in operating the licensee's transmission system in respect of year t-1 and SORate_{t-1}:

- B9. For the purpose of paragraph 14 of Part 2(ii) of special condition AA5A, the term PSC_t (being the costs incurred by the licensee in preparing participants' systems for the introduction of the New Electricity Trading Arrangements to be recovered under the balancing services activity) shall have the value given by the following formula:

$$PSC_t = PSAC_t + \left(PSACDiff_t \left(1 + \frac{I_t}{100} \right) \right)$$

where:

PSAC_t is given by the table below:

| Relevant Year commencing on 1 April | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|--|------|-----------|------|------|------|------|
| PSAC_t | 0 | 4,200,000 | 0 | 0 | 0 | 0 |

and:

PSACDiff_t is the difference between the participant support costs incurred by the licensee in year t in respect of preparing participants' systems for the introduction of the New Electricity Trading Arrangements and PSAC_t.

- B10. For the purpose of paragraph 13 of Part 2(ii) of special condition AA5A, the term ASO_t shall have the value specified by the following formula:

$$ASO_t = \text{£}5,600,000 \left[\frac{NT}{365} \right]$$

where:

NT is given by the number of days, from and including the day on which the effective time occurred, to and including 31 March 2001, but otherwise have the value of zero.

B11. For the purpose of paragraph 13 of Part 2(ii) of special condition AA5A, the value of the term NPI

(a) in respect of the relevant period t shall be given by the following formula:

$$NPI = \frac{ND}{365} \quad \text{if} \quad ND \leq 365; \quad \text{or}$$

$$NPI = 1, \quad \text{if} \quad ND > 365;$$

where:

ND is given by the number of days from and including the day on which the effective time occurs to and including 31 March 2002; and

(b) for each relevant year t thereafter shall be 1.

B12. For the purpose of paragraphs B5, B6, B7, B13 and B14 of this Schedule:

Z_t has the value against relevant year t in the following table:

| Relevant year t Commencing 1 April | Z_t |
|---|----------------------|
| 2001 | 175.17 |
| 2002 | 178.67 |
| 2003 | 182.25 |
| 2004 | 185.89 |
| 2005 | 189.61 |

and

RI_t shall have the value Z_t until such time as the Retail Price Index for the last month of each relevant year t is known when it shall be the arithmetic average of the Retail Price Indices in respect of each month of each relevant year t.

RM shall, until such time as the Retail Price Index for March 2001 is known, be 171.42 (being the forecast of the Retail Price Index prepared by Business Strategies Limited in December 2000 in respect of the relevant year commencing on 1 April 2000 on the assumption that the Retail Price Index for January 1987 equals 100) after which it shall become the arithmetic average of the Retail Price Indices in respect of each month of the relevant year commencing on 1 April 2000.

B13. For the purpose of paragraph 15 of Part 2(ii) of special condition AA5A, the term CSF_{Mt} shall have the value:

(a) in respect of each month M of the relevant period t commencing at the effective time

(i) $CSF_{Mt} = 0.4$ when $0 \leq 0.4 CP_{Mt} < \pounds 250,000$

(ii) $CSF_{Mt} = 0$ otherwise

(b) in respect of each month M of the relevant year t commencing on 1 April 2002 and of each relevant year thereafter

(i)

$$CSF_{Mt} = 0.4 \text{ when } 0 \leq \left[0.4 CP_{Mt} \right] < \left[\pounds 250,000 \left(\frac{Z_t}{RN} \right) \left(\frac{RI_t}{Z_t} \right) \right]$$

(ii) $CSF_{Mt} = 0$ otherwise

where:

RN shall, until such time as the Retail Price Index for March 2002 is known, be 175.17 (being the forecast of the Retail Price Index prepared by Business Strategies Limited in December 2000 in respect of the relevant year commencing on 1 April 2001 on the assumption that the Retail Price Index for January 1987 equals 100) after which it shall become the arithmetic average of the Retail

Price Index in respect of each month of the relevant year commencing on 1 April 2001.

and

R_{it} and Z_t shall have the meanings ascribed to them in paragraph B12.

B14. For the purposes of paragraph 15 of Part 2(ii) of special condition AA5A, the term OS_{Mt} shall have the value:

(a) in respect of each month M of the relevant period t commencing at the effective time

(i) $OS_{Mt} = 0$ when $CSF_{Mt} > 0$

(ii) $OS_{Mt} = £250,000$ when $CSF_{Mt} = 0$

(b) in respect of each month M of the relevant year t commencing on 1 April 2002 and of each relevant year thereafter

(i) $OS_{Mt} = 0$ when $CSF_{Mt} > 0$

$$(ii) \quad OS_{Mt} = \pounds 250,000 \left(\frac{Z_t}{RN} \right) \left(\frac{RI_t}{Z_t} \right) \text{ when } CSF_{Mt} = 0$$

where:

RI_t and Z_t shall have the meanings ascribed to them in paragraph B12 and
 RN shall have the meaning ascribed to it in paragraph B13.

Appendix 3 Respondents to the initial proposals document

3.1 The following is a list of those who responded to the December 2002 Initial Proposals document:

- ◆ Association of Electricity Producers
- ◆ Bizzenergy Ltd
- ◆ BOC Process Gas Solutions
- ◆ British Energy plc
- ◆ British Gas Trading
- ◆ Chemical Industries Association
- ◆ Conoco (U.K.) Limited and Immingham CHP
- ◆ Corus
- ◆ EDF Trading Ltd
- ◆ Edison Mission Energy
- ◆ Energy Intensive Users Group
- ◆ energywatch
- ◆ Gaz de France Energy Supply Solutions
- ◆ Innogy plc, npower Ltd, Innogy Cogen Trading Ltd, npower Direct Ltd, npower Northern Ltd, npower Yorkshire Ltd
- ◆ LE Group
- ◆ Major Energy Users Council
- ◆ National Grid Company plc

- ◆ Powergen UK plc
- ◆ ScottishPower
- ◆ Scottish and Southern Energy plc
- ◆ TXU Europe
- ◆ United Utilities plc

Appendix 4 Incentivised Balancing Cost component breakdown

Balancing Mechanism Costs (CSOBM)

