# **Price controls and incentives under BETTA**

# An Ofgem/DTI consultation

October 2003

## **Summary**

Under BETTA, the electricity transmission licensees will have revised statutory duties and new licence duties. The new licence duties will include an obligation to comply with the SO-TO code, a document which will also have contractual force between the parties to the code. In June 2003, Ofgem/DTI issued a second consultation on electricity transmission licences under BETTA, and a further consultation on the content of the SO-TO Code.

The purpose of this paper is to set out how Ofgem/DTI propose that licence conditions related to price controls and incentives will be developed to ensure that, given the changes in roles of the existing transmission licensees under BETTA, those licensees continue to be appropriately financed and incentivised. The paper seeks the views of interested parties.

#### **Timetable**

This is the first in a series of consultation papers which will lead to Ofgem's final proposals for the price controls and incentives to apply to the three transmission licensees:

- Scottish Hydro-Electric Transmission Ltd (SHETL)
- ♦ SP Transmission Ltd (SP Transmission), and
- ♦ The National Grid Company plc (NGC).

The document sets out the proposed process and timetable for putting in place the price controls and incentives to apply from the planned BETTA go-live date of 1 April 2005. The paper also proposes that to protect the interests of consumers revised revenue restrictions are developed for SP Transmission and SHETL in the event that BETTA go-live should be after 1 April 2005.

The paper recognises that as regards the allowed revenues appropriate to electricity transmission licensees, there are two important and related pieces of work being taken forward alongside the development of BETTA. These are, firstly, the development of NGC's SO incentive scheme and, secondly, the regulatory treatment of transmission expenditure required for the transmission of electricity from renewable sources, particularly in Scotland. Ofgem's thinking on these matters is the subject of separate

publications. Furthermore a decision on a roll forward of the existing Scottish transmission price controls will be published shortly.

#### Price controls under BETTA

The document describes the framework within which price controls will be developed, taking into account the allocation of transmission functions between the NGC and the Scottish transmission owners (SP Transmission and SHETL) under BETTA, and sets out Ofgem's proposals on the forms of controls. It proposes that NGC's form of control as combined system operator/transmission owner will not be significantly different from NGC's current form of control, but that adjustments will need to be made to the magnitude of each component of the revenue restriction to reflect the reflect the fact that NGC, as GB system operator, will collect all revenues from users. Ofgem's intention is to retain balancing services incentives on NGC under BETTA in the form that they exist in England and Wales prior to BETTA go-live, although slight adjustments might need to be made to the form of the incentives to reflect the interactions between NGC as GB system operator and transmission owners in Scotland. It also proposes that the form of the transmission owner price controls under BETTA will be similar to NGC's current Transmission Network Revenue Restriction (commonly referred to as its TO control), but recognises that adjustments may be needed to the form of SP Transmission and SHETL controls to provide incentives on transmission owners in specific areas of activity. The paper notes the work that is underway with transmission licensees to inform the development of proposals for such incentives.

The document details the proposed programme of work including the approach to considering BETTA implementation costs, the treatment of connection assets, the treatment of the England-Scotland interconnector assets, and the possible need for licensees to provide additional reports to Ofgem to facilitate the enforcement of the revenue restrictions. It also discusses the possible need for transitional arrangements to deal with any under or over recovery of revenues by existing transmission licensees in the period immediately prior to BETTA go-live.

The document refers to the areas of ongoing work being carried out by Ofgem across the range of price controls and notes that, as regards electricity transmission, these issues will be considered as part of the price control reviews to be carried out after BETTA golive.

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# 1. Introduction

- 1.1. There are three existing transmission licence holders in GB:
  - ♦ Scottish Hydro-Electric Transmission Ltd (SHETL)
  - ♦ SP Transmission Ltd (SP Transmission), and
  - ♦ The National Grid Company plc (NGC).
- 1.2. Each of the three current transmission licensees is an integrated transmission company operating within a defined geographical area, permitted to undertake all the functions that are otherwise prohibited by Section 4(1)(b) the Electricity Act (1989) as amended by the Utilities Act 2000, subject to the conditions of their licence. The existing price controls and incentives regimes applying to these companies reflect this structure.
- 1.3. The implementation of British Electricity Trading and Transmission Arrangements (BETTA) requires primary legislation to modify the prohibition on the transmission of electricity to reflect the introduction of transmission owner and system operator roles, and to provide for the modification of electricity licences, including the introduction of a new set of standard licence conditions for electricity transmission, and the modification of a number of industry codes and documents.
- 1.4. On 15 January 2003, the Government announced its intention to introduce legislation in order to have BETTA in place no later than April 2005<sup>1</sup>. On 17 June 2003, the DTI announced<sup>2</sup> that it would not be possible to introduce the legislation into Parliament in the 2002/3 session and, in view of this, Ofgem announced<sup>3</sup> on 18 June 2003 that the target date for go-live would be April 2005.

