

National Grid Electricity Transmission's System Operator incentive schemes 2006/07

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Overview:

National Grid Electricity Transmission (NGET) is the system operator (SO) for the high voltage electricity system in Great Britain. NGET buys and sells electricity and other related services from generators, suppliers and large customers to keep the system safe and secure. Ofgem sets incentive schemes to encourage NGET to manage and reduce these costs on customers' behalf. The current incentive schemes are due to expire on 31 March 2006. This document sets out our final proposals for these schemes for 2006/07.

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Target Audience: This document will be of interest to generators, suppliers, customers and other interested parties

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Context

National Grid Electricity Transmission (NGET) is system operator (SO) for the high voltage electricity transmission system in Great Britain. NGET is responsible for making sure that electricity supply and demand stay in balance and the system stays within safe technical and operating limits. NGET currently spends about £500 million a year managing the system. The main costs are the costs of NGET's staff and systems and of buying and selling electricity and other services from electricity generators, suppliers and large customers.

Ofgem sets an incentive scheme to encourage NGET to manage and reduce the costs of operating the system. This document sets out our final proposals for this year's incentive scheme. If NGET agrees to our proposals they will be implemented on 1 April 2006.

Associated Documents

- Ofgem's December letter: National Grids Electricity Transmission System Operator Incentives 2006-07 and associated appendices.
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13412_Initial_proposals_letter_FINAL_corrected_.pdf
- Ofgem's January letter: National Grids Electricity Transmission System Operator Incentives 2006-07 - Revised Forecast and associated appendixes.
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13458_Ofgem_cover_letter_for_NGET_revised_forecast_FINAL.pdf
- Ofgem's Final Proposals on internal incentive costs: NGC System Operator price control and incentive scheme under NETA; December 2000.
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/1435_ngcpcincentive.pdf?wtfrom=/ofgem/whats-new/archive.jsp
- Ofgem's Final proposals and impact assessment: Transmission price control and BETTA - 'December 2004' (Reference 279/04).
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9612_27904.pdf?wtfrom=/ofgem/whats-new/archive.jsp
- Ofgem Final proposals: Extending National Grid Electricity plc's transmission Owner Control for 2006/07 - 'November 2005'.
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/12992_253_05.pdf?wtfrom=/ofgem/whats-new/archive.jsp

Table of Contents

Summary	1
Background	1
Respondents' views	1
Ofgem's views	1
Final proposals	2
Next steps	2
1. Introduction	3
Introduction	3
Process for setting this incentive scheme	3
Structure and Approach	4
Way Forward	4
2. Background on NGET's proposed SO incentive costs for 2006/07 .	6
System operation	6
External balancing incentive scheme	6
Transmission losses	10
Internal SO costs	11
Summary	12
3. Assessment of NGET's forecast	13
NGET's external balancing costs forecast	13
NGET's internal SO cost forecasts	18
Respondents' views	19
Our analysis of NGET's external balancing costs	19
Changes to balancing services in 2006/07	22
Transmission losses	23
Internal SO costs	23
Summary	24
4. Ofgem's final proposals	25
Introduction	25
External balancing costs	25
Transmission losses adjustment	29
Internal SO costs	30
Next steps	30
Appendices	32
Appendix 1 - Consultation Response and Questions	33
Appendix 2 – Summary of responses to December (and January) consultation	35
Appendix 3 – Internal incentive SO costs	38
Appendix 4 - Draft legal text	41
Appendix 5 - Ofgem's Statutory Responsibilities	60
Appendix 6 - Glossary	62
Appendix 7 - Feedback Questionnaire	65

Summary

The purpose of this document is to set out our proposals for **incentive schemes** on National Grid Electricity Transmission (NGET) for its **system operation** (SO) activity for **2006/07**. These schemes are designed to encourage NGET to manage and reduce the costs of operating the high voltage transmission system in Great Britain. Customers ultimately pay for the costs of system operation. NGET has significantly reduced the costs of system operation under previous incentive schemes. Both customers and NGET have enjoyed the benefits of these reductions in cost under the schemes as they share any cost reductions between them.

The document also formally consults on changes to NGET's transmission licence that are necessary to implement the new schemes.

Background

There are three main elements subject to the 'incentive' schemes: one incentive scheme covers NGET's **external balancing** costs (the costs NGET incurs in buying and selling electricity and other services from generators, suppliers and large customers to keep the system in balance) the second **transmission losses** and the third covers NGET's own **internal costs** (ie. buildings, staff and IT systems).

In November 2005, NGET submitted forecasts of its incentive scheme costs for this year and next year. NGET forecast that it would reduce its external balancing costs for 2005/06 below its current incentive scheme target of £377.5 million but that its costs for next year would rise by £55 million to £420 million. After submitting its forecasts, NGET began to incur much higher costs for some periods of this winter. NGET withdrew its forecasts and in January submitted a re-forecast, projecting costs of £395 million for this year and £451 million for 2006/07.

Respondents' views

We published both of NGET's forecasts, inviting views on the forecasts and whether we should consider the revised forecasts in setting the new scheme. There were nine responses to our publication of these forecasts. Five respondents expressed concern that NGET had withdrawn its forecast so late in the process and said that Ofgem should not consider the revised forecasts. Two respondents said that we should consider them in setting this year's scheme.

Ofgem's views

We have carefully analysed NGET's forecasts and have the following concerns:

- **Distribution of costs:** NGET's revised forecasts for 2006/07 is based on the assumption that the increased costs it has faced during the latter part of 2005/06 will continue in 2006/07. NGET assumes that the distribution of balancing costs has shifted and that the incentive scheme target needs to reflect this. Whilst we accept that there are some reasons why balancing costs may rise, such as higher

wholesale energy prices, we think that NGET has overstated the risks and that its forecast level of costs is too high as a result.

- **Assumptions in NGET's forecasts:** we do not think that a number of the detailed assumptions underlying NGET's forecasts are reasonable (e.g. the impact of higher wholesale prices on balancing costs, the volumes of certain services it expects to buy and its assumption that competition will not, over time, reduce some of its system management costs).
- **NGET's forecast history:** NGET has a consistent track record of proposing very high targets for its external cost incentive scheme and agreeing to a lower target based on our assessment of a more reasonable target. It has beaten the target and made a profit under the scheme for every year a scheme has been set.

Final proposals

Ofgem has carried out a "top down" and "bottom up" analysis of the probable level of costs next year. The "top down" approach constructs a forecast distribution of costs for next year, based on this year's costs after making adjustments for any cost drivers that are likely to change costs next year. The "bottom up" approach considers each of the detailed elements of NGET's forecast and assesses whether the underlying assumptions are reasonable, making adjustments where appropriate.

Ofgem's final proposals are based on this analysis. There are two options for external balancing costs that are designed to provide a fair balance of risk and reward between NGET and customers, who ultimately pay these costs.

External balancing costs

	Target (£m)	Upside (reward to NGET if costs are below target)		Downside (costs to NGET if costs are above target)	
		Sharing factor	Cap (£m)	Sharing factor	Cap (£m)
Option 1	390	60%	40	-10%	-10
Option 2	410	10%	10	-60%	-40

Transmission losses scheme

The target volume of losses is 5.82TWh and the reference price will be indexed to market prices. The sharing factors will be the same as for external balancing costs.

Internal SO costs

The internal cost incentive scheme target is £107.9million, with the same sharing factors as under the external balancing cost scheme.

Next steps

If NGET consents to either of our options for the external incentives scheme, their chosen option would be effective from 1 April 2006. If it rejects both of them, we would have to decide whether to refer the matter to the Competition Commission or else to rely on direct regulation of NGET's SO costs based on our existing powers.

1. Introduction

Chapter Summary

This chapter describes the process we have followed in developing our final proposals for NGET's incentive schemes, the structure of the document and our intended way forward. We also invite views from interested parties on the final proposals set out in this document.

Questions

There are no specific questions in this chapter.

Introduction

1.1. National Grid Electricity Transmission (NGET) is the system operator (SO) for the high voltage electricity system in Great Britain (GB). As SO, NGET buys and sells electricity and other related services from generators, suppliers and large customers to keep the high voltage transmission system in balance in real time. To ensure that NGET's incentives are aligned with those of consumers, who ultimately pay the SO costs, Ofgem puts in place incentive schemes on both its internal and external costs.

Process for setting this incentive scheme

1.2. The incentive schemes are based around an assessment of forecast costs and the potential distribution of costs under different scenarios for the next year (see Chapter 3). NGET provide a forecast of the level of costs and the likely distribution under a range of scenarios. Ofgem then issues a consultation document setting out NGET's forecast costs and our views on this forecast. This year, we decided to issue a letter inviting views on NGET's forecasts. We did not publish a document because we had to divert resources and re-prioritise our work because of events in the gas market. Our letter was published in December (the December letter)¹ setting out NGET's initial forecasts (the November forecast) but without any comments from Ofgem on the forecast.

1.3. Just before the publication of our December letter, NGET wrote to us stating that it was withdrawing its forecast level of external balancing costs for 2006/07. It cited concerns over increases in the costs of managing constraints and the impact of high and volatile wholesale prices on SO costs. NGET indicated that it would submit a revised forecast of its external balancing costs (IBC) for 2006/07 to us in early January. Although, we had not decided whether to take into account NGET's revised forecasts (the January forecast), we published NGET's revised forecast so that respondents could take into account NGET's revised views.²

¹http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13412_Initial_proposals_letter_FINAL_corrected_.pdf

²http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13458_Ofgem_cover_letter_for_NGET_revised_forecast_FINAL.pdf

1.4. In light of respondents' views and our own analysis of NGET's forecasts and costs we developed our view on appropriate incentive schemes. We shared our draft proposals and analysis with NGET so that we could present its views prior to our final decision on an appropriate incentive scheme.

1.5. In mid-February, NGET put forward the suggestion that the target for the external cost incentive scheme should be indexed to power prices.³ This would represent a material change to the form of the incentive scheme compared with previous years. It could also significantly alter the risk/reward balance relative to the incentive schemes NGET has faced in the past. We think that introducing such a substantial change at such a late stage, without the possibility of consulting on it or analysing the underlying assumptions in detail, would introduce unacceptable risks of unintended consequences or would be a bad deal for customers. We therefore decided not to pursue NGET's proposal. NGET also put forward a variation on this proposal, retaining the indexation, but establishing the target based on 2005/06 outturn costs plus £20 million. Chapter 4 contains a more detailed discussion of these proposals and our reasons for rejecting them.

1.6. Inevitably, NGET's submission of a substantially revised forecast has reduced the time we have had to consider its analysis and develop our own proposals. In addition, there has been no opportunity to consult with market participants and other interested parties on our proposals or potential alternatives. Ofgem will be taking up these points with NGET to make sure there is a better process during the development of next year's proposals.

1.7. We are now publishing our final proposals in the light of responses to our consultations and our discussions with NGET.

Structure and Approach

1.8. Chapter 2 of this document briefly recaps on NGET's system operation (SO) role, the reason for the SO incentive schemes, how they work and are set each year. Chapter 3 summarises NGET's forecasts, our analysis and respondents views on the targets for 2006/07. Chapter 4 sets out our final proposals based on our assessment of NGET's forecasts. Appendix 4 provides a statutory notice containing our revised licence conditions reflecting our proposed changes.

Way Forward

1.9. Appendix 4 of this document a statutory notice of our intention to modify by agreement NGET's transmission licence under section 11 of the Electricity Act 1989. These modifications will implement the proposals set out in this document.

³ NGET's proposal was for the target to be set at £415 million and linked to an electricity market price of £45/MWh. Under this indexation approach, the target would be adjusted upwards if electricity prices rose or adjusted downwards if they fell.

1.10. The proposed licence modifications contains licence drafting to reflect the options presented under our final proposals present for the external SO incentive scheme. If NGET does not consent to either of the external balancing costs incentives, we would still propose appropriate changes to the internal SO costs allowance for next year.

1.11. We would welcome the views of interested parties regarding all aspects of our proposed modifications. Responses should be sent to wholesale.markets@ofgem.gov.uk to be received no later than **28 March 2006**. Details of how to respond can be found in Appendix 1.⁴

1.12. The statutory notice under section 11 of the Electricity Act 1989 specifies a period of not less 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, except where the Secretary of State directs Ofgem not to make the modifications.

1.13. NGET must consent to the proposed licence modifications before they can be implemented. If NGET does not consent to the proposed licence modifications Ofgem can refer the proposed SO incentive scheme modifications to the Competition Commission for final adjudication. Alternatively, we could allow the incentive schemes to fall away. If this occurs, NGET will simply pass-through its actual costs. Ofgem would then be responsible for directly regulating NGET's performance as SO and could take enforcement action and impose financial penalties if NGET was operating the system inefficiently or was found to be in breach of other relevant licence conditions.

1.14. If NGET consents, Ofgem intends, subject to any representations made during the consultation and any direction received from the Secretary of State, to direct the relevant modification of NGET's transmission licence in line with the proposed licence modifications shortly after 28 March 2006, so that the new licence conditions can apply from 1 April 2006.

⁴ Appendix 7 provides details of how to give feedback to us on the manner in which this consultation has been conducted.