Licence definition

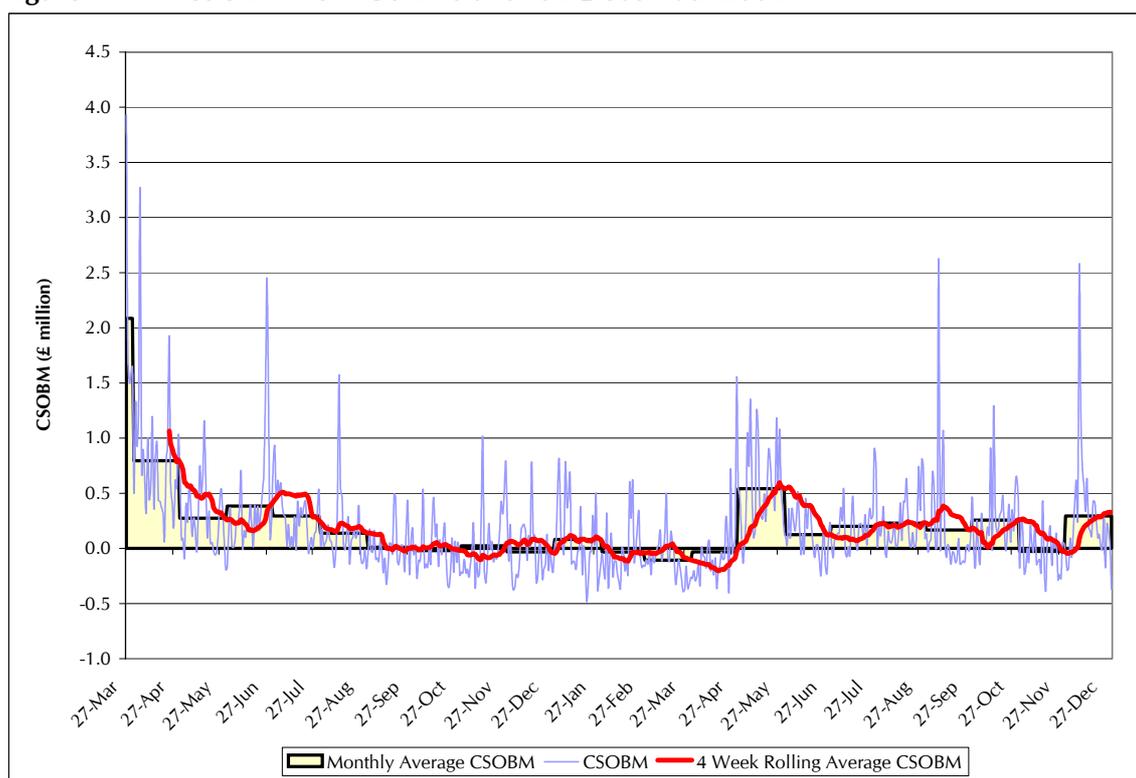
- 4.1 Under NGC's Transmission Licence CSOBM_t is defined as the cost to the licensee of bids and offers in the Balancing Mechanism accepted by the licensee in relevant period t⁵¹ less the total non-delivery charge for that period. CSOBM_t is the sum across the relevant period of the values of CSOBM_j (being the Daily System Operator Balancing Mechanism Cashflow as defined in Table X-2 of Section X of the BSC in force immediately prior to 1 April 2001).

Performance to date

- 4.2 CSOBM_t over the period from Go-Live until 31 March 2002 totalled £65.4 million. Cumulative daily CSOBM from 1 April 2002 until 31 December 2002 was £54.2 million. Figure A4.1 shows daily CSOBM, monthly average CSOBM and a 4 week rolling average of CSOBM for the period up until 31 December 2002.

⁵¹ The transmission licence defines "relevant period t" as that period for the purposes of which any calculation falls to be made commencing on Go-Live and ending on 31 March 2002 and thereafter shall have the same meaning as "relevant year t" where "relevant year t" means that relevant year for the purposes of which any calculation falls to be made.

Figure A4.1 – CSOBM from Go-Live until 31 December 2002



4.3 CSOBM generally decreased throughout the first year of NETA from a monthly total of £23.8 million in April 2001 to -£3.3 million in March 2002. The first nine months of the current incentive period have seen positive monthly CSOBM in all months excluding April 2002 and November 2002. Notably, CSOBM totalled £16.8 million in May 2002, the second highest monthly total since Go-Live. During May 2002, daily CSOBM exceeded £1 million on six occasions. Further CSOBM spikes occurred in September 2002, for example CSOBM was £2.6 million on 9 September 2002. More detailed statistics concerning CSOBM are presented in Table A4.1.

Table A4.1 – Monthly CSOBM statistics (£ million, money of the day)

| Month | Sum | Average | Min | Max | Standard deviation |
|--------|-------|---------|-------|------|--------------------|
| Mar-01 | 10.43 | 2.09 | 1.50 | 3.93 | 1.04 |
| Apr-01 | 23.82 | 0.79 | 0.07 | 3.27 | 0.61 |
| May-01 | 8.51 | 0.27 | -0.19 | 1.15 | 0.30 |
| Jun-01 | 11.51 | 0.38 | -0.18 | 2.45 | 0.52 |
| Jul-01 | 9.09 | 0.29 | -0.04 | 0.93 | 0.24 |
| Aug-01 | 4.26 | 0.14 | -0.19 | 1.57 | 0.32 |
| Sep-01 | 0.33 | 0.01 | -0.33 | 0.49 | 0.20 |
| Oct-01 | -0.61 | -0.02 | -0.35 | 0.53 | 0.21 |
| Nov-01 | 0.75 | 0.02 | -0.35 | 1.01 | 0.32 |

| Month | Sum | Average | Min | Max | Standard deviation |
|--------|-------|---------|-------|------|--------------------|
| Dec-01 | -0.95 | -0.03 | -0.38 | 0.78 | 0.25 |
| Jan-02 | 2.50 | 0.08 | -0.48 | 0.80 | 0.34 |
| Feb-02 | -0.94 | -0.03 | -0.36 | 0.62 | 0.26 |
| Mar-02 | -3.28 | -0.11 | -0.39 | 0.50 | 0.19 |
| Apr-02 | -0.93 | -0.03 | -0.39 | 1.55 | 0.37 |
| May-02 | 16.80 | 0.54 | -0.13 | 1.35 | 0.38 |
| Jun-02 | 3.73 | 0.12 | -0.25 | 0.51 | 0.20 |
| Jul-02 | 6.19 | 0.20 | -0.08 | 0.90 | 0.23 |
| Aug-02 | 7.10 | 0.23 | -0.08 | 0.81 | 0.24 |
| Sep-02 | 5.01 | 0.17 | -0.14 | 2.62 | 0.54 |
| Oct-02 | 7.99 | 0.26 | -0.17 | 1.29 | 0.31 |
| Nov-02 | -0.80 | -0.03 | -0.39 | 0.43 | 0.19 |
| Dec-02 | 9.12 | 0.29 | -0.37 | 2.57 | 0.53 |

Balancing Services Contract Costs (BSCC)