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<sup>&</sup>lt;sup>1</sup> See Hansard, 15 January 2003, Official Report Column 647W

<sup>&</sup>lt;sup>2</sup> See Hansard, 17 June 2003, Col. 135, Question reference 119861

<sup>&</sup>lt;sup>3</sup> Ofgem Press Release R50

- 1.5. The rationale for the BETTA reforms is set out in a consultation paper of December 2001<sup>4</sup> (the "December 2001 consultation") and a report of May 2002<sup>5</sup> (the "May 2002 report"). Further, on 30 January 2003, the DTI published the draft Electricity (Trading and Transmission) Bill<sup>6</sup> (the "E(TT) Bill") and a Regulatory Impact Assessment<sup>7</sup> ("RIA"), which explains both the purpose and impact of the proposed primary legislation to enable the BETTA reforms and the expected costs and benefits of BETTA.
- 1.6. The draft E(TT) Bill has been the subject of pre-legislative scrutiny by the Trade and Industry Committee (TIC). This process has now been completed and the TIC published its report on the E(TT) Bill on 8 April 2003<sup>8</sup>. The TIC has published the DTI response and the TIC comments on that response<sup>9</sup>.

### BETTA framework

- 1.7. In the December 2001, consultation Ofgem noted that one of the principal components of BETTA was the introduction of common independent balancing arrangements across GB, through the creation of a single GB system operator that is separate<sup>10</sup> from generation and/or supply interests.
- 1.8. The December 2001 consultation went on to describe a number of options for the precise allocation of the functions between the activities of system operation and transmission ownership, and in the May 2002 report, Ofgem/DTI set down its conclusions in relation to the issues raised in the December 2001 consultation.

<sup>&</sup>lt;sup>4</sup> The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper, Ofgem, December 2001 Ofgem 74/01.

<sup>&</sup>lt;sup>5</sup> The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps. Ofgem/DTI, May 2002 Ofgem 38/02.

<sup>&</sup>lt;sup>6</sup> See Pre-legislative scrutiny of the draft Electricity (Trading and Transmission) Bill. Fifth Report of session 2002-3. Volumes 1 and 2, see www.parliament.uk/parliamentary\_committees/trade\_and\_industry.cfm <sup>7</sup> See http://www.dti.gov.uk/energy/domestic\_markets/electricity\_trading/index.shtml

<sup>&</sup>lt;sup>8</sup> The British Electricity Trading and Transmission Arrangements: Pre-legislative scrutiny of the draft Electricity (Trading and Transmission) Bill. Fifth Report of session 2002-3. Volumes 1 and 2, see www.parliament.uk/parliamentary\_committees/trade\_and\_industry.cfm

<sup>&</sup>lt;sup>9</sup> House of Commons report HC 937, 8 July 2003

<sup>&</sup>lt;sup>10</sup> Other than for the purpose of balancing the system under BETTA, the activity of generation or supply in GB, or of trading electricity in GB, or the carrying out of any other relevant activity which may conflict with the carrying out of the activities of the GB system operator in an independent and non-discriminatory manner, should not be undertaken by the party itself nor by any of its affiliates.