2. Background on NGET's proposed SO incentive costs for 2006/07

Chapter Summary

This chapter sets out a brief description of NGET's role, how the incentives are set and how they have operated previously.

Questions

There are no specific questions in this chapter.

System operation

2.1. NGET's SO incentives schemes relate to the costs NGET incurs in operating the GB electricity system and is designed to provide appropriate financial incentives for NGET to manage and reduce these costs.

2.2. There are three main components subject to incentives schemes. Under an external balancing scheme NGET is set a target level of costs to beat covering:

- the costs that NGET incurs in buying or selling electricity and other services (such as reserve, reactive power, black start, frequency response)⁵ in order to keep the transmission system balanced within safe technical limits, and
- the costs of transmission losses

2.3. The internal balancing scheme sets a target level of cost for NGET to beat in respect of NGET's own internal costs incurred in its SO role such as staffing and IT costs.

2.4. In this chapter we set out more information on the main three components subject to these schemes, how the levels within the schemes are set and how the schemes work.

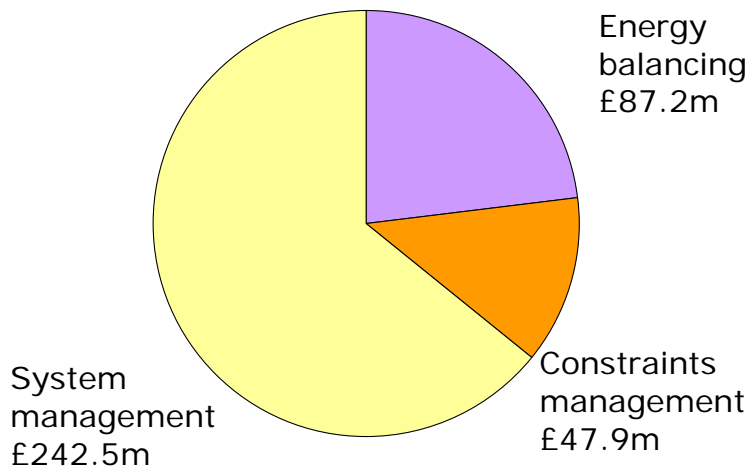
External balancing incentive scheme

External balancing costs: components

2.5. As stated above, NGET must contract with external parties in order to keep the high voltage transmission system in balance. Figure 2.1 below shows the target for external balancing costs that Ofgem set for NGET for 2005/06. External balancing costs can be split into three main categories: energy balancing; system and constraints management. We explain each of these further below. Within the external balancing scheme, NGET also has an incentive to reduce the costs of transmission losses. We discuss this in more detail later in this chapter.

⁵ Appendix 6 contains an explanation of these terms in more detail.

Figure 2.1: External balancing costs components 2005/06 target (£ 377.5m)



Energy balancing⁶

2.6. The balancing and settlement rules for the wholesale electricity market are designed to encourage generators and suppliers to make sure they match the electricity they are contracted to produce or supply (to customers) with what they actually produce or their customers use. NGET's acts as 'residual balancer' and buys and sells electricity to keep the system in balance. Typically, these trades are carried out at short notice in the balancing mechanism (BM) but NGET may also contract ahead (for example where it anticipates potential shortages). When we set NGET's target for 2005/06, we allowed around £87 million for these costs (about one quarter of the overall target for external balancing costs).

Constraints management

2.7. NGET also takes actions (by contracting with generators, suppliers and large customers) to resolve constraints on the transmission system. These occur when there is not enough transmission capacity to transmit electricity from where it is being generated to where it is being consumed and may arise even if the system is otherwise in balance. NGET's target allowance was around £48 million for 2005/06.

System management

2.8. NGET also contracts for a range of other balancing (or 'ancillary') services. These are mainly system balancing services required to maintain the system stability, such as Reactive Power and Frequency Response, but it also contracts Reserve for energy balancing reasons.⁷ These system management costs represent

⁶ NGET refers to energy balancing in its forecasts as incentivised balancing mechanism costs plus trading costs (excluding constraints).

⁷ Further detail on these balancing services is available Appendix 6, which provides a glossary of these terms.

the largest proportion (nearly two-thirds) of NGET's target for its balancing costs for 2005/06.

SO external balancing incentive scheme: how the scheme works

2.9. Under the SO external cost incentive scheme, NGET is allowed to recover the actual costs of energy balancing, constraint management and system management, adjusted by incentive payments or charges relating to these costs. The value of an incentive payment or charges depends upon NGET's performance in relation to a cost target set in advance.

2.10. If NGET's costs are below the target, it keeps a proportion, set by a **sharing factor (the upside sharing factor)**, of the reduction in costs. If its costs are above the target, NGET is charged a proportion, set by a sharing factor (**the downside sharing factor**), of the costs in excess of the target. NGET's overall gains or losses on its balancing costs are limited by applying a **cap** on the profits and a **collar (or floor)** on the losses. In setting incentive scheme targets, sharing factors, caps and floors, Ofgem aims to provide NGET with an appropriate balance of risk and reward given the likely distribution of costs under a range of scenarios. Table 2.1 summarises the schemes to date.⁸

Table 2.1: SO external balancing incentive schemes to date⁹

£ m	Target	Sharing factors		Cap	Floor
		Upside (%)	Downside (%)		
2001/02	382	40	12	46.3	-15.4
2002/03	367	60	50	60	-45
2003/04	340	50	50	40	-40
2004/05	320	40	40	40	-40
2005/06	378	40	20	40	-20

2.11. The scheme benefits electricity customers, who ultimately pay for the costs of balancing the system by giving NGET strong commercial incentives to manage these costs effectively. Customers and NGET have benefited under successive schemes as NGET has been able to reduce the costs of running the system below the target level of costs, as shown in Table 2.2.¹⁰

⁸ This table summarises the schemes in place since the introduction of New Electricity Trading Arrangements (NETA). NGET has been subject to incentive schemes for system operation costs since 1994.

⁹ Prices are based on the Net treatment of transmission losses

¹⁰ Note that for the period 2001/02 to 2004/05 these incentive schemes only related to the costs of system

Table 2.2 – NGET's performance and cost savings to customers under each incentive scheme (money of the day)

£m	Target	Outturn	Profit/loss
2001/02	382	263	46
2002/03	370	286	49
2003/04	340	275	32
2004/05	320	289	12
2005/06	378	-	-

External balancing costs: how the levels are set

NGET's forecasts

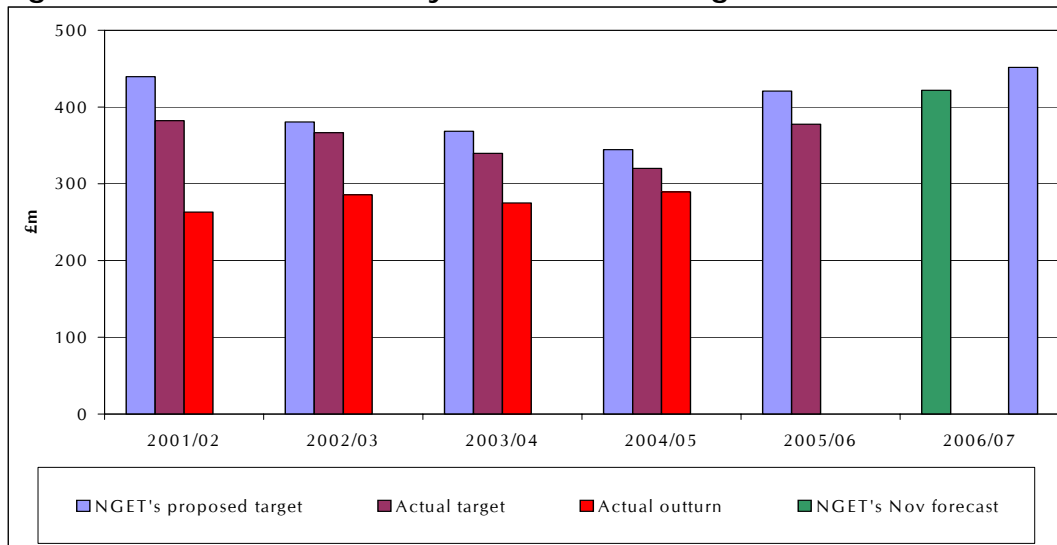
2.12. In order to establish an appropriate target for the external balancing scheme, each year we ask NGET to provide a forecast of its costs both for the outturn for the current year and the following year. This enables us to compare NGET's experience and expectations of costs for the current year with its projected costs for the next year.

2.13. As there is inevitably some uncertainty regarding the level of future balancing costs, NGET derives its forecasts based on a range of scenarios reflecting possible outcomes under different market conditions. These scenarios incorporate, for example, NGET's views on plausible assumptions regarding energy prices, competitive pressures and output by different generating types. By attaching a probability to each scenario, NGET arrives at an average expectation of its SO costs for the next year and a distribution of the possible outcomes.

2.14. As the incentive scheme rewards NGET for achieving costs below its target level, we need to be mindful that this may create incentives for it to over-estimate its costs, so that the target is not particularly difficult to beat. Figure 2.2 shows that historically, NGET has tended to over-forecast the level of costs. NGET has in successive years accepted a much lower target than its initial forecast. In each year, NGET have beaten the target and made a profit under the scheme.

operation within England and Wales. From 1 April 2005, NGET became responsible for system operation across the whole of Great Britain.

Figure 2.2: NGET has a history of over forecasting



2.15. Although the extent to which NGET has been able to out-perform against its incentives has fallen in recent years, Ofgem continues to have concerns about the overall level of NGET's forecasts, given its year on year performance under the incentive schemes to date. We have included here NGET's forecasts for 2005/06 and 2006/07 for comparative purposes. Chapter 3 discusses in more detail NGET's forecasts for 2005/06 and 2006/07 and our analysis.

Transmission losses

2.16. Transmission losses relate to power lost as a result of transporting electricity across the network. The SO external balancing incentive scheme includes a transmission losses adjustment term that is set on an annual basis. This makes sure that NGET, when taking balancing actions, has an incentive to take account of their impact on transmission losses.

Transmission losses - how the scheme works

2.17. The incentive on transmission losses operates by setting NGET a target for the volume of transmission losses. If NGET beats this target (ie. actual losses are lower than this target) it receives a payment and if actual losses exceed the target it faces a cost. The calculation of this payment or cost is made by multiplying the difference between the actual and target losses by the Transmission Losses Reference Price (TLRP), which has previously been fixed in advance (this was set at £29/MWh for 2005/06).

Transmission losses - how the level is set

2.18. In line with NGET's other external balancing costs, we assess NGET's forecast for the volume of transmission losses and the reference price before producing our own proposals.

Internal SO costs

Internal SO costs - components

2.19. NGET's internal SO scheme relates to NGET's own costs associated with its SO activities, such as building, staff and IT costs. The internal incentive scheme comprises an 'incentivised' element and a 'non-incentivised' element, which passes-through certain of NGET's costs. The latter costs consist of costs that NGET cannot control for example business rates. In addition, there are other specific allowances included within the non-incentivised element, such as those associated with the implementation of British Electricity Transmission and Trading Arrangements (BETTA).¹¹

Internal SO costs - how the scheme works

2.20. The incentivised element of internal SO costs is based on the same approach as the external scheme. A target level of costs is set for each year of the scheme and NGET faces sharing factors identical to the external balancing scheme but no caps or floors.¹² Like the pass-through elements, the specific allowances are passed through to market participants, subject to a review by Ofgem.

Internal SO costs - how the levels are set

2.21. NGET's internal SO incentive scheme was originally set for a five year period, commencing on 1 April 2001 and due to expire on 31 March 2006.¹³ As NGET's incentive SO costs comprise both capital and operating expenditure, we would ordinarily undertake a detailed review of the proposed levels of costs to establish appropriate allowances for non-incentivised costs and a target for incentivised element.

2.22. However, as explained in our December consultation letter, for next year, we are intending only to extend the existing control for a further year, rather than set another five year scheme. This is so we can set another long-term scheme from 1 April 2007 that is fully aligned with the timing of the main transmission price controls in electricity and gas. This approach has also been adopted for the Transmission Operator (TO) price controls due to expire on 31 March 2006.¹⁴

2.23. Apart from the first year under NETA, NGET has consistently made a modest profit under its internal cost incentive scheme, as shown in table 2.3.

¹¹ BETTA widened the scope of NGET's SO role from England and Wales to the whole of Great Britain. In preparation for this NGET incurred certain costs and allowances were provided.

¹² The sharing factors associated with the internal incentive are the same as the external incentive schemes, so that NGET takes equal account of costs across both its internal and external incentive schemes.

¹³ Ofgem 're-opened' the internal incentive scheme to take account of the widening the scope of NGET's SO role from England and Wales to the whole of GB and the costs NGET incurred to implement BETTA.

¹⁴ "Transmission Price Controls and BETTA – Final proposals and impact assessment", December 2004.

¹⁴ For more information see - "Extending National Grid Electricity Transmission plc's Transmission Owner Control for 2006/07: Final proposals", Ofgem, November 2005.