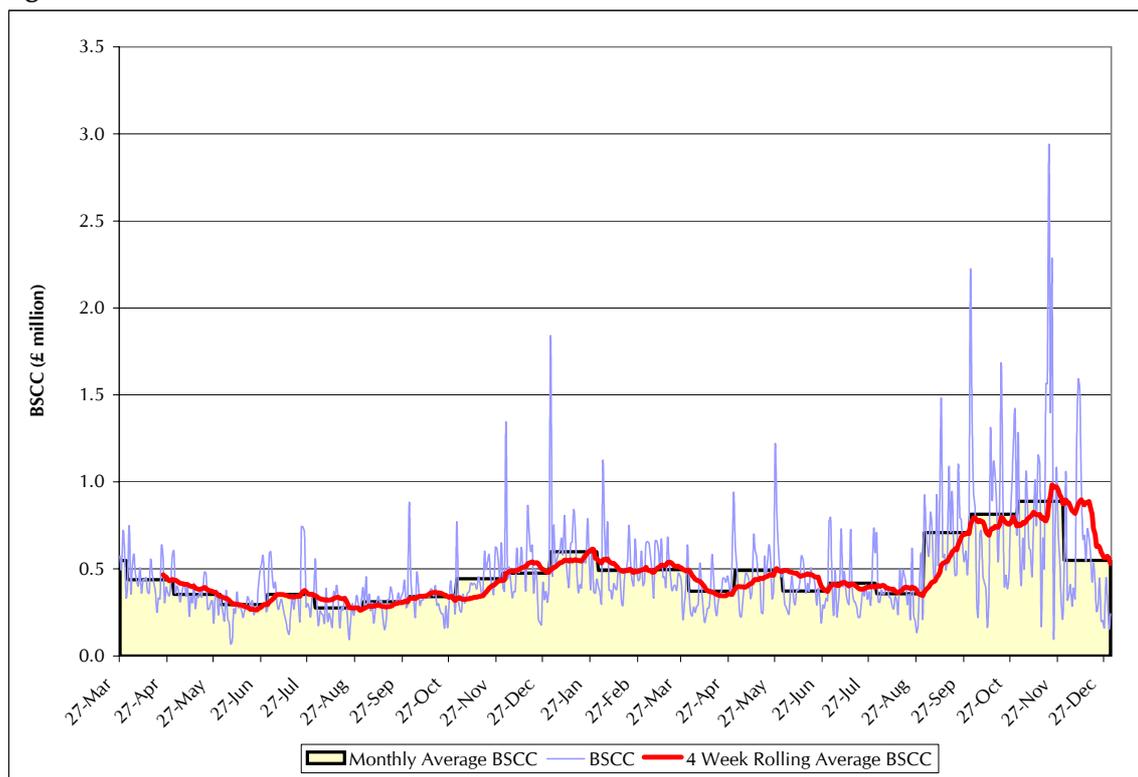
Licence definition

- 4.4 Under NGC's Transmission Licence, BSCC_t is defined as the costs to the licensee of contracts for the availability or use of balancing services during the relevant period *t*, excluding costs within CSOBM_t but including charges made by the licensee for the provision of balancing services to itself in the relevant period *t*.
- 4.5 BSCC_t are the costs of the payments that NGC makes under contract to the providers of balancing services excluding any costs paid through the Balancing Mechanism. This includes costs associated with the procurement of energy, reserve, frequency response, some transmission constraints, black start and reactive power. All these costs are bundled together as BSCC for the purposes of the IBC calculation.

Performance to date

- 4.6 BSCC_t over the period from Go-Live until 31 March 2002 totalled £150.8 million. Cumulative daily BSCC from 1 April 2002 until 31 December 2002 was £151.8 million. Figure A4.2 shows daily BSCC, monthly average BSCC and a 4 week rolling average of BSCC for the period up until 31 December 2002.

Figure A4.2 – BSCC from Go-Live until 31 December 2002



4.7 Total monthly BSCC generally fell over the initial five months after Go-Live to a low of £8.5 million in August 2001 before increasing to a peak of £18.6 million in January 2002. Between February 2002 and August 2002, BSCC fluctuated between about £11 million and £15 million. September 2002 marked the start of three successive months in which BSCC surpassed £20 million (the previous highest monthly total was £18.6 million in January 2002). BSCC was £21.3 million in September 2002, £25.3 million in October 2002 and £26.7 million in November 2002. Over this three month period, BSCC totalled £73.2 million (almost half of overall BSCC for the first nine months of the 2002/03 incentive scheme) at an average of £0.8 million per day, peaking at £2.9 million on 21 November 2002. BSCC decreased to £17.0 million in December 2002. More detailed statistics concerning BSCC are presented in Table A4.2.

Table A4.2 – Monthly BSCC statistics (£ million, money of the day)

| Month | Sum | Average | Min | Max | Standard deviation |
|--------|-------|---------|------|------|--------------------|
| Mar-01 | 2.74 | 0.55 | 0.34 | 0.72 | 0.14 |
| Apr-01 | 13.17 | 0.44 | 0.25 | 0.75 | 0.11 |
| May-01 | 10.95 | 0.35 | 0.19 | 0.60 | 0.08 |
| Jun-01 | 8.85 | 0.30 | 0.07 | 0.57 | 0.11 |
| Jul-01 | 10.95 | 0.35 | 0.13 | 0.74 | 0.16 |
| Aug-01 | 8.54 | 0.28 | 0.10 | 0.56 | 0.09 |
| Sep-01 | 9.35 | 0.31 | 0.15 | 0.45 | 0.07 |
| Oct-01 | 10.57 | 0.34 | 0.16 | 0.88 | 0.13 |
| Nov-01 | 13.29 | 0.44 | 0.25 | 0.77 | 0.12 |
| Dec-01 | 14.74 | 0.48 | 0.18 | 1.34 | 0.22 |
| Jan-02 | 18.55 | 0.60 | 0.36 | 1.84 | 0.27 |
| Feb-02 | 13.75 | 0.49 | 0.29 | 1.12 | 0.18 |
| Mar-02 | 15.36 | 0.50 | 0.21 | 0.68 | 0.13 |
| Apr-02 | 11.17 | 0.37 | 0.19 | 0.94 | 0.15 |
| May-02 | 15.23 | 0.49 | 0.22 | 1.21 | 0.20 |
| Jun-02 | 11.21 | 0.37 | 0.19 | 0.57 | 0.09 |
| Jul-02 | 12.94 | 0.42 | 0.22 | 0.79 | 0.17 |
| Aug-02 | 11.07 | 0.36 | 0.13 | 0.70 | 0.13 |
| Sep-02 | 21.27 | 0.71 | 0.44 | 1.48 | 0.24 |
| Oct-02 | 25.25 | 0.81 | 0.17 | 2.21 | 0.46 |
| Nov-02 | 26.66 | 0.89 | 0.16 | 2.94 | 0.61 |
| Dec-02 | 17.01 | 0.55 | 0.16 | 1.59 | 0.37 |

Transmission Losses (TL) and Transmission Losses Reference Price (TLRP)

Licence definition

4.8 Under NGC's Transmission Licence, $\sum_i(TL_i[TLRP_i])$, referred to as the Transmission Losses Adjustment (TLA), is defined as the volume of Transmission Losses (TL_i) multiplied by the Transmission Losses Reference Price (TLRP_i) for each Settlement Period, summed across all Settlement Periods in the relevant period t. It is the difference between the quantities of electricity delivered to the licensee's transmission system and the quantity taken from the licensee's transmission system during that Settlement Period, but excluding all generator transformer losses.