- 1.9. In June 2002, DTI/Ofgem published a document<sup>11</sup> proposing a process to be followed in order to identify a party (or parties) that an assessment panel<sup>12</sup> would recommend to the Secretary of State as a suitable candidate for the role of GB system operator. In August 2002<sup>13</sup> DTI/Ofgem set out its key conclusions on this process and invited applications for this role.
- 1.10. On 27 September 2002 the Government announced that it had received one application for the role of GB system operator, from the National Grid Company plc ("NGC")<sup>14</sup>. On 17 December 2002, the then Minister for Energy and Construction, Mr Brian Wilson, stated in a response to a Parliamentary Question that, "Licensing of the GB system operator cannot take place until the necessary legislation has received Royal Assent. I am minded to accept the recommendation of the GB system operator Selection Panel that the National Grid Company plc's application for the role of GB system operator should be accepted."<sup>15</sup>
- 1.11. This document therefore assumes that NGC will be appointed as GB system operator, performing the system operator role in relation to SP Transmission and SHETL assets as well as in relation to its own assets, and that SP Transmission and SHETL will be transmission owners under BETTA. NGC will carry out the GB system operator role as a combined system operator/transmission owner.
- 1.12. Ofgem/DTI recognised that based on the initial conclusions it would be necessary to develop the detailed allocation of functions between the GB system operator and the transmission owners, and that in doing so it would be necessary to consider further the practicalities and costs associated with such allocations. In December 2002, Ofgem/DTI published a consultation on the regulatory framework for transmission licensees under BETTA<sup>16</sup> (the "December 2002 consultation"). This document was published in four volumes. The first volume included a summary and rationale for the principal proposals set down

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<sup>&</sup>lt;sup>11</sup> "The Process for Identifying the GB system operator", a DTI/Ofgem consultation paper, June 2002.

 $<sup>^{12}</sup>$  The 3 member selection Panel comprised a representative from each of the DTI, and Ofgem, and an independent member.

<sup>&</sup>lt;sup>13</sup> "The Process for Identifying the GB system operator, Key conclusions and invitation for applications", a DTI/Ofgem conclusions document, August 2002.

<sup>&</sup>lt;sup>14</sup> DTI Press Notice ref P/2002/593

<sup>&</sup>lt;sup>15</sup> See Hansard 17 December 2002, Official Report Column 45WS.

<sup>&</sup>lt;sup>16</sup> 'Regulatory framework for transmission licensees under BETTA, Volumes 1-4', Ofgem/DTI, December

and an outline of the process to be followed to further develop the regulatory framework for transmission licensees under BETTA. Of the other three volumes:

- Volume 2 included a description of the overall regulatory framework that it was proposed would apply to transmission licensees under BETTA, with particular focus on proposals for changes to the structure and content of transmission licences
- Volume 3 set down proposals for the development of new contractual interfaces between the transmission licensees under BETTA, including the establishment of a new industry code – the SO-TO code ("STC"), and
- Volume 4 set down proposals and discussion on the issues surrounding the more detailed allocation of transmission functions between the GB system operator and transmission owners across areas ranging from realtime operations through to longer term investment planning.
- 1.13. Ofgem/DTI have recently published further thinking about the scope and content of the proposed transmission licences (the Licences Consultation<sup>17</sup>) and the STC (the June STC paper<sup>18</sup>) under BETTA. The introduction of revised statutory and new licence obligations will necessitate the development of price controls and incentives that reflect these obligations.

# Developing price controls

1.14. The transmission licensees' statutory duties and licence requirements will be finalised as the BETTA project proceeds. Ofgem/DTI consider that sufficient information on these duties and requirements has now been published for the price control and incentives work to progress in the shape of this consultation document. This is the first in a series of consultation documents which will lead to Ofgem's final proposals for the price controls and incentives to apply to NGC, SP Transmission and SHETL under BETTA.

<sup>2002,88/02.</sup> 

Regulatory framework for transmission licensees under BETTA, Second consultation on electricity transmission licences under BETTA, An Ofgem/DTI consultation, June 2003, Ofgem 59/03
 The SO-TO Code under BETTA, Summary of responses and conclusions on Volumes 3 and 4 of the December 2002 consultation on the regulatory framework for transmission licensees under BETTA, and further consultation on content of the SO-TO Code, Ofgem/DTI, June 2003, Ofgem 41/03