Table 2.3: SO internal costs incentive payments

£m	2001/02	2002/03	2003/04	2004/05
Profit/loss	-1.4	3.8	4	2.3

2.24. We do not yet have data for 2005/06, but NGET's projected capital expenditure is some £2 million (2000 money) higher than its allowance.

Summary

2.25. This chapter has looked at how the schemes operate and are set each year based around our assessment of NGET's forecasts. In the next chapter, we provide a brief summary of NGET's forecasts for 2005/06 costs and for the target for next year's incentive schemes and our views on those forecasts.

3. Assessment of NGET's forecast

Chapter Summary

This chapter explains NGET's main assumptions for its forecasts for the system operator incentives. We then present respondent's views on those forecasts and our own assessment of these forecasts.

Questions

There are no specific questions in this chapter.

3.1. In this chapter we first consider NGET's forecasts and proposals, for:

- the external balancing costs, covering energy balancing, constraints management, system management
- transmission losses, and
- internal SO costs.

3.2. We then present our own assessment of these forecasts, including an explanation of how we have analysed them.

NGET's external balancing costs forecast

High level forecast overview

3.3. As stated in chapter 2, historically NGET has created a range of scenarios for its external balancing costs and these scenarios have formed the basis for its forecast for the following year. NGET's initial forecasts (submitted in November 2005) of its costs were £364 million for 2005/06 and £422 million for 2006/07.

3.4. NGET subsequently wrote to Ofgem in December 2005 stating that it wished to withdraw its initial forecast for 2006/07. NGET cited the costs of constraint payments and the high and volatile wholesale prices in the period in late 2005 as the main reasons for wanting to provide new forecasts. In January, NGET submitted revised forecasts of £395 million for its actual 2005/06 costs and £451 million for 2006/07 (an increase of around £30 million for both years compared to its previous forecasts). Table 3.1 compares NGET's revised January forecasts to the cost allowances for the different external balancing costs components implied¹⁵ by the current target balancing costs of £377.5 million.

¹⁵ The final proposals provided for specific allowances of £7.35 m for 6 months of CAP47 costs, £20 million for Cheviot constraints and £10 million for within Scotland costs. To calculate implied allowances for other areas, we have calculated the percentage difference between NGET's forecasts and the final target of £377.5 million and reduced the remaining terms in NGET's forecasts (ie. in 2004/05) by an appropriate proportion.

Table 3.1: Cost breakdown of NGET's December and January forecasts

Cost component (£m)	Cost allowances 'implied' by 2005/06 target [1]	NGET's forecast for 2005/06 [2]	NGET's forecast for 2006/07 [3]	Difference between [3] and [1] (£m)
Energy balancing	87.2	100.9	101.3	14.1
Constraints management	47.9	59.9	69.4	11.5
System management	242.5	238.3	280.8	38.3
TOTAL (includes losses)	377.5	395.3	451.4	73.9

3.5. The table shows that (relative to the target for this year), in absolute terms the majority of the forecast rise in costs for next year is related to system management costs. The remaining cost increases are split fairly equally between energy balancing and constraint management. We discuss below the reasons for these changes by looking at the three main cost components: energy balancing, system balancing, constraint costs. In addition, we consider the transmission losses adjustment term, which is part of the external balancing scheme.

Energy balancing

NGET's forecast for 2005/06

3.6. NGET's January forecasts included costs of £101 million for outturn energy balancing for this year. This represents an increase of £14 million compared to the implied allowance under its target for this year.

NGET's forecast for 2006/07

3.7. NGET's January forecasts included energy balancing costs of £101 million for 2006/07. Hence, it thinks that energy balancing costs will be essentially unchanged from this year to next.

Cost drivers

3.8. NGET's higher projections of energy balancing costs for both this year and next are based on continued high volumes of energy balancing activities and higher energy prices. NGET assumes:

- **volumes of balancing actions:** will increase due to a continued reduction in the amount of free-headroom (the spare reserve that generators hold back). It also assumes that a volume impact will arise from changes in the mix of generation running next year, with NGET's scenarios assuming increasingly marginal operation of gas-fired plant.
- **prices of energy balancing:** NGET has adopted an average wholesale market price of £49/MWh, which feeds through into the bids and offers available to NGET and hence its balancing costs.¹⁶

Summary on energy balancing costs

3.9. To summarise, there is only a minimal change in NGET's forecast for 2006/07 from its forecast outturn for 2005/06, but this is an increase of around £14 million from the implied target for this year.

Constraints management*NGET's forecast for 2005/06*

3.10. NGET's January forecast incorporates £60 million for constraints costs in 2005/06. This compares to the implied allowance of £47.9 million under the current incentive target. The target comprises a specific allowance of £30 million for constraints management in Scotland (£20 million for the Cheviot constraint¹⁷ and £10 million for within Scotland costs) and an implied allowance of £17.9 million for England and Wales constraints costs. Hence, NGET is forecasting an increase of £12 million compared to this target.

3.11. For the three main components of constraints, NGET forecasts for 2005/06:

- **Within Scotland: £32 million (£22 million higher than target allowances).** This is due to higher energy prices and a larger than expected volume of within

¹⁶ NGET's SO incentive scheme contains a term known as the Net Imbalance Adjustment (NIA), which reflects the system imbalance volume multiplied by the Net Imbalance Volume Reference Price (NIRP). This is to reflect the fact that if the volume of balancing actions NGET has to take increases (as it has limited control over the extent to which participants choose not to balance their positions) or the NIRP increases due to general rises in system balancing prices. Then this NIA term will increase and therefore offset some of the impact of price rises.

¹⁷ This constraint is at the border interconnecting Scotland and England.

Scotland constraints costs, in particular the need to pay generators in Scotland to provide voltage support.¹⁸

- **Cheviot constraints: £14 million (£6 million below the allowance provided under the current incentive target).** This is lower than assumed due to higher fuel prices and lower than anticipated volumes (in part reflecting increased prices).
- **England and Wales: £13.8 million (£4 million below the implied target allowance):** this is lower than assumed because increased interconnector flows from France helped to keep overall level of constraint actions relatively low compared to some previous years.

NGET's forecast for 2006/07

3.12. For 2006/07, NGET forecasts constraint costs rising to £69 million, an increase of £9 million from its forecast for 2005/06. By component, NGET makes the following assumptions:

- **Within Scotland (£31 million):** NGET assumes that the costs in 2006/07 will essentially be the same as those it forecasts for 2005/06. Its forecast is driven by its assumptions regarding prices and volumes of generation in Scotland.
- **Cheviot constraint (£20.4 million):** NGET thinks that costs at the Cheviot constraint will increase next year due to increased wind connection in Scotland.
- **England and Wales (£18 million):** NGET considers that costs of England and Wales constraints are likely to rise back to the levels seen in 2004/05, mainly due to increased outages associated with greater capital expenditure it will be undertaking to reinforce or replace parts of its network.

Summary on constraint costs

3.13. To summarise, NGET's forecast for constraint costs is based on similar levels of within Scotland costs for 2006/07 as 2005/06; increased Cheviot constraint costs associated with increased wind connection; and increased costs in England and Wales due to outages connected with increased levels of capital expenditure. Overall, its forecast is £21 million higher than the 2005/06 target.

System management

NGET's forecast for 2005/06

3.14. NGET forecasts that system management costs will outturn at £238 million in 2005/06. This is just below the implied allowance of £243 million under the existing incentive scheme.

¹⁸ Voltage support is required to maintain the levels of voltage on the system. For 2005/06, Peterhead station in North-East Scotland, in particular, has been required to generate to provide voltage support to the network in Scotland.

NGET's forecast for 2006/07

3.15. For 2006/07, relative to 2005/06, NGET forecasts a £38 million increase in its system management costs to £280 million. This is derived from the following assumptions:

- **Reactive power: NGET forecasts £74 m (30 per cent increase on the allowance implied under the current target)** - as these costs are linked 50 per cent to inflation and 50 per cent to market prices, NGET's assumptions about higher forward prices are the main driver of these increases.
- **Frequency response: NGET forecasts mandatory response costs will rise to £21 million (41 per cent increase on full year¹⁹ of costs implied under current target)** - this reflects NGET's assumption that initial increases in mandatory frequency prices seen in November and December 2005 are likely to persist and will only gradually be eroded by greater competition from providers of this service.
- **Reserve: NGET forecasts £87 million (20 per cent increase on allowances implied under current target)** - NGET's forecast increase is driven by a 10 per cent increase in the volumes of standing reserve for which it has contracted as well as increases in the prices offered for providing reserve. The combined cost of standing reserve and supplementary standing reserve is forecast to be £56 million. It also forecasts a slight increase in fast reserve costs to £36 million.

Summary on system management costs

3.16. To summarise, NGET's system management costs account for the largest part of the increase in NGET's forecast. The main drivers are NGET's forward price assumptions and its views on the evolution of competition for frequency response and other services. Volume assumptions impact mainly on its assumption regarding reserve costs.

Transmission losses*NGET's forecast for 2005/06*

3.17. NGET forecasts the outturn volume of losses in 2005/06 is forecast at 5.66 TWh. This is equivalent to around 2 per cent of annual electricity demand in Great Britain. As NGET's target for 2005/06 was 5.79 TWh, the forecast implies a payment of £3.8 million to NGET for this year under the transmission losses scheme.²⁰

¹⁹ Mandatory frequency response is provided for via the CAP047 provisions, which enable providers to alter their holding prices. The CAP047 reforms only became effective on 1 November 2005, although the assumption when the target was set was that it would become effective in October 2005. Therefore, full year data on response prices are not available.

²⁰ This is based on the Transmission Losses Reference Price, which for 2005/06 was set at £29/MWh multiplied by the difference between the target (5.79) and forecast outturn of 5.66 TWh.

NGET's forecast for 2006/07

3.18. For 2006/07, NGET forecasts an increase in losses based on demand growth and increased wind connection and proposes a target of 5.82 TWh for 2006/07. The forecast for net losses (ie. outturn against target) is zero.²¹ NGET assumes that the current reference price of £29/MWh will be retained for 2006/07 (this assumption was not changed in its January re-forecast).

Summary on transmission losses

3.19. NGET is assuming no change in the transmission losses reference price, but assumes a small increase of 0.03 TWh in losses associated with increased wind connections and demand growth.

NGET's internal SO cost forecasts

3.20. As set out in our December consultation letter, in line with the approach adopted for the Transmission Operator price controls,²² we requested that NGET develop its projections of internal SO costs based on rolling forward the principal terms and existing assumptions and allowances included under the current internal SO incentive scheme. Table 3.2 below summarises NGET's initial proposals for 2006/07.

Table 3.2: NGET's proposed allowances for internal SO costs 2006/07

2006/07 prices	£m (post tax)
Incentivised internal SO costs	69.0
Non-incentivised internal SO costs	18.8
BETTA implementation recovery²³	11.1
Other²⁴	4.5
TOTAL	103.4

²¹ This is because the forecast represents its average expectation for losses and NGET's proposed basis for setting the target in 2006/07.

²² For more information see - "Extending National Grid Electricity Transmission plc's Transmission Owner Control for 2006/07: Final proposals", Ofgem, November 2005.

²³ In the run up to BETTA, NGET incurred internal capital and operating costs which need to be recovered. As these costs have been treated on an accruals basis, NGET has proposed an appropriate cost recovery.

²⁴ This includes BETTA outage adjustment costs (£ 3.4 million), which NGET may incur by paying Scottish transmission companies to adjust the timing of their outage plans so that NGET's SO costs are reduced.

Plus appropriate tax allowance ²⁵	10.7 (preliminary estimate)
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Respondents' views

3.21. There were nine responses to the consultation letters. A summary of these responses is provided in Appendix 2. Six of the respondents did not support NGET's revised forecasts as they considered that the original forecast should have taken account of any increase in costs. Two respondents considered that an increase in the target could be justified, although one of these highlighted some areas where costs could have been overestimated. Respondents also generally expressed a preference for symmetrical sharing factors, caps and floors (ie. balanced risk and returns). Some respondents considered that a shallower upside sharing factor (ie. less generous returns to NGET) was appropriate.

Our analysis of NGET's external balancing costs

3.22. In this section, we explain how we have analysed NGET's forecasts based on two different (but complementary) approaches. First, since most of NGET's forecast start from the level of costs this year, we adopt the **top-down** approach of considering if the costs for this year provide a good starting point for projecting next year's costs. Following on from this, we consider from a **bottom-up** perspective how costs are likely to evolve from this year to next year.

Have costs this year been consistent with previous years?

3.23. To determine whether this year's costs provide a good starting point for considering likely costs for 2006/07, we need to understand whether the increase in costs forecast by NGET is a result of one-off factors such as bad weather, unusually high constraint costs, abnormal gas market conditions, or the system being inefficiently operated by NGET. If this is the case, then NGET's forecasts of costs for this year will not provide a good benchmark for next year's costs. The alternative would be that the shift in the level of costs represents a fundamental shift in the market, which is likely to persist in the future, in which case NGET's forecast for 2005/06 will be an appropriate reference point for next year's costs.