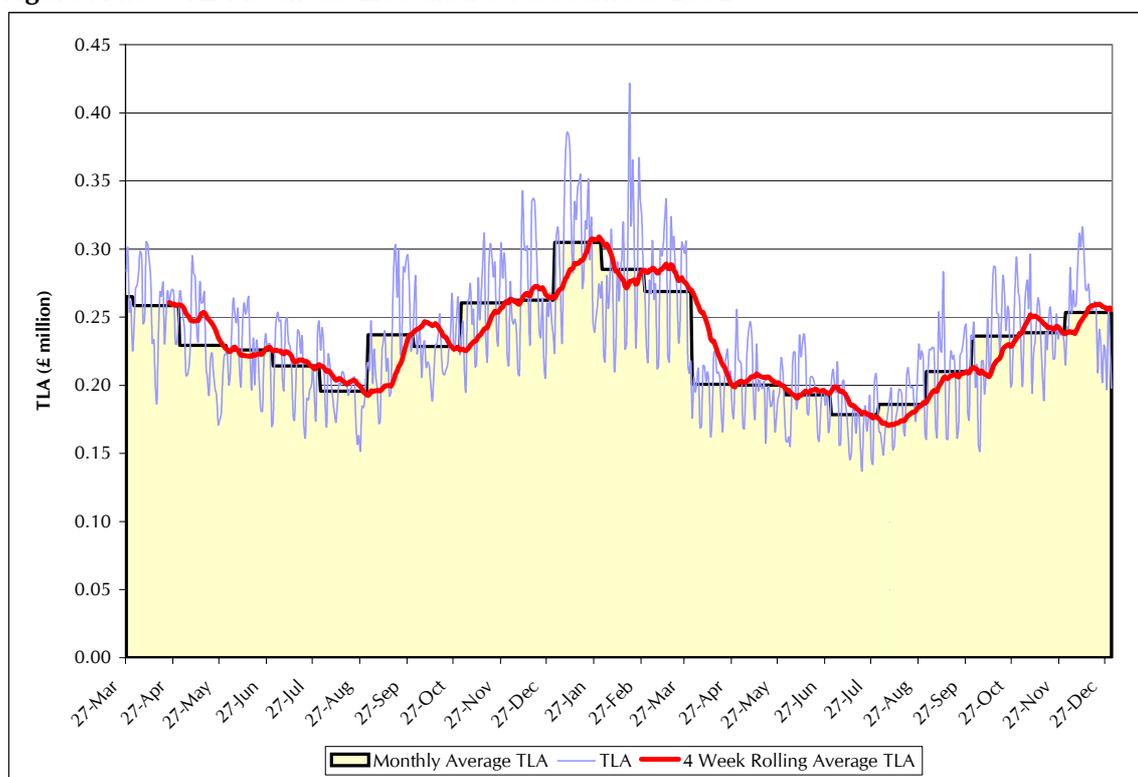
4.9 NGC is incentivised to reduce the overall volume of losses and a reference price (TLRP) is required to allow a cost target to be included in IBC. TLRP_i has the value specified for each Settlement Period set out in paragraph B3 of Part B of

Schedule A of NGC's Transmission Licence. During the period from 27 March 2001 until 31 March 2002, TLRP was fixed at £20.30/MWh (after indexation). It was reduced to £18.50/MWh for the period from 1 April 2002 until 31 March 2003.

Performance to date

4.10 TLA over the period from Go-Live until 31 March 2002 totalled £91.6 million. Cumulative daily TLA from 1 April 2002 until 31 December 2002 was £58.0 million. Figure A4.3 shows daily TLA, monthly average TLA and a 4 week rolling average of TLA for the period up until 31 December 2002.

Figure A4.3 – TLA from Go-Live until 31 December 2002



4.11 TLA generally fell over the initial five months after Go-Live to a low of £6.1 million in August 2001 before increasing to £9.5 million in January 2002. This profile reflects the typical seasonal pattern of losses. Average daily TLA ranged between £0.20 million and £0.30 million during the initial incentive period. The reduction in the value of TLRP from £20.30/MWh to £18.50/MWh for the current incentive scheme accounts for much of the reduction in the average daily TLA from 1 April 2002 onwards. During the current incentive,

daily average TLA has ranged between £0.18 million and £0.25 million. More detailed statistics concerning TLA are presented in Table A4.3.

Table A4.3 – Monthly TLA statistics (£ million, money of the day)

| Month | Sum | Average | Min | Max | Standard deviation |
|---------------|------------|----------------|------------|------------|---------------------------|
| Mar-01 | 1.32 | 0.26 | 0.23 | 0.30 | 0.03 |
| Apr-01 | 7.76 | 0.26 | 0.19 | 0.31 | 0.03 |
| May-01 | 7.11 | 0.23 | 0.17 | 0.29 | 0.03 |
| Jun-01 | 6.78 | 0.23 | 0.17 | 0.26 | 0.03 |
| Jul-01 | 6.64 | 0.21 | 0.16 | 0.25 | 0.03 |
| Aug-01 | 6.07 | 0.20 | 0.15 | 0.24 | 0.02 |
| Sep-01 | 7.11 | 0.24 | 0.17 | 0.30 | 0.04 |
| Oct-01 | 7.08 | 0.23 | 0.19 | 0.28 | 0.02 |
| Nov-01 | 7.81 | 0.26 | 0.20 | 0.31 | 0.03 |
| Dec-01 | 8.14 | 0.26 | 0.21 | 0.34 | 0.04 |
| Jan-02 | 9.45 | 0.30 | 0.23 | 0.39 | 0.05 |
| Feb-02 | 7.98 | 0.29 | 0.21 | 0.42 | 0.05 |
| Mar-02 | 8.33 | 0.27 | 0.21 | 0.34 | 0.04 |
| Apr-02 | 6.02 | 0.20 | 0.16 | 0.26 | 0.02 |
| May-02 | 6.20 | 0.20 | 0.16 | 0.25 | 0.02 |
| Jun-02 | 5.79 | 0.19 | 0.16 | 0.24 | 0.03 |
| Jul-02 | 5.53 | 0.18 | 0.14 | 0.22 | 0.02 |
| Aug-02 | 5.76 | 0.19 | 0.15 | 0.23 | 0.02 |
| Sep-02 | 6.30 | 0.21 | 0.16 | 0.28 | 0.03 |
| Oct-02 | 7.32 | 0.24 | 0.15 | 0.29 | 0.04 |
| Nov-02 | 7.16 | 0.24 | 0.19 | 0.29 | 0.02 |
| Dec-02 | 7.86 | 0.25 | 0.20 | 0.32 | 0.03 |

Total Net Energy Imbalance Volume (TQEI) and the Net Imbalance Volume Reference Price (NIRP)