- 1.15. Ofgem's objectives for a price control review are driven by three main factors:
  - Ofgem's statutory objectives and duties
  - transmission licensees' statutory and licence duties, and
  - other influences including the views of consumers, licensees and other interested parties and guidance received from the Secretary of State on social and environmental issues.
- 1.16. Ofgem's principal objective is to protect the interests of consumers, wherever appropriate by promoting effective competition<sup>19</sup>. Price controls and incentives serve two main purposes in the context of electricity transmission licensees as providers of monopoly services:
  - to protect consumers from the abuse of monopoly power, of which an important aspect is allowing them to share in the benefits that companies realise from efficiency savings, and
  - to provide companies with a level of revenues to allow them to meet their statutory duties and licence obligations including operating an economic, efficient and co-ordinated transmission system.
- 1.17. The May 2002 report set out the work needed to establish the price controls and incentives that should apply under BETTA.
- 1.18. This document sets out the proposed process and timetable for putting in place the price controls and incentives to apply from the planned BETTA go-live date of 1 April 2005. It also proposes that revised revenue restrictions for transmission licensees in Scotland are developed to protect the interests of consumers in the event that BETTA go-live should be after 1 April 2005.

# Renewable Energy Transmission Study (RETS)

1.19. The potential growth in renewable generation could have a significant impact on the need for transmission capacity, particularly in Scotland. DTI formed the

<sup>&</sup>lt;sup>19</sup> As set out in Section 3A of the Electricity Act 1989, as amended the Utilities Act 2000

Transmission Issues Working Group to look at this issue and there have been subsequent discussions between Ofgem and the three transmission companies individually on the possible impacts of renewables on the allowed revenues of transmission licensees and whether any adjustments to existing arrangements would be appropriate, and Ofgem has published a document on the issues surrounding the regulatory treatment of RETS related expenditure<sup>20</sup>. The outcome of this consultation on allowed revenues will need to be reflected in the BETTA final proposals.

## Structure of document

- 1.20. Chapters 2 of this document sets out the background to this document in terms of the development of the new transmission licences, the SO/TO allocation of functions and the contractual framework between transmission licensees as set out in the STC.
- 1.21. Chapter 3 sets out the proposed structure of the price controls under BETTA. It describes the framework within which price controls will be developed, the existing price control arrangements and the impact of the detailed allocation of transmission functions under BETTA on price controls. The chapter then sets out Ofgem's proposals on the form of controls. It also discusses the possible need for transitional arrangements to deal with any under or over recovery of revenues from users in the period immediately prior to BETTA go-live.
- 1.22. Chapter 4 sets out Ofgem's proposed process and timetable for taking forward and finalising the revenue restrictions conditions in the transmission licences under BETTA.
- 1.23. Chapter 5 describes the proposed programme of work for setting the price controls and incentives for the three electricity transmission licensees under BETTA.

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<sup>&</sup>lt;sup>20</sup> Transmission investment and renewable generation, Consultation document, Ofgem, October 2003, Ofgem 129/03

### Views invited

- 1.24. Parties are free to raise comments on any of the matters covered in this paper and in particular on the items requested. All responses will normally be published on the Ofgem website and held electronically in Ofgem's Research and Information Centre unless there are good reasons why they must remain confidential. Respondents should try to put any confidential material in appendices to their responses. Ofgem prefers to receive responses in an electronic form so they can easily be placed on the Ofgem website.
- 1.25. Responses, marked 'Response to Price controls and incentives consultation' should be sent by 1<sup>st</sup> December 2003 to:

David Halldearn

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Office of Gas and Electricity Markets (Ofgem)

9 Millbank

London

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Fax: 020 7901 7479

- 1.26. Please e-mail responses to <u>BETTA.consultationresponse@ofgem.gov.uk</u> marked 'Response to Price controls and incentives consultation'.
- 1.27. If you wish to discuss any aspect of this document, please contact Graham Jones, e-mail <u>graham.jones@ofgem.gov.uk</u>, telephone 020 7901 7468 or Gordon Armstrong at DTI, e-mail <u>gordon.armstrong@dti.gsi.gov.uk</u>, telephone 020 7215 6149.

# 2. Background

2.1. Under BETTA, transmission licensees will be permitted to undertake all the functions that are otherwise prohibited by the E(TT) Bill<sup>21</sup>, subject to the conditions of their licences. This chapter describes the development of the licences and the STC pursuant to the E(TT) Bill, and the allocation of functions to the GB system operator and transmission owners. The price controls and incentives to apply to transmission licensees under BETTA will be developed to reflect this new structure.