3.24. The plausible range of SO costs for each year can be represented as a distribution of outcomes to which different probabilities are attached. Ideally, the target of the SO incentive scheme should be close to the mean of this distribution if the distribution is symmetrical.²⁶ Consequently, to answer our first question, we need to understand whether the increased costs NGET has faced this year are a reflection of a change in the mean of the distribution or whether they simply lie at the upper end of the current distribution.

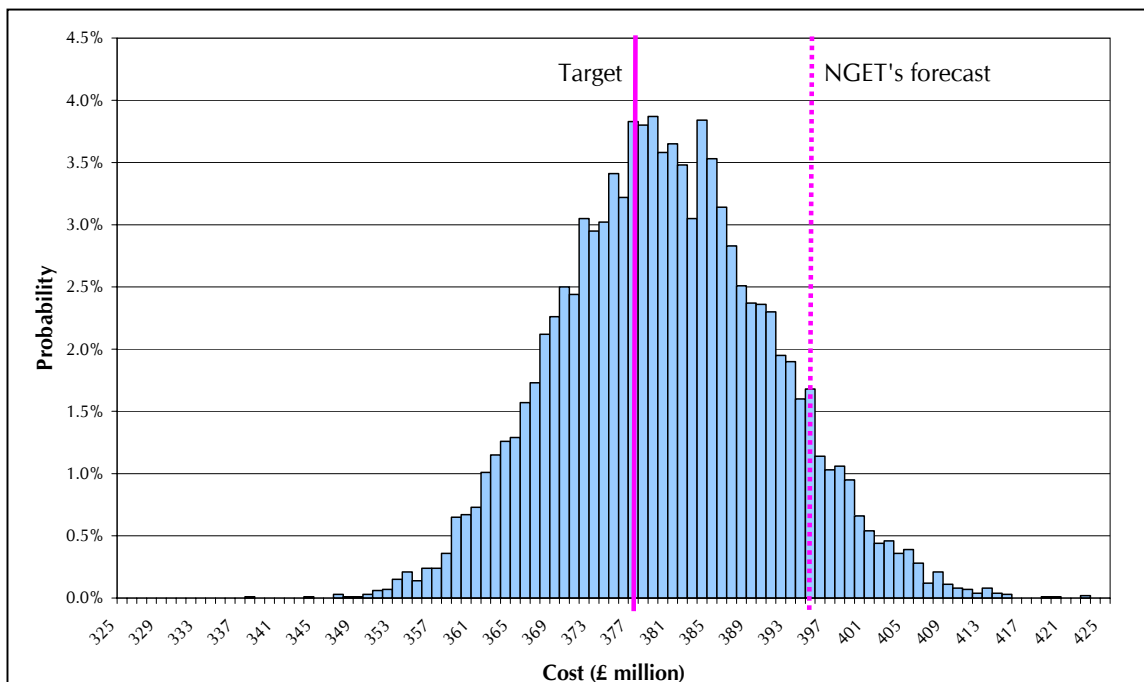
3.25. In order to assess this question we needed to estimate what the distribution of costs has been. We have created a distribution using the daily external balancing

²⁶ If the distribution of outcomes is very skewed, this would suggest that the target should be close to the median ie. the point at which there is a 50% chance of costs being higher or lower, rather than the mean.

costs values from 1 April 2005 to 27 January 2006²⁷ plus estimates of plausible daily costs for the remainder of the year. We represented the missing days from January onwards with data from the 2004/05 scheme. However, these costs only refer to the England and Wales market and not the GB market. In order to avoid bias (ie. under represent the high cost tail) we uplifted the 2004/05 data points by a factor equivalent to the cost change we allowed NGET associated with moving from an England and Wales incentive scheme to a GB wide incentive scheme.

3.26. To create the distribution, we use a process known as 'Monte Carlo' simulation. We build up estimates of NGET's annual balancing costs by randomly picking a value for each day in the year from the distribution of actual (or estimated) values that have occurred for the quarter in which that day falls. For example, for a day in July we pick an outcome that actually occurred between July and September 2005. The sum of the individual daily values then provides an annual cost which forms one point of our distribution. We have repeated this operation 10,000 times to arrive at the distribution shown in Figure 3.1.

Figure 3.1: Ofgem's estimated distribution of external balancing costs for 2005/06



3.27. The target for 2005/06 (£377.5 million) is very close to the mean of this distribution (£379.8 million). In addition, NGET's projection of its outturn costs (£395 million) falls within the band of plausible outcomes for this distribution. This provides some evidence to suggest there has not been a fundamental shift in the distribution away from that on which the current incentive scheme is based.

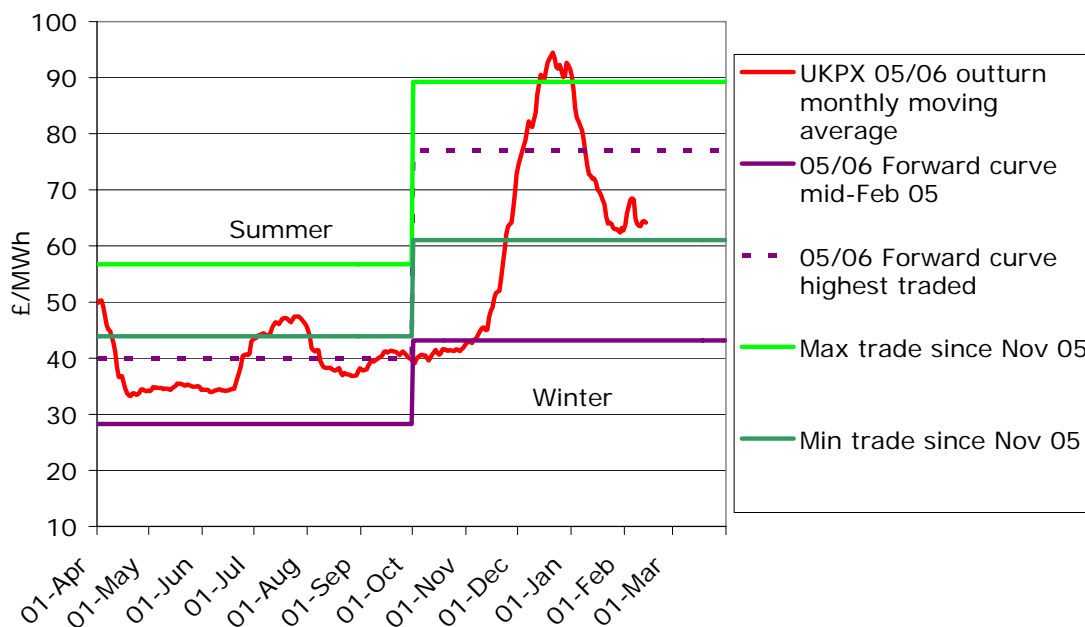
²⁷ This is based on the latest available data NGET has been able to provide.

3.28. Based on this assumption, in the paragraphs that follow we discuss the extent to which each element of costs is likely to increase in 2006/07 from its 2005/06 target.

Energy balancing costs: will these increase?

3.29. NGET's key drivers of energy balancing costs are prices and volume assumptions (headroom). Figure 3.2 shows peak electricity forward prices in 2005/06

Figure 3.2: Peak electricity forward prices (for summer and winter 2006) during 2005/06



3.30. Figure 3.2 shows the highest and lowest traded electricity prices for the summer and winter 2006 forward products. This is compared to the highest price the 2005/06 forward curve was trading at and the forward price in mid-February 2005, when the 2005/06 incentive scheme was finalised. We accept that forward prices are indicating that market prices are expected to be higher next year than this year. As shown in figure 3.2, prices have also been very volatile this winter. We are therefore not convinced that the price rises will translate into the cost increases forecast by NGET.

3.31. In addition, we have not accepted NGET's assumptions that headroom will continue to decline. The evidence presented by NGET strongly suggests that free headroom has stabilised over the course of this year.

Constraints management costs: will these increase?

3.32. We accept that constraint volumes in Scotland have been higher than we anticipated when we set the 2005/06 target. However, we question whether all the costs associated with increased volumes have been efficiently incurred. We also consider that NGET may have over-estimated the impact of increased wind capacity in Scotland, both in terms of the timing and size of the increase in capacity and the impact that it will have on constraint costs.

3.33. In relation to England and Wales costs, we think that the increase in outages associated with increased capital expenditure is consistent with NGET's transmission price control assumptions and hence that the associated constraint costs should be included in NGET's target allowance. However, we do not think that on average, there will be an increase in constraints as a result of French interconnector flows, which is what NGET is forecasting.

System management costs: will these increase?

3.34. We have considered the three key components driving system management costs as follows:

- **Reactive power:** we accept that the current high forward prices translate into high spot prices, which will increase reactive power costs as these are linked 50 per cent to inflation and 50 per cent to market reference prices. However, we consider that NGET may have over-estimated the extent of this price rise, based on our views regarding forward prices in the context of this winter.
- **Frequency response:** we note that there have been significant increases in NGET's costs during the first two months of implementation of CAP47.²⁸ We do not agree with NGET's assumption that these prices will fall but continue to remain relatively high over the following twelve months. We think that the introduction of competition is likely to lower costs more than NGET has forecast and have therefore applied revised price scenarios.
- **Reserve:** we have considered NGET's reserve costs, which have largely already been established by its decision to procure additional reserve for next year and the prices revealed through its tenders. We considered the efficiency of this decision and the potential reserve products still open to tender and considered that there were prospects for further cost savings.

Changes to balancing services in 2006/07

3.35. As in previous years, the SO external cost incentive target only takes into account those modifications which will impact on NGET's costs that have been approved by the Authority. Pending decisions or potential new changes to wholesale market rules in industry documents, such as the Balancing and Settlement Code (BSC) or the Connection Use of System Code (CUSC), that are likely to result in increases (or decreases) to NGET's costs in 2006/07 have not been taken into account when setting NGET's target for this year. It will be for

²⁸ Previously mandatory frequency response was subject to a default price. CAP47 allows market participants to vary their prices for providing this service to NGET.

NGET (or market participants) to bring forward income adjusting events (IAEs)²⁹ to take account of any such changes.

Transmission losses

3.36. We have accepted NGET's forecast as it appears reasonable. However, we think it is appropriate to change the reference price to reflect market prices. If the reference price is below market prices it may not provide NGET with sufficient incentives to take appropriate of transmission losses. If the incentives are correctly set, then NGET should trade off reducing losses with reducing balancing costs. Given recent volatility in forward prices we propose to use a market based reference price.³⁰

3.37. More details of the basket of electricity prices are included in the proposed new licence drafting in Appendix 4. In summary, the reference price is calculated as an annual average of the outturn of within day prices.³¹

Internal SO costs

3.38. Ofgem has not undertaken a detailed review of NGET's projection of its internal SO costs although its capex assumptions have been reviewed at a high level as part of the TO price control analysis.³² We will need to undertake a more detailed assessment over the course of the next year in preparation for the new TO price controls and SO incentive scheme to apply from 1 April 2007. As part of this analysis, we will assess whether NGET's capital expenditure has been efficiently incurred and will disallow any inefficiently incurred costs.

3.39. Ofgem has therefore adopted a simplified approach in developing its proposals for the internal SO incentives and has undertaken an initial review of NGET's capital expenditure (capex).³³ For the purposes of setting a one-year scheme, we have instead assured ourselves that NGET's proposed costs are line with the costs currently allowed under its internal incentive scheme. For consistency with the approach adopted in the recent roll-over of the TO price

²⁹ An IAE is defined under NGET's licence and where granted allows for adjustment of the costs NGET is allowed to recover (either as a result of increased costs or cost savings). There are a number of conditions or circumstances that need to occur for the Authority to grant an IAE, but in general it should relate to exceptional costs or savings that were not anticipated or taken into account when setting the target external (or internal) balancing costs.

³⁰ A dynamic reference price would instead be calculated based on an appropriate basket of electricity prices so that it can vary if outturn prices are higher or lower.

³¹ This calculation uses the same reference prices (as inputs into the TLRP calculation) as the SPNIRP term, which is based on half hourly prices and prices for four hour trading blocks taken from the UKPX exchanges (Schedule A, part B, paragraph B4 of NGET's special licence condition).

³² In relation to SO related capital expenditure, Ofgem requested that consultants PB Power conduct a preliminary assessment of NGET's capital expenditure and projected costs for 2006/07. PB Power's initial view was that NGET's projection of capital expenditure of £14 million provided a reasonable initial allocation for 2006/07.

³³ For the purposes of the internal SO capex, NGET's projections have been used to derive an interim valuation for the RAV ("interim RAV") to apply for 2006/07. Subject to the assessment of the initial opening value for the RAV in 2006/07 and this depreciation, and further assessment as part of the full review, NGET's calculations appear to provide a reasonable basis for establishing an interim RAV for the purposes of the one-year roll-forward.

controls, we have moved from a pre-tax methodology to a post-tax one.³⁴ Apart from this change, we are content that NGET's proposed allowances are reasonable and, in relation to the recovery of BETTA implementation costs, follow the agreed methodology.