Licence definition

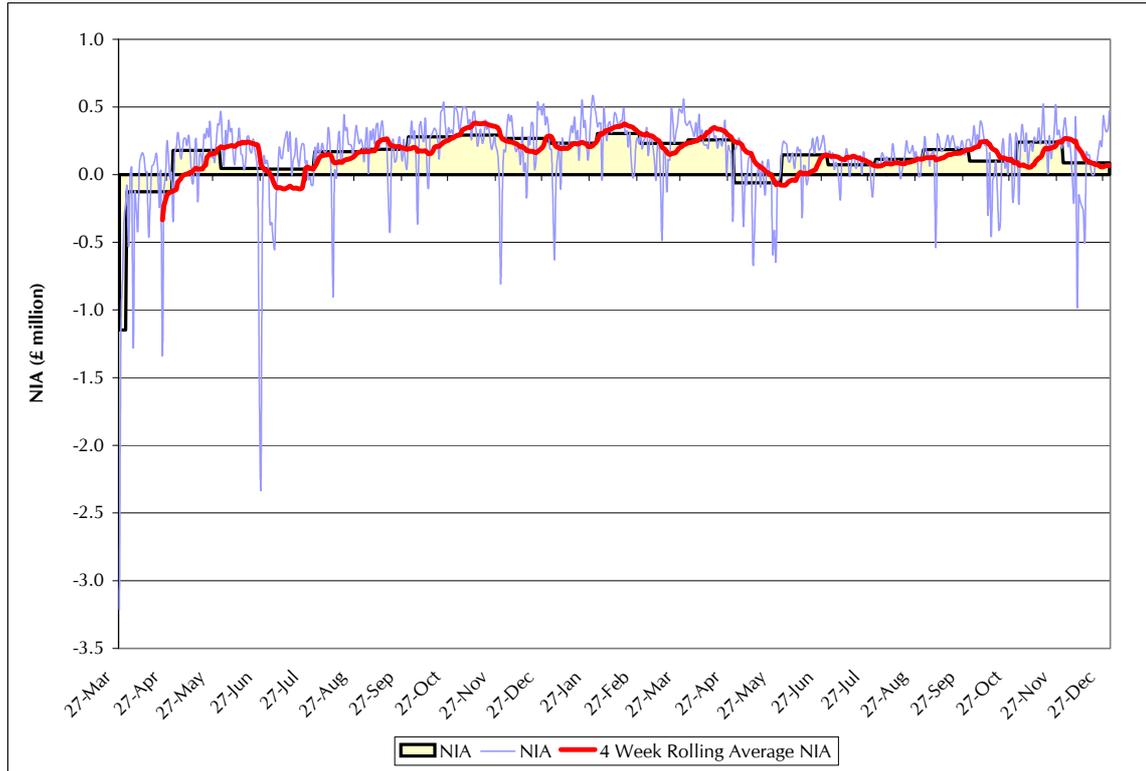
- 4.12 Under NGC's Transmission Licence, $\sum_{jt}(TQEI_j[NIRP_j])$, referred to as the Net Imbalance Adjustment (NIA), is defined as the Total Net Imbalance Volume⁵² ($TQEI_j$), as defined in the BSC in force immediately prior to 1 April 2001, multiplied by the Net Imbalance Volume Reference Price ($NIRP_j$) for each Settlement Period, summed across all Settlement periods in the relevant period t . $\sum_{jt}(TQEI_j[NIRP_j])$.
- 4.13 $NIRP_j$ has the value specified for each Settlement Period set out in paragraph B4 of Part B of Schedule A of NGC's Transmission Licence. During the period from 27 March 2001 until 31 March 2002, $NIRP_j$ was based on imbalance prices using the definitions of System Buy Price (SBP) and System Sell Price (SSP) included in the version of the BSC in force immediately prior to 1 April 2001. Whether SBP or SSP applied was dependent upon TQEI. NIRP was set to be equal to SBP when the system was short, i.e. $TQEI < 0$, SSP when the system was long, i.e. $TQEI > 0$, and zero when the system was in balance.
- 4.14 The definition of NIRP was changed for the current incentive scheme. The first stage in deriving $NIRP_j$ is now to calculate the Single Price Net Imbalance Volume Reference Price for the settlement period ($SPNIRP_j$). This is a market based reference price calculated from a basket of power exchange prices (the United Kingdom Power Exchange and United Kingdom Automated Power Exchange). A variable price adjustment is then applied to $SPNIRP_j$ to give $NIRP_j$. When the system is long $SPNIRP_j$ is multiplied by 0.5 whereas when the system is short it is multiplied by 2.5.

⁵² The total net imbalance volume is the sum of all imbalance volumes over all energy accounts other than energy accounts held by the Transmission Company.

Performance to date

- 4.15 NIA over the period from Go-Live until 31 March 2002 totalled £58.2 million. Cumulative daily NIA from 1 April 2002 until 31 December 2002 was £34.6 million. Figure A4.4 shows daily NIA, monthly average NIA and a 4 week rolling average of NIA for the period up until 31 December 2002.

Figure A4.4 – NIA from Go-Live until 31 December 2002



- 4.16 On 84 per cent of days from Go-Live until 31 December 2002, daily NIA has been positive. This reflects the general tendency for the system to be long, which means that the TQEI component of NIA is positive. As NIA is positive in the majority of cases, the overriding influence of NIA is to increase IBC. On a monthly average basis, daily NIA ranged between -£0.13 million and £0.30 million during the period from April 2001 to March 2002. This spread has narrowed during the period of the current incentive up until the end of December 2002 to range from -£0.06 million to £0.26 million. More detailed statistics concerning NIA are presented in Table A4.4.

Table A4.4 – Monthly NIA statistics (£ million, money of the day)

| Month | Sum | Average | Min | Max | Standard deviation |
|--------|-------|---------|-------|-------|--------------------|
| Mar-01 | -5.73 | -1.15 | -3.21 | -0.22 | 1.22 |
| Apr-01 | -3.76 | -0.13 | -1.34 | 0.25 | 0.37 |
| May-01 | 5.53 | 0.18 | -0.34 | 0.39 | 0.16 |
| Jun-01 | 1.39 | 0.05 | -2.30 | 0.46 | 0.55 |
| Jul-01 | 1.28 | 0.04 | -0.55 | 0.31 | 0.22 |
| Aug-01 | 5.26 | 0.17 | -0.90 | 0.44 | 0.23 |
| Sep-01 | 5.62 | 0.19 | -0.41 | 0.39 | 0.17 |
| Oct-01 | 8.65 | 0.28 | -0.36 | 0.53 | 0.18 |
| Nov-01 | 8.77 | 0.29 | -0.81 | 0.50 | 0.24 |
| Dec-01 | 8.27 | 0.27 | -0.17 | 0.53 | 0.19 |
| Jan-02 | 7.24 | 0.23 | -0.63 | 0.59 | 0.24 |
| Feb-02 | 8.52 | 0.30 | -0.04 | 0.49 | 0.14 |
| Mar-02 | 7.16 | 0.23 | -0.48 | 0.56 | 0.21 |
| Apr-02 | 7.71 | 0.26 | -0.34 | 0.44 | 0.15 |
| May-02 | -1.87 | -0.06 | -0.65 | 0.27 | 0.25 |
| Jun-02 | 4.39 | 0.15 | -0.32 | 0.29 | 0.12 |
| Jul-02 | 2.25 | 0.07 | -0.18 | 0.19 | 0.09 |
| Aug-02 | 3.50 | 0.11 | -0.03 | 0.25 | 0.07 |
| Sep-02 | 5.53 | 0.18 | -0.54 | 0.30 | 0.15 |
| Oct-02 | 3.07 | 0.10 | -0.46 | 0.39 | 0.24 |
| Nov-02 | 7.23 | 0.24 | -0.22 | 0.52 | 0.14 |
| Dec-02 | 2.74 | 0.09 | -0.98 | 0.47 | 0.31 |

Other Allowed Income (RT) and Balancing Services provided to others (OM)

Licence definition

4.17 Under NGC's Transmission Licence, RT_t is defined as the amount of any allowed income adjustment, given by paragraph 12(b) of special condition AA5A, in respect of relevant period t .