3.40. We have only made two changes to NGET's proposals, in relation to BETTA implementation operating expenditure (opex) costs and Scottish outage costs. The former, NGET originally treated as a form of capex. NGET has subsequently accepted that it should not be treated in this fashion but simply as opex, which reduces these costs by over £3 million. In relation to Scottish outage costs, NGET accepted that its allowance for next year should be based on its projected costs for this year (and its view of likely costs for next year) of £1million (compared to £3.4 million allowance under its current scheme and its initial proposals).

3.41. In light of these adjustments, the total implied allowances for 2006/07 are projected at £107.9 million.

Summary

3.42. This chapter has looked at NGET's forecast for actual 2005/06 costs and for the target for next year's incentive scheme. We have analysed these forecasts using two complementary approaches. First, we have considered if there is anything unusual about the level of costs for this year. Second, we have assessed how costs might move from this year to next year and whether we agree with NGET's forecasts in this respect. We think that there is a possibility that balancing costs could be higher for next year. However, we do not accept that costs are likely to be as high as NGET has forecast or that there is compelling evidence that the distribution of costs has shifted.

³⁴ For more information on this approach see - "Extending National Grid Electricity Transmission plc's Transmission Owner Control for 2006/07: Final proposals", Ofgem, November 2005.

4. Ofgem's final proposals

Chapter Summary

This chapter summarises our final proposals based on our assessment of NGET's forecasts explained in chapter 3.

Questions

Question 1: do you agree that the proposed licence modifications appropriately reflect the final proposals explained in this chapter?

Introduction

4.1. This chapter presents our final proposals for NGET's SO external, transmission losses and internal incentive schemes for 2006/07 and the next steps.

External balancing costs

4.2. Based on the analysis explained in Chapter 3, we are proposing two options for this year's scheme. NGET can accept either option or reject both. During the course of our discussions with NGET, we invited them to make their own proposals on the incentive schemes for this year. NGET put forward two proposals, which are also set out in table 4.1 below.

Table 4.1: Ofgem's final proposals and NGET's counter proposals for the SO external incentive scheme

		Target (£m)	Upside (reward to NGET if costs are below target)		Downside (costs to NGET if costs are above target)	
			Sharing factor	Cap (£m)	Sharing factor	Floor (£m)
Current Scheme		377.5	40%	40	-20%	-20
Ofgem's final proposals	Option 1	390	60%	40	-10%	-10
	Option 2	410	10%	10	-60%	-40

NGET's counter proposals	Target 1 (linked to power prices)	412 - 440 ³⁵	20%	20	-20%	-20
	Target 2 (as above with target linked to outturn 2005/06)	400-415 ³⁶	20%	20	-20%	-20

4.3. The targets have been established based on our views regarding NGET's forecasts and the way in which the distribution of balancing costs may have changed. In light of our views on this, we developed the sharing factors and caps and floors. The way in which the targets and sharing factors have been developed is more easily understood by looking at the potential rewards and losses to NGET as shown in tables 4.2 and 4.3 below. For these tables, we have considered what NGET's position would be under two cases. Our **central case** is that the distribution of possible costs for next year is the same as this year ie. it has a mean of £380million. Our **high case** shifts the distribution, but maintains its shape, so that its mean is £410million.

³⁵ Target £415 million based on £45/MWh forward price. NGET propose that for each £1/MWh increase (decrease) in outturn prices the target would be adjusted by £3.5 million.

³⁶ NGET's option 2 is a variation on option 1. The "central target" would instead be calculated based on outturn for 2005/06 uplifted by £20 million. The target would still be subject to energy indexation. On the basis of Ofgem's projected outturn for 2005/06 the target would be £400 million and based on NGET's forecast outturn of £395 million the target would be £415 million.

Table 4.2: Ofgem's option 1

	Average expected profit under new scheme	Probability of profit	Level of profit that will be exceeded with 25% probability	Level of profit that will be exceeded with 75% probability
Central case	£6.4m	82%	£10.8m	£2.4m
High case	-£2.0m	3%	-£1.2m	-£2.7m

Table 4.3: Ofgem's option 2

	Average expected profit under new scheme	Probability of profit	Level of profit that will be exceeded with 25% probability	Level of profit that will be exceeded with 75% probability
Central case	£3.0m	100%	£2.4m	£3.8m
High case	-£2.3m	51%	-£4.2m	-£0.8m

4.4. Ofgem considers that the two options presented to NGET as final proposals provide an appropriate balance between risk and reward for NGET and represent a good deal for customers. This is based on the analysis we have undertaken, taking account of the analysis and submissions made by NGET and respondents to our consultation.

NGET's counter proposals

4.5. We rejected NGET's counter proposals based on our concerns over the targets put forward by NGET and its energy indexation proposals for the following reasons.

Target level of costs

4.6. We do not think that NGET's forecast target is credible. This reflects our concerns about NGET's historic over-forecasting when we have been setting

previous schemes and Ofgem's "top down" and "bottom up" analysis of forecast costs for next year.

4.7. NGET also made arguments about this year's forecast level of outturn costs and that it expected to make a loss under this year's scheme. We do not think that the fact that NGET might make a loss should necessarily have a bearing on next year's scheme. As any loss (or profit) could be the result of poor (or excellent) management of the system by NGET rather than evidence that the incentive target is too low (or high). NGET has also indicated it that it intends to raise one or more Income Adjusting Events (IAEs) for some costs and NGET may actually expect to make a profit under this year's scheme if we accept all or part of any IAEs.

4.8. In light of our views on NGET's forecasts and our "top down" and "bottom-up" analysis, on the available evidence, we think that our central and high case distributions were the most reasonable basis for setting our targets.

Energy indexation

4.9. We do not think that it is reasonable to index the target for this scheme to energy prices for two main reasons:

- **Insufficient time for analysis:** we would have to carry out our own analysis to reassure ourselves that NGET's analysis of the relationship between energy prices and the target is reasonable and represents a fair allocation of risk and reward between NGET and customers. We would also need to analyse the impact of indexation on other elements of the scheme to make sure there are not any perverse incentives or unintended consequences, and
- **Process concerns:** although one respondent to our consultation proposed energy indexation as an option, we do not think it is reasonable to propose indexation without first having consulted on the details with all market participants and customers. We are conscious that a number of respondents had already expressed concerns about the existing process. In particular, a number of respondents expressed concern about NGET's decision to withdraw its previous forecast and submit a revised forecast and the impact this had on the time respondents had to consider NGET's proposals.

4.10. The proposal based on indexation was rejected on this basis. We also consider that NGET's proposals are heavily weighted in its favour at customers' expense. Table 4.4 shows the expected profit. As NGET's target is indexed to energy prices (and under its alternative proposal dependent on outturn costs for 2005/06) we looked at the potential profits under different assumptions.³⁷

Table 4.4: NGET's counter proposal based on different assumptions

³⁷ These assumptions imply a 'low' target of £396.5 million and a 'high' target of £440 million. As there are range of outcomes under NGET's proposed targets we have considered the range based on a central target of £400 million (Ofgem's central case of £380 million for 2005/06 costs plus £20 million) and £415 million. Based on these central targets we have then applied a range of forward prices from £44/MWh to £52/MWh (lowest 2006 forward price in 2005/06 and current forward price for 2006) to arrive at a low and high target (ie. £396.5 and £440 million respectively). NGET does not propose to vary the sharing factors or caps and collars, so these are not changed for its two approaches.

	Average expected profit under new scheme	Probability of profit	Level of profit that will be exceeded with 25% probability	Level of profit that will be exceeded with 75% probability
Central case	£5.7 to 14.4m	100%	£7.3 to £16 m	£4.5 to 13.2 m
High case	£7.9 to 13.4m	100%	£0.7 to £9.4 m	£6.8 to £20 m

4.11. The proposed indexation and sharing factors and caps and collars give a very significant expected profit against our view of the likely distribution of costs. For NGET's second proposal, the expected target level of costs combined with the sharing factors and caps and collars would still give a very significant expected profit to NGET against our view of the likely distribution of costs.

Final proposals

4.12. Our final proposal is therefore to present NGET with our two options.

Table 4.5: Ofgem's final proposals for the external SO incentive scheme

	Target (£m)	Upside sharing factor	Downside sharing factor	Cap (£m)	Collar (£m)
Option 1	390	60%	-10%	40	-10
Option 2	410	10%	-60%	10	-40

Transmission losses adjustment

4.13. Based on the discussion in chapter 3, our final proposal is to accept NGET's volume assumption of 5.82 TWh. In order to ensure that NGET has sufficient incentives to address transmission losses, we consider that, in contrast to previous schemes where there has been a pre-determined transmission losses reference price, it is now more appropriate to employ a more dynamic reference price linked to market prices.

4.14. We accept that, from a process perspective, it would have been preferable to have consulted on this change. However, its impact on NGET's overall costs is

likely to be small and the relationship between price movements and the economic costs of transmission losses is clear and unambiguous, removing any risk of unintended consequences.

Internal SO costs

4.15. In relation to NGET's internal costs, we are proposing the following allowances by cost component.

Table 4.6: Ofgem's proposed allowances for NGET's internal SO costs 2006/07

2006/07 prices	£m (post tax)
Incentivised internal SO costs	68.9
Non-incentivised internal SO costs (including tax allowances)	26.0
BETTA implementation recovery³⁸	10.9
Other³⁹	2.1
TOTAL	107.9

4.16. These final proposals are based on rolling forward the principal assumptions and costs of the last year of the existing scheme. As stated in Chapter 3, these costs are subject to further review when we complete a fuller review of internal costs in setting a (proposed) five-year scheme from 1 April 2007.

Next steps

4.17. In order to amend NGET's transmission licence to take account of the proposed changes to the SO incentive scheme associated with the proposals in this document, a statutory notice of the licence modification under section 11 of the Electricity Act 1989 is required. The statutory notice is contained within Appendix 4 (reflecting licence changes necessary to introduce either option 1 or option 2 for the external balancing scheme) or option 3, which only takes account of changes to internal SO costs. If NGET does not object to the proposed licence modifications (ie. consents to one of the options), then one of the revised incentive schemes will come into effect from 1 April 2006.

³⁸ In the run up to BETTA, NGET incurred internal capital and operating costs which need to be recovered. As these costs have been treated on an accruals basis, NGET has proposed an appropriate cost recovery.

³⁹ This includes BETTA outage adjustment costs (£1 million), which NGET may incur by paying Scottish transmission companies to adjust the timing of their outage plans so that NGET's SO costs are reduced.

4.18. If NGET decides not to accept any of the options that we have put forward for its incentive schemes, we would have the option to refer the matter to the Competition Commission. Alternatively, we could choose not to refer the matter to the Competition Commission, in which case we would not implement any of the incentives, including the internal cost and transmission losses schemes. Consequently, the current external incentive scheme (covering external balancing and transmission losses) would fall away leaving NGET to pass through the costs it incurs to consumers.⁴⁰ Given the magnitude of the costs that are involved, we would take our duties to monitor NGET's costs very seriously and would put in place procedures to ensure that these were rigorously monitored throughout the year and would take enforcement action if there was evidence that NGET was incurring costs inefficiently.

⁴⁰ If NGET rejects the changes to the external balancing scheme, it still has the option to consent to changes to the internal scheme (option 3 includes licence drafting to reflect changes to the licence to implement the internal cost scheme only, while taking account of non-implementation of external balancing costs scheme). In such circumstances, we would propose the same targets and allowances for the internal SO costs as set out in this document, but would propose that the NGET is exposed to the full costs above or below this target (ie. 100% sharing factors).

Appendices**Index**

Appendix	Name of Appendix	Page Number
1	Consultation responses	33
2	Summary of responses to December and January consultation letters	35
3	Internal cost projection calculations	38
4	Draft revised licence conditions	41
5	Ofgem's statutory responsibilities	60
6	Glossary	62
7	Feedback Questionnaire	65

Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to Ofgem's final proposals and revised licence conditions.

1.2. We would especially welcome responses to the specific question in chapter 4:

Question1: Do you agree that the proposed licence modifications appropriately reflect the final proposals explained in this chapter?

1.3. Responses should be received by **28 March 2006** and should be sent to:

Sonia Brown
Director, Wholesale Markets
Ofgem
9 Millbank
London
SW1P 3GE

wholesale.markets@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Following consideration of any representations received, revisions to the proposed licence modifications will be made if it considered appropriate, except where the secretary of state directs Ofgem not to make the modifications. In order for the proposed licence modifications to be made, NGET is required to provide its written consent to the modifications. If this is received, we will direct the modification of NGET's transmission licence in line with the proposed licence modifications.

1.7. If NGET does not consent to the proposed licence modifications, we have the ability to refer the proposed SO incentive scheme modifications to the Competition Commission for final adjudication. If this were to occur, there would be a lapse in NGET's SO incentive arrangements from the expiry of the current SO incentive scheme pending the final adjudication of the Competition Commission.

NGET's SO incentives schemes 2006/07

February 2006

1.8. If we did not refer to the Competition Commission, the incentive schemes would lapse. We would instead rely on requirements for NGET to comply with its existing licence obligations. This would require us to undertake detailed monitoring and review of NGET's costs over the course of 2006/07.