4.18 NGC's Transmission Licence defines OM_t as the amount representing the revenue from the provision of balancing services to others during relevant period t , calculated in accordance with paragraph 7 of special condition AA5A.

Performance to date

4.19 Both these costs have been zero to date since the introduction of NETA. RT will only be non-zero if Ofgem agrees to a change to the incentive scheme target as a

result of an Income Adjusting Event. To date, neither NGC nor any BSC Party has issued a notice to the Authority outlining costs or expenses incurred or saved which they consider to relate to an Income Adjusting Event. NGC has advised Ofgem that they expect OM to remain zero for the whole of this year.

Contribution of components to IBC

4.20 In addition to examining the trends of the individual components of IBC, an examination of each component's relative contribution to IBC throughout the period is set out below. Tables A4.5 and A4.6 provide a breakdown of average monthly IBC component totals and their contributions to IBC.

Table A4.5 – Average monthly IBC component totals (£ million, money of the day)

| Period | CSOBM | BSCC | TLA | NIA | IBC |
|--------------------------|--------------|-------------|------------|------------|------------|
| Go-Live to Dec-02 | 5.44 | 13.76 | 6.80 | 4.22 | 30.21 |
| Go-Live to Mar-02 | 5.03 | 11.60 | 7.05 | 4.48 | 28.15 |
| Apr-02 to Dec-02 | 6.02 | 16.87 | 6.44 | 3.84 | 33.17 |

Table A4.6 – Average monthly IBC components as proportion of IBC

| Period | CSOBM | BSCC | TLA | NIA |
|--------------------------|--------------|-------------|------------|------------|
| Go-Live to Dec-02 | 20% | 44% | 23% | 13% |
| Go-Live to Mar-02 | 22% | 41% | 25% | 13% |
| Apr-02 to Dec-02 | 18% | 50% | 20% | 13% |

4.21 Monthly total CSOBM averaged £6.02 million for the period from 1 April 2002 until 31 December 2002 equating to a contribution of 18 per cent to overall IBC over this period. Over the entire period since Go-Live, CSOBM has accounted for 20 per cent of IBC, averaging £5.44 million each month.

4.22 Monthly total BSCC averaged £16.87 million for the period from 1 April 2002 until 31 December 2002, which is over £5 million higher than average BSCC under the initial incentive scheme post Go-Live. This is matched by an upward movement in BSCC's contribution to overall IBC from 41 per cent between 27 March 2001 and 31 March 2002 to 50 per cent between 1 April 2002 and 31 December 2002. BSCC continues to make the largest contribution to IBC of all four non-zero IBC components.

4.23 Monthly total TLA averaged £6.44 million for the period from 1 April 2002 until 31 December 2002, accounting for 20 per cent of IBC. TLA has accounted for

around 23 per cent of total IBC costs over the entire period from Go-Live until 31 December 2002.

4.24 Monthly total NIA averaged £3.84 million for the period from 1 April 2002 until 31 December 2002. NIA's contribution to IBC has been 13 per cent overall for the period from Go-Live until 31 December 2002.

4.25 Additional detail is provided in the tables below. Table A4.7 presents the monthly values of each of the components of IBC, while Table A4.8 shows each component's monthly percentage contribution to IBC.

Table A4.7 – Monthly IBC component totals (£ million, money of the day)

| Month | CSOBM | BSCC | TLA | NIA | IBC |
|--------|-------|-------|------|-------|-------|
| Mar-01 | 10.43 | 2.74 | 1.32 | -5.73 | 8.76 |
| Apr-01 | 23.82 | 13.17 | 7.76 | -3.76 | 40.98 |
| May-01 | 8.51 | 10.95 | 7.11 | 5.53 | 32.10 |
| Jun-01 | 11.51 | 8.85 | 6.78 | 1.39 | 28.53 |
| Jul-01 | 9.09 | 10.95 | 6.64 | 1.28 | 27.95 |
| Aug-01 | 4.26 | 8.54 | 6.07 | 5.26 | 24.13 |
| Sep-01 | 0.33 | 9.35 | 7.11 | 5.62 | 22.41 |
| Oct-01 | -0.61 | 10.57 | 7.08 | 8.65 | 25.69 |
| Nov-01 | 0.75 | 13.29 | 7.81 | 8.77 | 30.62 |
| Dec-01 | -0.95 | 14.74 | 8.14 | 8.27 | 30.21 |
| Jan-02 | 2.50 | 18.55 | 9.45 | 7.24 | 37.74 |
| Feb-02 | -0.94 | 13.75 | 7.98 | 8.52 | 29.31 |
| Mar-02 | -3.28 | 15.36 | 8.33 | 7.16 | 27.57 |
| Apr-02 | -0.93 | 11.17 | 6.02 | 7.71 | 23.97 |
| May-02 | 16.80 | 15.23 | 6.20 | -1.87 | 36.37 |
| Jun-02 | 3.73 | 11.21 | 5.79 | 4.39 | 25.13 |
| Jul-02 | 6.19 | 12.94 | 5.53 | 2.25 | 26.92 |
| Aug-02 | 7.10 | 11.07 | 5.76 | 3.50 | 27.44 |
| Sep-02 | 5.01 | 21.27 | 6.30 | 5.53 | 38.11 |
| Oct-02 | 7.99 | 25.25 | 7.32 | 3.07 | 43.62 |
| Nov-02 | -0.80 | 26.66 | 7.16 | 7.23 | 40.25 |
| Dec-02 | 9.12 | 17.01 | 7.86 | 2.74 | 36.72 |

Table A4.8 – Monthly IBC components as proportion of IBC

| Month | CSOBM | BSCC | TLA | NIA |
|---------------|--------------|-------------|------------|------------|
| Mar-01 | 119% | 31% | 15% | -65% |
| Apr-01 | 58% | 32% | 19% | -9% |
| May-01 | 27% | 34% | 22% | 17% |
| Jun-01 | 40% | 31% | 24% | 5% |
| Jul-01 | 33% | 39% | 24% | 5% |
| Aug-01 | 18% | 35% | 25% | 22% |
| Sep-01 | 1% | 42% | 32% | 25% |
| Oct-01 | -2% | 41% | 28% | 34% |
| Nov-01 | 2% | 43% | 26% | 29% |
| Dec-01 | -3% | 49% | 27% | 27% |
| Jan-02 | 7% | 49% | 25% | 19% |
| Feb-02 | -3% | 47% | 27% | 29% |
| Mar-02 | -12% | 56% | 30% | 26% |
| Apr-02 | -4% | 47% | 25% | 32% |
| May-02 | 46% | 42% | 17% | -5% |
| Jun-02 | 15% | 45% | 23% | 17% |
| Jul-02 | 23% | 48% | 21% | 8% |
| Aug-02 | 26% | 40% | 21% | 13% |
| Sep-02 | 13% | 56% | 17% | 15% |
| Oct-02 | 18% | 58% | 17% | 7% |
| Nov-02 | -2% | 66% | 18% | 18% |
| Dec-02 | 25% | 46% | 21% | 7% |

Appendix 5 BSC Modification Proposals and CUSC Amendment Proposals

5.1 Tables A5.1 and A5.2 respectively list those BSC Modification Proposals and CUSC Amendment Proposals for which Income Adjusting Event (IAE) provisions will not be available. The proposals listed are all those that were live as of 14 March 2003.

Table A5.1 – BSC Modification Proposals for which IAE provisions are not available

| Modification No. | Modification Title |
|-------------------------|---|
| P80 | Deemed Bid/Offer Acceptance for Transmission System Faults |
| P87 | Removal of market risk associated with operation of a Generator Inter-trip Scheme |
| P89 | Clarification of the Timescales for Submitting MEL/MIL Data to the BMRA |
| P98 | Dual Notification Of Contract Positions |
| P100 | Extension of Demand-side Trading Units in order to increase the competitiveness of the market for embedded benefits |
| P102 | Entitlement of Licence Exemptable Generators ("LEGs") to BSC Membership Without Evidence of Trading |
| P103 | Respecification of Trading Data |
| P106 | Amendment to the BSC to allow Multiple Supplier Ids. |
| P107 | Data Retention Requirements for Post-Final Trading Disputes |
| P109 | A Hedging Scheme for changes to TLF in Section T of the code |
| P110 | Nullification of Volume Notifications Where No Notification Authorisations Are in Place |
| P111 | Procedure to allow the BSC Panel to refuse to accept Contingent Modification Proposals |
| P112 | Removing the obligation on new BSC Parties acceding to the BSC Framework Agreement to comply with Section A 2.2.5 |
| P113 | E-mail communications under the code |
| P114 | Entitlement of Licence Exemptable Generators ("LEGs") and other Non-trading Parties to BSC Membership Without Evidence of Trading |
| P115 | Disapplication of Supplier Charges Under Certain Circumstances |
| P116 | Changes to Allow Line Loss Factor Data from BSC Website to be used in Settlement |
| P117 | Rectification of Past Notification Errors (PNEs) |
| P118 | Increased efficiency in the reporting of Credit Default statements |
| P119 | Increased flexibility in the reporting of upheld Trading Disputes relating to Credit Default |
| P120 | Credit Cover during Holiday Periods |
| P121 | Credit Cover following a change in a Party's Portfolio |

Table A5.2 – CUSC Amendment Proposals for which IAE provisions are not available

| Amendment No. | Amendment Title |
|----------------------|--|
| CAP002 | Clause 6.5.1 |
| CAP044 | Extension of Election Arrangements to Panel Alternates |
| CAP045 | Cost-reflective reactive power default payment rate indexation |
| CAP046 | Mandatory Frequency Response - Calculation of Volumes |

Appendix 6 The regulatory framework

Introduction

- 6.1 This appendix summarises the current regulatory framework for the electricity industry. It outlines the current legislative, licensing and regulatory regimes and describes the relationship between the Electricity Act 1989, the Utilities Act 2000, licences and industry agreements.

The Electricity Act 1989 (the “Electricity Act”)

- 6.2 The Electricity Act, as amended by the Utilities Act 2000, provides the framework for the functions of the Gas and Electricity Markets Authority (the “Authority”) and sets out the licensing regime in relation to the supply, distribution, generation and transmission of electricity.
- 6.3 Under section 9(2) of the Electricity Act, holders of Transmission Licences are obliged to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity.

The Utilities Act 2000 (the “Utilities Act”)

- 6.4 The Utilities Act received Royal Assent on 28 July 2000. It introduced a new principal objective for the Authority, as defined in Section 3A of the Electricity Act. The Authority’s principal objective is “to protect the interests of consumers in relation to electricity conveyed by distribution systems, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity”.

NGC’s Electricity Transmission Licence

- 6.5 NGC owns and operates the national grid in England and Wales, which transports electricity at high voltage from the generators to the local distribution networks and to customers connected directly to the transmission system. The

Secretary of State granted, under section 6(1) of the Electricity Act, an Electricity Transmission Licence to NGC. NGC is the sole possessor of an Electricity Transmission Licence in England and Wales.

Special condition AA4

6.6 NGC's transmission licence contains several provisions relating to information provision and transparency:

- ◆ special condition AA4 (1) requires the licensee to operate the licensee's transmission system in an efficient, economic and co-ordinated manner; and
- ◆ special condition AA4 (2) prohibits the licensee from discriminating as between any persons or classes of persons in its procurement or use of balancing services.

6.7 NGC is required to procure any balancing services competitively and via transparent processes. In order to fulfil this requirement, NGC is obliged under special condition AA4 of the transmission licence to have in place two documents⁵³:

- ◆ the Procurement Guidelines ("PGs"), which detail the types of balancing services that NGC may be interested in purchasing, together with the mechanisms envisaged for purchasing such balancing services. Table 3 within Part E of the PGs outlines NGC's approach to providing information relating to its procurement of balancing services in order to provide market participants and other interested parties with sufficient information without compromising the commercial position of any contracting party. Table 3⁵⁴ is reproduced in Appendix 7 of the Initial Proposals; and

⁵³ Details of the PGs, BPS and the BSAD Methodology Statement can be found at NGC's website www.nationalgrid.com/uk/indinfo.

⁵⁴ The version of Table 3 reproduced is that which will apply from 25 February 2003 following the recent conclusion of a PGs consultation.

- ◆ the Balancing Principles Statement (“BPS”), which defines the broad principles and criteria by which NGC will determine, at different times and in different circumstances, which balancing services it will use to assist in the operation of the transmission system.