1.9. Any questions on this document should, in the first instance, be directed to:

Kevin James
Wholesale Markets
Ofgem
9 Millbank
London
SW1P 3GE

020 7901 7181

Kevin.James@ofgem.gov.uk

Appendix 2 – Summary of responses to December (and January) consultation

1.1. There were nine responses to the December (and January) consultation, of which two responses supported the consideration of NGET's revised target, five were against its consideration, and two did not make clear their preference. One respondent expressed clear support for the original forecast to be considered by Ofgem when setting the SO incentive target for 2006/07.

NGET's Forecasts

Over-forecasting

1.2. One respondent considered that NGET's good performance should be encouraged and not attributed to over-forecasting and also highlighted that NGET's out performance in recent years had provided consumers with lower costs. One respondent was of the view that although NGET had performed relatively well under the SO incentive scheme in recent years it had been finding it difficult to maintain performance against decreasing target levels in the last few years, as fuel input prices have gone up and free headroom had diminished. They thought this, alongside the market events of November and December 2005, should be considered by Ofgem when setting the 2006-07 target.

1.3. Five respondents did not consider that NGET were justified in submitting a revised forecast and raised concerns over NGET's ability to consistently out-perform their targets. They suggested that in recent years NGET had over-estimated their future incentive balancing costs (IBC) to help secure a high target, which they could easily out-perform and therefore guarantee a payment under the scheme. Three of these respondents also shared the view that the SO incentive target should be sufficiently rewarding yet challenging and should also be appropriately balanced against risk and award. However they did not consider that previous targets had met this objective and partly attributed this to NGET's deliberate over-estimation of its future IBC.

2005/06 Wholesale gas and power prices

1.4. Two respondents highlighted that NGET were unable to capture the extreme market conditions of November and December 2005 in its original forecast. These respondents were of the view that the volatile wholesale gas and power prices experienced during this period were potentially signs of new market behaviour and Ofgem should consider NGET's revised forecast, which took this fully into consideration.

1.5. Five respondents were of the view that the market environment towards the end of 2005 did not justify NGET's revised forecast of £451 million. These respondents considered that NGET had adequate warning of potentially high wholesale gas prices, and its perceived impact on electricity prices, to have included it in their original forecast and to have put into place strategies to minimise costs. One respondent

suggested that NGET should learn from the market experiences of winter 2005/06 by establishing strategies to deal with similar scenario's next winter to help reduce costs.

Constraint costs

1.6. One respondent argued that forecasted external balancing costs were based on historical information and as such Ofgem should consider NGET's revised forecast that took into full consideration the most recent activities in the wholesale gas and power markets. Another respondent also emphasised that NGET's revised forecast represented a balanced range of possible market scenarios that took into consideration recent market activities and as such ensured a balanced incentive on the SO.

1.7. Four respondents were of the view that increasing constraint costs towards the end of 2005/06 were foreseen and NGET should have managed the cheviot and Scotland constraints in a manner that would have minimised costs. It was therefore considered that constraints are costs that could be avoided and should not be a contributory factor in setting the 2006/07 target.

1.8. Another respondent also considered that the high forward gas and power prices experienced towards the end of 2005/06 would not continue into the 2006/07 markets and there was concern that NGET had placed an undue emphasis on this in their revised forecast. It was also considered that the target for 2006-07 should be broadly aligned with the revised forecast for 2005/06.

Related Issues

Income Adjusting Events (IAE)

1.9. A number of respondents expressed concerns over the potential for NGET to raise an Income Adjusting Event (IAE) for 2005/06. Four respondents considered that the risks with respects to CAP47 and constraints costs were already factored into the scheme design and the 2005/06 scheme was robust enough to absorb high and volatile gas and power prices. Consequently these respondents did not foresee a need for NGET to raise an IAE.

Suggested changes to the SO Incentive Scheme

1.10. Two respondents suggested reverting to symmetrical sharing factors. One of these respondents suggested this would provide NGET with an incentive to forecast costs accurately and the other respondent suggested this would help ensure equality in risks and rewards for all market participants. One respondent suggested lowering the sharing factors in order to reduce the level of risk and reward, while another respondent considered having shallower sharing factors without associated caps and floors.

1.11. One response suggested to index link the cost to NGET of managing balancing mechanism activities to a market price, as opposed to having a fixed target, to help manage volatile electricity prices. Another respondent suggested extending the

incentive scheme to beyond a year to provide greater incentives for long term strategies to reduce costs. Other suggestions included excluding from the IBC the costs attributed to black start contracts as they represented arrangements between NGET and generators that were generally stable.

Transparency

1.12. Four respondents were of the view that there should be increased transparency for market participants regarding NGETs balancing activities. It was suggested by one respondent that greater transparency would enable industry participants to comment meaningfully on the scheme.

Appendix 3 – Internal incentive SO costs

1.1. The SO internal cost incentive scheme consists of the following main elements:

- Incentivised costs (CSOC)
- Non-incentivised costs (NSOC)
- A non-incentivised allowance for rates (SOBR)
- Non-incentivised allowances for market participants' NETA costs and National Grid's BETTA implementation costs (PSC and BI)
- Non-incentivised allowances for the charges that NGET has to pay to SPTL and SHETL for BETTA (TSPN and TSHN)
- An allowance for the costs of adjusting transmission outages on the Scottish networks (OT)

1.2. In arriving at our forecast for the SO internal cost incentive scheme for 2006/07, we have had to derive estimates for each of these elements based on assumptions regarding the regulated asset value (RAVs) associated with each element, projected capital expenditure and depreciation allowances and projected operating costs.⁴¹

Regulated asset values, capital expenditure and depreciation - CSOC and NSOC

1.3. Table A3.1 shows the anticipated development of the RAVs associated with CSOC and NSOC over 2006/07. The starting RAV is given by the closing RAV for 2005/06, which is based upon actual capital expenditure during the period from 2001/02 rather than the projected capital expenditure included in the previous internal incentive scheme. TSS capex is not shown in this table because it is now remunerated under the TO price control.⁴²

Table A3.1: Development of NGET's System Operator RAV over 2006/07 (£ million)

2006/07	NSOC	CSOC
Opening RAV	54.8	35.3
Depreciation	16.4	7.6
Capex		14.0

⁴¹ As per our analysis in 'Exetnding National Grid Electricity Transmission Ltd's Transmission Owner Price Control for 2006/7 - Final Proposals', Ofgem, November 2005, the capex values have been rolled forward to determine an "interim RAV". As appropriate, NGET internal SO costs and our calculations are subject to the same caveats expressed in that document, for example, regarding the need to undertake a detailed review the efficiency of these costs as part of setting a longer term scheme from 1 April 2007.

⁴² See Note 2 of Table 3.1 of 'Exetnding National Grid Electricity Transmission Ltd's Transmission Owner Price Control for 2006/7 - Final Proposals', Ofgem, November 2005.

NGET's SO incentives schemes 2006/07

February 2006

Closing RAV	38.4	41.6
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1.4. In line with the change from pre-tax to post-tax treatment for the rollover of the TO price controls, we have implemented the same post-tax treatment, which ensures that NGET's allowed profits are the same on a pre-tax and post-tax basis.

Operating costs - NSOC and CSOC

1.5. NGET has proposed, and we have accepted that its incentivised operating costs should remain constant in real terms between 2005/06 and 2006/07. This is line with the allowed base opex included in the current incentive scheme, which was also approximately constant.

Rates

1.6. For business rates, the current incentive scheme includes an allowance of £1.1 million for 2005/06 (in 2000 money) plus a pass-through of any difference between the actual cost of rates and this allowance. The same allowance and approach has been adopted for the proposed incentive scheme.

Market Participants' NETA Costs

1.7. The NETA set up costs incurred by National Grid on behalf of market participants (PSC) have now been fully recovered so that this element of the SO internal scheme can now be removed.

BETTA implementation costs

1.8. The BETTA capex implementation costs are scheduled to be recovered over seven years whilst the opex costs are scheduled to be recovered over two years and we have based our cost estimates on these assumptions but using NGET's latest forecast of these costs, plus a change in the treatment of opex costs.

Table A3.2: Development of NGET's BETTA Implementation RAV over 2006/7 (£million)

2006/7 money	BETTA
Opening RAV	17.8
Depreciation	3.0
Capex	0.0

NGET's SO incentives schemes 2006/07

February 2006

Closing RAV	14.8
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Scottish BETTA implementation costs

1.9. These costs form part of the allowed revenues of SPTL and SHETL respectively and are simply passed through to consumers by NGET. Consequently, we do not include them within the total figure calculated for NGET's internal costs.

Scottish outage costs

1.10. NGET was given an allowance of £3 million (2002/03 money) for these costs in 2005/06 and initially proposed that the same allowance be included in its 2006/07 allowed costs. However, since it forecasts that the actual outage costs it will incur in 2005/06 will only be of the order of £1 million, it has accepted that this lower figure should be rolled forward into the 2006/07 incentive scheme.

Appendix 4 - Draft legal text

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

1. 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.
2. The Authority proposes to modify the conditions of the transmission licence treated as granted to National Grid Electricity Transmission plc ("NGET") under section 6(1)(b) of the Act by amending the following in accordance with either Schedule 1, Schedule 2 or Schedule 3 to this Notice:
 - (a) paragraphs 5 (in Schedule 3 only), 5A, 9, 10 (in Schedules 1 and 2 only), 14 and 16 of Special Condition AA5A (Revised Restrictions on Revenue);
 - (b) paragraph 4 of Special Condition AA5E (Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction); and
 - (c) paragraphs B1 (in Schedules 1 and 2 only), B2, B3 (in Schedules 1 and 2 only), B5 - B9 inclusive and B15 of Schedule A Part B (Terms used in the balancing services activity revenue restriction).
3. For the avoidance of doubt, no amendments are being proposed to paragraphs 1 – 4 inclusive, 6 – 8 inclusive, 11 – 13 inclusive and 15 of Special Condition AA5A, to Schedule A Part A or to any part of Schedule A Part B not specifically referred to above. As such, nothing in these proposed modifications alters these paragraphs.
4. The Schedules to this Notice contain different options for amending the transmission licence which are designed to provide a fair balance of risk and reward between NGET and customers. NGET may consent to the proposed modifications set out in either Schedule 1, Schedule 2 or Schedule 3 to this Notice, or it may reject all options.
5. The proposed modifications set out in Schedule 1 to this Notice provide a lower target (£380m) but with greater reward if NGET manages to beat this target (ie. NGET would receive a higher payment where its costs are above its target). The proposed modifications set out in Schedule 2 to this Notice provide a higher target (£410m), but with lower reward if NGET beats this target. Schedule 3 contains the Authority's proposed allowances for NGET's internal SO costs if NGET rejects the proposed modifications in relation to external balancing costs contained in Schedules 1 and 2.
6. Subject to the outcome of this statutory consultation, consideration of respondents' views and the consent of NGET being given, it is the intention of the Authority that these proposed licence modifications shall have effect on and from 00:00 hours on 1 April 2006.

7. The reasons why the Authority proposes to make the licence modifications appearing in paragraph 1, and their effect, are set out in paragraph 8 and by the Authority in the following documents:
- (a) "National Grid Electricity Transmission System Operator Incentives 2006-07", Ofgem, December 2005;
 - (b) "National Grid Electricity Transmission System Operator Incentives 2006-07 –Revised Forecast, Ofgem, January 2006";
 - (c) "National Grid Electricity Transmission's System Operator incentive schemes 2006/07, Final Proposals and statutory licence consultation, Ofgem, February 2006".
8. In summary, the effects of the proposed licence modifications are as follows:
- (a) the proposed amendments seek to revise the relevant provisions in order to accommodate the proposals relating to the NGET Great Britain ("GB") System Operator ("SO") incentive schemes from 1 April 2006;
 - (b) the incentive scheme parameters of the NGET GB SO incentive scheme intended to run from 1 April 2006 until 31 March 2007 are set out in the table below:

Parameter	2006/07 values (money of the day) Schedule 1	2006/07 values (money of the day) Schedule 2
Incentive scheme target	380	410
Upside sharing factor	60%	10%
Downside sharing factor	-10%	-60%
Cap	40	10
Floor	-10	-40

- (c) the transmission losses element of the SO incentive scheme is included on a net basis in line with the proposals. As part of this, an annual transmission losses target ("TLTt") is defined in line with the proposals. For 2006/07, TLTt is to be set at 5,820,000MWh. Additionally, the transmission losses reference price ("TLRpj") is to be redefined in line with the proposals. Rather than setting this price in advance (as has been the case under previous SO incentive schemes) the proposals will be set on the basis of a reference price derived from a relevant basket of electricity prices to arrive at an annual reference price based on outturn prices for the year. Therefore the reference price will no longer be fixed for the duration of the incentive scheme at the beginning of the year;

- (d) the proposals also expose NGET to potential increases or decreases in system operation costs associated with Balancing and Settlement Code ("BSC") Modification Proposals or Connection and Use of System ("CUSC") Amendment Proposals, as of 27 February 2006, being consulted on by the BSC or CUSC Panels and which may be implemented in the future following a decision by the Authority. This year the proposed targets do not provide allowances for potential modifications where the Authority has yet to reach a decision (this is without prejudice to the Authority's decision in respect of these modifications);
- (e) in addition, the proposed amendments seek to modify the allowances for the terms CSOC, NSOC and other categories of internal costs as follows:

Components of internal incentives	2006/07 values (money of the day) (£m)
Internal incentives target	68.9
Non-incentivised costs (NSOC)	26.0
BETTA implementation (BI)	10.9
SO rates	1.1
ON	1

- (f) the sharing factors relating to the incentive payments on internal costs in respect of the relevant period commencing on 1 April 2006 have been amended. The proposed licence amendments aim to set the internal costs incentive scheme sharing factors for this period equal to the proposed external costs incentive scheme sharing factors for the relevant period commencing on 1 April 2006.
9. The existing incentive scheme set out in Part 2(i) and 2(ii) of special condition AA5A and Schedule A Part B will terminate with effect from 31 March 2006 on NGET 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.
10. 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).
11. Any representations or objections to the proposed licence modifications may be made in writing before [28 March 2006] to:

Steve Smith
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

NGET's SO incentives schemes 2006/07

February 2006

or by email to wholesale.markets@ofgem.gov.uk

A handwritten signature in black ink, appearing to be 'Steve Smith', written in a cursive style.