Special condition AA5

- 6.8 Special condition AA5A sets restrictions on the revenues that NGC is allowed to earn from its Transmission Business. For this purpose, NGC’s activities are split between its Transmission Network Services (“TNS”) and its Balancing Services Activity (“BSA”).
- 6.9 The TNS activities are defined as including all NGC’s authorised activities relating to the planning, development, construction and maintenance of the transmission system (except for its BSA and excluded services). The BSA covers procuring and using balancing services for the purpose of balancing the licensee’s transmission system. As such, the TO carries out the TNS activities whilst the SO carries out the BSA activity.
- 6.10 Part 1 of special condition AA5A outlines the revenue restriction in relation to NGC’s TNS, while Part 2 outlines the revenue restriction in relation to its BSA.
- 6.11 The TNS revenue restriction is in the form of an RPI-X price control. The current restriction started on 1 April 2001 and is due to finish on 31 March 2006.⁵⁵ The BSA revenue restriction consists of a profit-sharing (sliding scale) incentive scheme, which has separate targets for NGC’s internal and external SO costs.

Industry Codes

The Balancing and Settlement Code (the “BSC”)

- 6.12 The BSC’s scope is defined in general terms in the Transmission, Generation and Supply licences. The BSC is a code that sets out the rules for the Balancing Mechanism and imbalance settlement process under NETA and it is maintained

⁵⁵ Details of the current revenue restriction can be found in ‘The transmission price control review of the National Grid Company from 2001: transmission asset owner, Final proposals’, Ofgem, September 2000.

by NGC under supplementary standard condition C3 of its Transmission Licence.

- 6.13 The BSC sets down the arrangements in respect of:
- ◆ making, accepting and settling offers and bids to increase or decrease electricity delivered to, or taken off, the total system (NGC's transmission system and the distribution systems) to assist NGC in balancing the system; and
 - ◆ determining and settling imbalances and certain other costs associated with operating and balancing the transmission system.
- 6.14 A BSC Panel has been created and charged with overseeing the management, modification and implementation of the BSC rules, as specified in Section B of the BSC. The Panel has twelve representatives made up from industry members, consumer representatives, independent members and NGC. The Authority appoints the Chairman of the Panel.
- 6.15 The Balancing and Settlement Code Company (ELEXON⁵⁶) supports the BSC Panel. The primary purpose of ELEXON is to provide or procure a range of operational and administrative services (both directly and through contracts with service providers) and to implement the provisions of the BSC and modifications to it.
- 6.16 The details of the modification procedures are contained in Section F of the BSC. They are designed to ensure that the process is as efficient as possible whilst enabling as many parties as possible to propose modifications and have the opportunity to comment on modification proposals. Whilst Ofgem cannot initiate any modifications, it is required to approve or reject all modifications to the BSC, according to defined criteria.

⁵⁶ The Balancing and Settlement Code Company was named ELEXON Limited on 7 June 2000.

The Connection and Use of System Code (the “CUSC”)

- 6.17 NGC is required under supplementary standard condition C7F of the Transmission Licence to prepare the CUSC. The CUSC is a licence-based code, setting out the principal rights and obligations in relation to connection to and/or use of the Transmission System and to the provision of certain balancing services. The CUSC was designated by the Secretary of State on 25 June 2001 and came into effect on 18 September 2001.
- 6.18 A CUSC Panel has been charged with overseeing the CUSC amendment process as specified in Section 8 of the CUSC. The Panel has representatives made up from industry members, consumer representatives, independent members and NGC. The Chairman of the Panel is appointed by NGC and must be a senior employee of NGC. NGC is responsible for implementing or supervising the implementation of Approved Amendments as outlined in paragraph 8.2.3.3 of the CUSC. As with the BSC, while Ofgem cannot initiate amendments, it is required to approve or reject all amendments to the Code, according to defined criteria.

Appendix 7 Information and transparency

- 7.1 This appendix provides details of enhanced information provision and possible developments to the transparency of the AA4 reports and the Balancing Principles Statement (“BPS”) audit suggested by respondents to the Initial Proposals.

Details of additional/enhanced information provision

Pre-Gate Closure Balancing Trade (PGBT) information

- 7.2 One respondent considered that PGBT information should be made available in similar timescales and format to that for Bid-Offer Acceptances (“BOAs”). The respondent therefore considered it appropriate that information relating to all accepted and unaccepted PGBT offers should be made available automatically in the settlement period following their acceptance or non-acceptance, together with details as to whether or not each trade will be included in Energy Imbalance Price calculations.
- 7.3 Another respondent considered that PGBT requirements should be notified and traded on a competitive screen based system to allow open competition for all parties. Acceptances should be published in real time with System/Energy tagging i.e. Balancing Services Adjustment Data (“BSAD”) inclusive or not.

Frequency response information

- 7.4 One respondent suggested enhanced reporting in relation to frequency response payment and capability. In relation to frequency response payments, the respondent suggested that the following are reported separately (if combined, its value will diminish):
- ◆ primary/secondary frequency response holding payment;
 - ◆ high frequency response holding payment;
 - ◆ primary/secondary frequency response imbalance compensation payment; and

- ◆ high frequency response imbalance compensation payment.

7.5 In relation to frequency response capability, the respondent suggested that the following are reported separately (if combined, its value will diminish):

- ◆ total frequency response capability available at the peak, trough demand and a TV pickup (or special event) for each day (3 figures per day);
- ◆ total frequency response capability instructed at the peak and trough demand and a TV pickup (or special event) for each day (3 figures per day);
- ◆ total frequency response volume delivered at the peak and trough demand and a TV pickup (or special event) for each day (3 figures per day); and
- ◆ total frequency response capability failure when instructed at the peak and trough demand and a TV pickup (or special event) for each day (3 figures per day).

Warming contract information

7.6 One respondent requested that the industry be notified when warming contracts are issued and to what stations in order to ensure that it is not only certain parties that have prior knowledge of the potential effect on Energy Imbalance Prices.

Additional information provision

7.7 Respondents also highlighted different ways in which to enhance information provision as follows:

- ◆ provide highest half-hourly payment/MVarh each day in relation to reactive power.
- ◆ reasons should automatically be given whenever anything is taken out of price order.

Details of developments to the special condition AA4 reports and BPS audit

7.8 One respondent outlined areas in which improvements could be made and suggested possible enhancements as follows:

BPS audit and report

- ◆ no detail is given about which days were tested in the sample;
- ◆ Ofgem and market participants should be able to suggest which days are audited and there should be less focus on clock change days etc. and more focus on days of significant system stress;
- ◆ the auditors should have sufficient engineering knowledge to be able to challenge engineers' remarks when actions are taken out of cost order;
- ◆ some audit tests that are described seem vague, e.g. checking to see if some units are called more frequently. In this example it is unclear what follow-up is undertaken if units are accepted more frequently and what criteria would constitute a breach of the BPS;
- ◆ a summary of what happened on each audited day would provide greater transparency and useful examples of how NGC takes actions in line with its BPS; and
- ◆ the audit could also look at the consistency of similar actions which are currently delivered using different mechanisms on different days. For example, reducing output from plants on summer evenings either through PGBTs with the action being classed as "system" or by accepting bids in the Balancing Mechanism with the former being excluded and the latter included in imbalance cashout prices.

PGs report

- ◆ the report only summarises the deals NGC did during the year. It provides no assurance that NGC delivered value for money through the units it accepted and rejected.