Steve Smith
Duly authorised on behalf of the Authority
28 February 2006

SCHEDULE 1

1. Special Condition AA5A (Revised Restrictions on Revenue) is amended in accordance with paragraphs 2 to 4 of this Schedule.
2. In Part 2 (i) (Balancing services activity revenue restriction on external costs)—
 - (a) paragraph 5A is omitted;
 - (b) in paragraph 9 -

- (i) for the formula set out at the beginning of that paragraph, substitute—

$$IBC_t = CSOBM_t + BSCC_t + \left[\left(\sum_{jt} [TL_j - TLT_j] \right) * TLRP_t \right] + \sum_{jt} (TQEI_j * [NIRP_j]) - RT_t - OM_t$$

- (ii) for—

„ $\sum_{jt} ([TL_j - TLT_j] * [TLRP_j])$ is the volume of transmission losses (TLj) minus the target volume of transmission losses (TLTj) multiplied by the transmission losses reference price (TLRPj) for each settlement period, summed across all settlement periods in the relevant period t",

substitute—

„ $(\sum_{jt} [TL_j - TLT_j]) * TLRP_t$ is the volume of transmission losses (TLj) minus the target volume of transmission losses (TLTj) for each settlement period, summed across all settlement periods in the relevant period t, multiplied by the transmission losses reference price (TLRPt) for the relevant period t";

- (iii) for—

"TLRPj 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",

substitute—

"TLRPt which is the transmission losses reference price, has the value specified for the relevant period t set out in paragraph B3 of Part B of Schedule A";

- (c) in paragraph 10—

- (i) in sub-paragraph (b), for "1 April 2005", substitute "1 April 2006" and for "31 March 2006" substitute "31 March 2007";

NGET's SO incentives schemes 2006/07

February 2006

(ii) for Table 1, substitute—

Table 1: Proposed modifications to the BSC

BSC Modification Proposal	BSC Modification Title (as entitled by the proposer of the modification)
P183	Mechanisms for Obtaining a valid CoS
P184	Clarification of BSC Section W
P185	Re-drafting of BSC Sections U and W
P186	Submission and Redeclaration of GC and DC values

(iii) for Table 2, substitute—

Table 2: Proposed modifications to the CUSC

CUSC Amendment Proposal	CUSC Amendment Title (as entitled by the proposer of the amendment)
CAP079	CUSC Section 10-Transitional Issues - Contents
CAP080	CUSC Paragraph 5.10 – Correction of Spelling Error
CAP081	CUSC Exhibit F - Amendment to Notes
CAP082	Correction to Definition of Mandatory Ancillary Services
CAP083	Amendment to Definition of NGC in Section 11
CAP084	Table of Contents Document and CUSC Section -1 Applicability of sections and related agreements structure – Contents
CAP085	Revised Treatment of Housekeeping Amendments
CAP086	Proposal for earlier consideration of implementation dates
CAP087	Revisions to Request for Urgency Process
CAP088	Application of late payments of Commercial Debts (Interest) Act 1998
CAP094	Limited Duration Transmission Entry Capacity
CAP095	Removal of Operational Day Reference from Ex-Post Response Information
CAP097	Revision to the contractual requirements for Small and medium Embedded Power Stations under CUSC 6.5
CAP100	Revision of CUSC Amendment Provisions to ensure that Amendment Reports contain a collective CUSC Panel Recommendation
CAP101	Removal of the Amendments Panel Chairman's Casting Vote – In context of Amendments Panel Recommendation vote
CAP103	Flexibility of Working Group Internal Procedures
CAP104	Amendments to System to Generator Intertrip related terms Concurrently defined in the Grid Code and the CUSC
CAP105	Change of Company Name for National Grid Company plc (NGC)
CAP106	Amendment to Revise Paragraph 4.5.1 (Indexation – Application) of the CUSC
CAP108	Housekeeping, CUSC Definition Actual Amount and Notional Amount reference correction
CAP109	Housekeeping, CUSC Definition Qualified Company and

NGET's SO incentives schemes 2006/07

February 2006

CUSC Amendment Proposal	CUSC Amendment Title (as entitled by the proposer of the amendment)
	Qualifying Company
CAP110	Housekeeping, CUSC Section 4.3.2.20 – Reference to HM Customs and Excise
CAP111	Housekeeping, CUSC Exhibits – Contact Update for the Return of Application Forms
CAP112	Housekeeping, CUSC Definition Housekeeping Amendment Report reference correction
CAP113	Housekeeping, Deletion of 'the The Company'
CAP114	Housekeeping, Amending Name and Address of National Grid
CAP115	Housekeeping, Replacing the term 'The Company Transmission System'
CAP116	Housekeeping, CUSC Section 6.5.1(d) – insertion of missing word
CAP117	Housekeeping, CUSC Section 3.12.3 – incorrect spelling of word
CAP118	Housekeeping, CUSC Section 6.8.3(b)(iii) – incorrect spelling of word
CAP119	Clarification of, and correction to, the table of Users' Credit Allowances

3. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 14—
- (a) in the definition of Blt—
 - (i) for "1 April 2005" substitute "1 April 2006";
 - (ii) for "£12,374,000" substitute "£10,853,000";
 - (b) in the definition of ONt—
 - (i) for "£3,228,000" substitute "£1,000,000";
 - (ii) for "1 April 2005" substitute "1 April 2006".
4. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 16, in sub-paragraph (b)—
- (a) for "1 April 2005" substitute "1 April 2006";
 - (b) for "31 March 2006" substitute "31 March 2007".
5. In Special Condition AA5E (Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction)—
- (a) in paragraphs 4(ii) and 4(iii), for "31 March 2006" substitute "31 March 2007";

- (b) in paragraph 4(B), for "1 April 2005" substitute "1 April 2006".
6. Schedule A (Supplementary Provisions of the Charge Restriction Conditions), Part B (Terms used in the balancing services activity revenue restriction), is amended in accordance with paragraphs 7 to 15 of this Schedule.
7. For paragraph B1, substitute—
- "B1. For the purpose of paragraph 8 of Part 2(i) of special condition AA5A, the terms MTt, SFt and CBt shall be selected against the appropriate value of IBCt (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 2006:

IBCt (£)	MTt (£)	SFt	CBt (£)
< 323,333,333	0	0	40,000,000
323,333,333 <= IBCt < 390,000,000	390,000,000	0.60	0
390,000,000 <= IBCt < 490,000,000	390,000,000	0.10	0
>= 490,000,000	0		-10,000,000

- (b) in respect of the relevant year t commencing on 1 April 2007 and each relevant year thereafter, the terms MTt, SFt and CBt shall be set to zero."
8. Paragraph B2 is omitted.
9. For paragraph B3, substitute:

"For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term TLtj in respect of each settlement period during relevant period t shall be given by the following formula:

$$TLT_j = \frac{TLT_t}{SP_t}$$

where:

TLTt which is the target volume of transmission losses in relevant period t, shall have the value in megawatt hours of 5,820,000.

SPt is the total number of settlement periods in the relevant period t.

For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term TLRPt for relevant period t shall have the value in £ per megawatt hour

given by the following formula:

$$TLRP_t = \left[\frac{\sum_{jt} SPNIRP_j}{SP_t} \right]$$

where $SPNIRP_j$ is determined in accordance with paragraph B4 in Part B Schedule A."

10. In paragraph B5, after sub-paragraph (e), insert—

- (f) in respect of the relevant year t commencing on 1 April 2006, from the following table:

(CSO C_t) (£)	IS F_t
<68,932,600	0.60
68,932,600 =>	0.10

11. For the table in paragraph B6, substitute—

Relevant Year Commencing 1 April	IM T_t (£)
2001	56,880,216 (R I_t / Z t)
2002	55,869,013 (R I_t / Z t)
2003	57,753,517 (R I_t / Z t)
2004	57,567,216 (R I_t / Z t)
2005	(60,656,843 + E C_t) (R I_t / Z t)
2006	68,932,600

12. For the table in paragraph B7, substitute—

Relevant Year Commencing 1 April	NSO C_t
2001	21,698,749 (R I_t / Z t)
2002	21,165,761 (R I_t / Z t)
2003	20,602,773 (R I_t / Z t)
2004	20,120,580 (R I_t / Z t)
2005	19,496,842 (R I_t / Z t)
2006	26,026,100

13. For the table in paragraph B8, substitute—

Relevant Year Commencing 1 April	SOR a_t
2001	0
2002	1,000,000

NGET's SO incentives schemes 2006/07

February 2006

2003	1,000,000
2004	1,000,000
2005	1,100,000
2006	1,100,000

- 14.** For the table in paragraph B9, substitute—

Relevant Year Commencing 1 April	PSACT
2001	0
2002	4,200,000
2003	0
2004	0
2005	0
2006	0

- 15.** In paragraph B15, in the last sentence, after "1 April 2005" insert "and for periods commencing from 1 April 2006".

SCHEDULE 2

1. Special Condition AA5A (Revised Restrictions on Revenue) is amended in accordance with paragraphs 2 to 4 of this Schedule.
2. In Part 2 (i) (Balancing services activity revenue restriction on external costs)—
 - (a) paragraph 5A is omitted;
 - (b) in paragraph 9 -

- (i) for the formula set out at the beginning of that paragraph, substitute—

$$IBC_t = CSOBM_t + BSCC_t + \left[\left(\sum_{jt} [TL_j - TLT_j] \right) * TLRP_t \right] + \sum_{jt} (TQEI_j * [NIRP_j]) - RT_t - OM_t$$

- (ii) for—

„ $\sum_{jt} ([TL_j - TLT_j] * [TLRP_j])$ is the volume of transmission losses (TLj) minus the target volume of transmission losses (TLTj) multiplied by the transmission losses reference price (TLRPj) for each settlement period, summed across all settlement periods in the relevant period t",

substitute—

„ $(\sum_{jt} [TL_j - TLT_j]) * TLRP_t$ is the volume of transmission losses (TLj) minus the target volume of transmission losses (TLTj) for each settlement period, summed across all settlement periods in the relevant period t, multiplied by the transmission losses reference price (TLRPt) for the relevant period t";

- (iii) for—

"TLRPj 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",

substitute—

"TLRPt which is the transmission losses reference price, has the value specified for the relevant period t set out in paragraph B3 of Part B of Schedule A";

- (c) in paragraph 10—

- (i) in sub-paragraph (b), for "1 April 2005", substitute "1 April

NGET's SO incentives schemes 2006/07

February 2006

2006" and for "31 March 2006" substitute "31 March 2007";

(ii) for Table 1, substitute—

Table 1: Proposed modifications to the BSC

BSC Modification Proposal	BSC Modification Title (as entitled by the proposer of the modification)
P183	Mechanisms for Obtaining a valid CoS
P184	Clarification of BSC Section W
P185	Re-drafting of BSC Sections U and W
P186	Submission and Redeclaration of GC and DC values

(iii) for Table 2, substitute—

Table 2: Proposed modifications to the CUSC

CUSC Amendment Proposal	CUSC Amendment Title (as entitled by the proposer of the amendment)
CAP079	CUSC Section 10-Transitional Issues - Contents
CAP080	CUSC Paragraph 5.10 – Correction of Spelling Error
CAP081	CUSC Exhibit F - Amendment to Notes
CAP082	Correction to Definition of Mandatory Ancillary Services
CAP083	Amendment to Definition of NGC in Section 11
CAP084	Table of Contents Document and CUSC Section -1 Applicability of sections and related agreements structure – Contents
CAP085	Revised Treatment of Housekeeping Amendments
CAP086	Proposal for earlier consideration of implementation dates
CAP087	Revisions to Request for Urgency Process
CAP088	Application of late payments of Commercial Debts (Interest) Act 1998
CAP094	Limited Duration Transmission Entry Capacity
CAP095	Removal of Operational Day Reference from Ex-Post Response Information
CAP097	Revision to the contractual requirements for Small and medium Embedded Power Stations under CUSC 6.5
CAP100	Revision of CUSC Amendment Provisions to ensure that Amendment Reports contain a collective CUSC Panel Recommendation
CAP101	Removal of the Amendments Panel Chairman's Casting Vote – In context of Amendments Panel Recommendation vote
CAP103	Flexibility of Working Group Internal Procedures
CAP104	Amendments to System to Generator Intertrip related terms Concurrently defined in the Grid Code and the CUSC
CAP105	Change of Company Name for National Grid Company plc (NGC)
CAP106	Amendment to Revise Paragraph 4.5.1 (Indexation – Application) of the CUSC
CAP108	Housekeeping, CUSC Definition Actual Amount and Notional Amount reference correction

CUSC Amendment Proposal	CUSC Amendment Title (as entitled by the proposer of the amendment)
CAP109	Housekeeping, CUSC Definition Qualified Company and Qualifying Company
CAP110	Housekeeping, CUSC Section 4.3.2.20 – Reference to HM Customs and Excise
CAP111	Housekeeping, CUSC Exhibits – Contact Update for the Return of Application Forms
CAP112	Housekeeping, CUSC Definition Housekeeping Amendment Report reference correction
CAP113	Housekeeping, Deletion of 'the The Company'
CAP114	Housekeeping, Amending Name and Address of National Grid
CAP115	Housekeeping, Replacing the term 'The Company Transmission System'
CAP116	Housekeeping, CUSC Section 6.5.1(d) – insertion of missing word
CAP117	Housekeeping, CUSC Section 3.12.3 – incorrect spelling of word
CAP118	Housekeeping, CUSC Section 6.8.3(b)(iii) – incorrect spelling of word
CAP119	Clarification of, and correction to, the table of Users' Credit Allowances

3. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 14—

- (a) in the definition of Blt—
 - (i) for "1 April 2005" substitute "1 April 2006";
 - (ii) for "£12,374,000" substitute "£10,853,000";
- (b) in the definition of ONt—
 - (i) for "£3,228,000" substitute "£1,000,000";
 - (ii) for "1 April 2005" substitute "1 April 2006".

4. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 16, in sub-paragraph (b)—

- (a) for "1 April 2005" substitute "1 April 2006";
- (b) for "31 March 2006" substitute "31 March 2007".

5. In Special Condition AA5E (Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction)—

- (a) in paragraphs 4(ii) and 4(iii), for "31 March 2006" substitute "31 March 2007";

(b) in paragraph 4(B), for "1 April 2005" substitute "1 April 2006".

6. Schedule A (Supplementary Provisions of the Charge Restriction Conditions), Part B (Terms used in the balancing services activity revenue restriction), is amended in accordance with paragraphs 7 to 15 of this Schedule.

7. For paragraph B1, substitute—

"B1. For the purpose of paragraph 8 of Part 2(i) of special condition AA5A, the terms MTt, SFt and CBt shall be selected against the appropriate value of IBCt (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 2006:

IBCt (£)	MTt (£)	SFt	CBt (£)
< 310,000,000	0	0	10,000,000
310,000,000 <= IBCt < 410,000,000	410,000,000	0.10	0
410,000,000 <= IBCt < 476,666,667	410,000,000	0.60	0
>= 476,666,667	0	0	-40,000,000

(b) in respect of the relevant year t commencing on 1 April 2007 and each relevant year thereafter, the terms MTt, SFt and CBt shall be set to zero."

8. Paragraph B2 is omitted.

9. For paragraph B3, substitute:

"For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term TL_j in respect of each settlement period during relevant period t shall be given by the following formula:

$$TL_j = \frac{TL_t}{SP_t}$$

where:

TL_t which is the target volume of transmission losses in relevant period t, shall have the value in megawatt hours of 5,820,000."

SP_t is the total number of settlement periods in the relevant period t.

For the purpose of paragraph 9 of Part 2(i) of special condition AA5A, the term TLRP_t for relevant period t shall have the value in £ per megawatt hour given by the following formula:

$$TLRP_t = \left[\frac{\sum_{jt} SPNIRP_j}{SP_t} \right]$$

where SPNIRP_j is determined in accordance with paragraph B4 in Part B Schedule A."

10. In paragraph B5, after sub-paragraph (e), insert—

(f) in respect of the relevant year t commencing on 1 April 2006, from the following table:

(CSO _t) (£)	ISF _t
<68,932,600	0.10
68,932,600 =>	0.60

11. For the table in paragraph B6, substitute—

Relevant Year Commencing 1 April	IMT _t (£)
2001	56,880,216 (R _{1t} / Z _t)
2002	55,869,013 (R _{1t} / Z _t)
2003	57,753,517 (R _{1t} / Z _t)
2004	57,567,216 (R _{1t} / Z _t)
2005	(60,656,843 + E _{Ct}) (R _{1t} / Z _t)
2006	68,932,600

12. For the table in paragraph B7, substitute—

Relevant Year Commencing 1 April	NSO _{Ct}
2001	21,698,749 (R _{1t} / Z _t)
2002	21,165,761 (R _{1t} / Z _t)
2003	20,602,773 (R _{1t} / Z _t)
2004	20,120,580 (R _{1t} / Z _t)
2005	19,496,842 (R _{1t} / Z _t)
2006	26,026,100

13. For the table in paragraph B8, substitute—

Relevant Year Commencing 1 April	SOR _{atet}
2001	0

NGET's SO incentives schemes 2006/07

February 2006

2002	1,000,000
2003	1,000,000
2004	1,000,000
2005	1,100,000
2006	1,100,000

14. For the table in paragraph B9, substitute—

Relevant Year Commencing 1 April	PSACT
2001	0
2002	4,200,000
2003	0
2004	0
2005	0
2006	0

15. In paragraph B15, in the last sentence, after "1 April 2005" insert "and for periods commencing from 1 April 2006".

SCHEDULE 3

1. Special Condition AA5A (Revised Restrictions on Revenue) is amended in accordance with paragraphs 2 to 4 of this Schedule.
 2. In Part 2 (i) (Balancing services activity revenue restriction on external costs)—
 - (a) in paragraph 5, in the definition of IncPayExtt, after "paragraph 8" insert, " except in respect of the relevant year commencing on 1 April 2006, and each relevant year thereafter, IncPayExtt shall be set to zero";
 - (b) paragraph 5A is omitted.
 3. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 14—
 - (a) in the definition of Blt—
 - (i) for "1 April 2005" substitute "1 April 2006";
 - (ii) for "£12,374,000" substitute "£10,853,000";
 - (b) in the definition of ONt—
 - (i) for "£3,228,000" substitute "£1,000,000";
 - (ii) for "1 April 2005" substitute "1 April 2006".
 4. In Part 2 (ii) (Balancing services activity revenue restriction on internal costs), in paragraph 16, in sub-paragraph (b)—
 - (a) for "1 April 2005" substitute "1 April 2006";
 - (b) for "31 March 2006" substitute "31 March 2007".
 5. In Special Condition AA5E (Duration of the Transmission Network Revenue Restriction and the Balancing Services Activity Revenue Restriction)—
 - (a) in paragraphs 4(ii) and 4(iii), for "31 March 2006" substitute "31 March 2007";
 - (b) in paragraph 4(B), for "1 April 2005" substitute "1 April 2006".
 6. Schedule A (Supplementary Provisions of the Charge Restriction Conditions), Part B (Terms used in the balancing services activity revenue restriction), is amended in accordance with paragraphs 7 to 13 of this Schedule.
 7. Paragraph B2 is omitted.
 8. In paragraph B5, after sub-paragraph (e), insert—
-

- (f) in respect of the relevant year t commencing on 1 April 2006, from the following table:

(CSO _t) (£)	ISF _t
<68,932,600	1.0
68,932,600 =>	1.0

9. For the table in paragraph B6, substitute—

Relevant Year Commencing 1 April	IMT _t (£)
2001	56,880,216 (R _{It} / Z _t)
2002	55,869,013 (R _{It} / Z _t)
2003	57,753,517 (R _{It} / Z _t)
2004	57,567,216 (R _{It} / Z _t)
2005	(60,656,843 + E _{Ct}) (R _{It} / Z _t)
2006	68,932,600

10. For the table in paragraph B7, substitute—

Relevant Year Commencing 1 April	NSO _{Ct}
2001	21,698,749 (R _{It} / Z _t)
2002	21,165,761 (R _{It} / Z _t)
2003	20,602,773 (R _{It} / Z _t)
2004	20,120,580 (R _{It} / Z _t)
2005	19,496,842 (R _{It} / Z _t)
2006	26,026,100

11. For the table in paragraph B8, substitute—

Relevant Year Commencing 1 April	SOR _{atet}
2001	0
2002	1,000,000
2003	1,000,000
2004	1,000,000
2005	1,100,000
2006	1,100,000

12. For the table in paragraph B9, substitute—

Relevant Year Commencing 1 April	PSA _{Ct}
2001	0
2002	4,200,000
2003	0
2004	0

NGET's SO incentives schemes 2006/07

February 2006

2005	0
2006	0

- 13.** In paragraph B15, in the last sentence, after "1 April 2005" insert "and for periods commencing from 1 April 2006".

Appendix 5 - Ofgem's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.⁴³

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly.⁴⁴

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met
- The need to secure that all reasonable demands for electricity are met
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them⁴⁵, and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.⁴⁶

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- Promote efficiency and economy on the part of those licensed⁴⁷ under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems

⁴³ entitled "Gas Supply" and "Electricity Supply" respectively.

⁴⁴ However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

⁴⁵ under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.

⁴⁶ The Authority may have regard to other descriptions of consumers.

- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity
- Contribute to the achievement of sustainable development, and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice, and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation⁴⁸ and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

⁴⁷ or persons authorised by exemptions to carry on any activity.

⁴⁸ Council Regulation (EC) 1/2003

Appendix 6 - Glossary

B

British Electricity Trading and Transmission Arrangements (BETTA)

The BETTA reforms, introduced on 01 April 2005, created a single, competitive wholesale electricity trading market in Great Britain. These trading arrangements are based upon the preceding England and Wales trading arrangements. The BETTA arrangements allow parties to trade energy forward through bilateral over the counter trades, through exchanges, or in any other manner they deem appropriate on a GB basis.

Black Start

All large power stations require some contingency provisions to enable them to restart should the system shut down. Not all power stations are required to have black start capability. It is remunerated via capability payments indexed to inflation and forward prices. It is contracted for bilaterally.

E

Enhanced reactive service

This describes a range of products delivering reactive power not provided via an obligatory arrangement. This is contracted for via market based arrangements.

F

Free Headroom

This describes the volume across part loaded plant. It can also be thought of as the sum of spare capacity across all running generators.

Frequency response

NGET has a statutory duty to maintain system frequency between +/- 1% of 50 hertz. The immediate second-to-second balancing to meet this requirement is provided by continuously modulating output. Mandatory frequency response is provided for via the CAP047 provisions, which enable providers to alter their holding prices. Larger frequency response is provided by demand side and bid-offer acceptances which form commercial services.

Non-mandatory frequency response, is entered into between the SO and the relevant provider, with the provider being able to freely price for volume. Generally non-mandatory frequency response is cheaper than mandatory response and is entered into via bilateral contract.

Fast reserve

This is the fast provision of reliable power via increased generation or reduction in demand which can be provided within 2 minutes, at a delivery rate of \geq 25MW/minute and the reserve needs to be sustainable for 15 minutes. Entered into via tender process.

Fast Start

Fast start is the ability of OCGT plant to ramp from standstill to its maximum rated output within five minutes of initiating a low frequency relay, or within seven minutes of a manual instruction. It comprises an availability fee and an utilisation fee. It is contracted by tender.

I

Intertrip

The majority of intertrips are required to strategically manage power flows on the system, and remove at short notice potentially vulnerable circuits. Commercial intertrips are negotiated bilaterally, whilst operational intertrips are covered by the CAP076 provisions (administered arrangements).

M

Maxgen

This is an emergency service and is used to extract additional output beyond a unit's normal operational range. It is contracted bilaterally with NGET, with submitted prices, volumes and "Xs" being provided on a monthly basis to NGET. This service is provided for under CAP071.

R

Reactive Power

Power generation creates background energy which absorbs or generates reactive energy as a result of the creation of magnetic and electric fields. Reactive power needs to be provided to assist in balancing the system and retaining its integrity. Market agreement and default arrangements cover the provision of mandatory services.

S

Sharing factors

These describe the percentage of profit or loss NGET will be subjected to if the day to day costs of running the system fall below or exceed the target cost.

System Operator (SO)

NGET is the operator of the high voltage system for GB.

Standing reserve

NGET's requirement for standing reserve can be met from synchronised and non-synchronised plant. The response time must be within 20 minutes, for a delivery of at least 3MW and needs to be maintained for at least 2 hours if instructed. Contracts struck via open tender.

W

Warming

This service is used to decrease the notice period a unit needs to deliver power. It substantially increases the flexibility of plant on the system. Warming and hot standby contracts exist, in £/hr availability fees. When a warmed unit is instructed the warming payment falls away, but the hot standby fees remains, (provided it has been initiated). Provided for via bilateral agreement.

Appendix 7 - Feedback Questionnaire

Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?

Please add any further comments?

Please send your comments to:

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