### Transmission licences under BETTA

- 2.2. Volume 3 of the December 2002 consultation set out Ofgem/DTI's view on the proposed scope and nature of the legal framework for the interface arrangements between transmission licensees. In particular, it proposed that the most appropriate way of achieving efficient interface arrangements was through the establishment of a STC.
- 2.3. The Licences Consultation considered the proposed structure of the transmission licences under BETTA and the appropriate coverage of Standard Licence Conditions (SLCs). It proposed that SLCs might include five sections:
  - ♦ Section A interpretation, application and payments
  - Section B general
  - ♦ Section C system operator licence conditions
  - Section D transmission owner licence conditions
  - Section E transmission owners with generation and supply interests, and
  - Section F possible section relating to combined system operator/transmission owner.

 $<sup>^{21}</sup>$  The term E(TT) Bill refers to the proposed legislation that was the subject of pre-legislative scrutiny by the TIC as discussed in Chapter 1.

- 2.4. The Licences Consultation concluded that:
  - those licence conditions which are appropriate for all licensees who undertake a particular role within "participation in transmission" should be Standard Licence Conditions (SLCs) for electricity transmission licences
  - where licence conditions are required in relation to a particular licensee due to the particular characteristics of that licensee, these conditions should be included as special conditions, and
  - if NGC is appointed as GB system operator under BETTA it is appropriate for NGC to have a single transmission licence which will cover both system operation activities and transmission owner activities.
- 2.5. Revenue restriction conditions in the transmission licences of each licensee would be special conditions. These conditions would be supported by a number of SLCs which prescribe the financial framework for the transmission companies and the financial reporting arrangements. Ofgem/DTI have put forward proposals on these matters in the Licences Consultation, including:
  - that the existing financial ringfencing arrangements should be applied to all transmission licensees under BETTA, with appropriate amendments to ensure that arrangements under the STC will not operate to place a licensee in breach of these provisions
  - that no significant changes would need to be made to the existing credit rating provisions, which require that the licensee maintains, at all times, an investment grade issuer credit rating. It was proposed that this licence condition should apply to all transmission licensees under BETTA
  - that no significant changes would be required to the existing provisions
     related to indebtedness
  - that no changes will be required to the licence condition on the prohibition on cross subsidies. Ofgem/DTI do not consider that it would be appropriate to apply the prohibition on cross subsidies as between a combined system operator/transmission owners' system operation and

transmission ownership activities to address concerns regarding possible discrimination, although other possible remedies are being considered in relation to the potential for undue discrimination by the GB system operator between transmission owners

- that all transmission licensees should be subject to an obligation to prepare and submit regulatory accounts under BETTA, but that it is not necessary, if NGC is appointed as the GB system operator, to require NGC to submit two sets of regulatory accounts (one for its system operation activities and one for its transmission owner activities), and
- that, subject to consultation, the ability for the payment of licence fees to be made either by the GB system operator or licensees undertaking transmission owner activities should be retained but that, under BETTA, the GB system operator should be responsible for the payment of licence fees for transmission.
- 2.6. Recently, Ofgem/DTI published a conclusions document<sup>22</sup> proposing that there will be a single grid code for Great Britain (a GB Grid Code) to apply to all users of the GB transmission system, and that the GB system operator should have a licence obligation to have in force the GB Grid Code. Transmission owners will be obliged through their licences to be party to the STC which will include obligations on the transmission owners to undertake activities necessary for the GB system operator to deliver services to users under the GB Grid Code (and the GB CUSC).

## Current position on defining the SO/TO split

2.7. In the May 2002 report Ofgem/DTI came to their initial views on the high level allocation of functions between the GB system operator and transmission owners

<sup>&</sup>lt;sup>22</sup> The Grid Code under BETTA, Ofgem/DTI conclusions and consultation on the text of a GB Grid Code and consultation on change coordination between the STC and user-facing industry codes, September 2003, Ofgem 111/03.

under BETTA. These matters were further considered in volume 4 of the December 2002 consultation. Principal proposals were that:

- the responsibility for the purchase and call off of balancing services in all timescales, and responsibility for directing the real time configuration of the operational transmission system will lie with the GB system operator.
- the transmission owner(s) will continue to own their existing
   transmission assets, and new transmission assets within their areas
- the transmission owners will be responsible for identifying asset maintenance requirements, carrying out maintenance of those assets and optimising the associated costs involved, and
- to ensure that new connections are managed in an independent and nondiscriminatory manner it will be appropriate for the GB system operator to be the single contractual point of contact for users in respect of connection to and use of the GB transmission system.
- 2.8. The June 2003 Licences Consultation gave conclusions relating to new licence conditions. These proposals include:
  - licence conditions that limit the extent to which each of the transmission licensees can participate in transmission in any specified geographic area
  - a licence condition requiring the transmission owners to plan, develop and make available their transmission assets in accordance with relevant standards
  - a licence condition requiring the GB system operator to operate the transmission system in accordance with relevant standards
  - a requirement on transmission owners to make available their assets for use to the GB system operator
  - a requirement on the GB system operator not to exceed the specified technical limits of transmission assets when using them

- a licence condition requiring compliance with the STC and setting out the matters to be covered in an STC, and
- licence conditions on the GB system operator in relation to the GB BSC and the GB CUSC under BETTA.
- 2.9. The June STC paper included conclusions relating to the roles that will apply to transmission owners and the GB system operator under BETTA. The principal proposals made in relation to these matters are that:
  - the transmission owners will be primarily responsible for the planning and development of their transmission systems and the interactions between transmission licensees in developing these plans will be set out in the STC. In particular, the GB system operator will have a legitimate interest in the plans and will be involved in the planning process
  - the GB system operator will be responsible for co-ordinating the outage planning process. However, Ofgem/DTI recognise that the detail of the process to be followed, in particular the issues of which party makes the initial plan and availability of data, requires further consideration, and
  - insofar as alarm and fault management is concerned, it will be the responsibility of the GB system operator to respond appropriately, by taking the necessary operational actions to alarms and faults, and for the transmission owner to take required action to investigate the physical cause of the alarm or fault, and to take appropriate remedial steps.
- 2.10. The June STC paper also discusses proposals on:
  - payment issues, including proposals on billing and credit arrangements
     between the GB system operator and transmission owners
  - disputes under the STC
  - transmission switching arrangements to apply under BETTA
  - issues associated with the transsmission owners' provision of assets to the GB system operator under BETTA, including making transmission

- assets operationally available, transmission planning and transmission outage planning
- a discussion of further issues relating to investment planning and new connections
- interface arrangements being put in place between transmission owners and users to support access to assets on each others sites, and
- a discussion of issues associated with decision making by STC parties.

## Proposed contractual framework under BETTA

- 2.11. The proposed new contractual framework for transmission licensees under BETTA is discussed in the June STC paper.
- 2.12. The creation of a single GB transmission system and a single set of GB trading arrangements will result in changes to the manner in which users of the transmission system obtain connection and use of system services, and therefore the manner in which licensees recover their revenues.
- 2.13. All agreements for connection and use of the transmission system are expected to be between users and the GB system operator, to the extent that they are not contestable. To provide such a service to users, the GB system operator will provide some transmission services itself and will also procure services from SP Transmission and SHETL. Consequently, there will be two main types of regulated revenue flow. Firstly, from users to the GB system operator. Secondly, from the GB system operator to non-affiliated transmission owners. Broadly, these arrangements are:
  - the GB system operator will obtain its allowable revenues from users in accordance with its revenue restriction licence condition and the charging arrangements set out in the user facing codes
  - the STC will place an obligation on the system operator to pay the transmission owners their allowable revenues in accordance with the revenue restriction conditions in transmission owners' respective licences, and

- the transmission owners would receive their revenues in accordance with the charging and invoicing provisions of the STC.
- 2.14. The nature and magnitude of these revenue flows will be regulated through the price controls and incentives regime discussed in Chapter 3.

# 3. Structure of price controls under BETTA

- 3.1. This chapter sets out the proposed structure of the price controls on the transmission licensees under BETTA. The chapter describes:
  - the framework within which price controls will be developed
  - the existing revenue restriction arrangements
  - the forms of the controls on transmission licensees under BETTA
  - the approach to adjusting NGC's revenue restrictions for BETTA
  - ♦ STC-related income adjusting events, and
  - the treatment of the K term in the existing controls. This discusses the possible need for transitional arrangements to deal with any under or over recovery of revenues from users in the period immediately prior to BETTA go-live, and

## Price control framework

- 3.2. In setting price controls on the electricity transmission businesses, Ofgem has sought to protect the interests of consumers by:
  - assessing the efficiency of companies in a particular year (or years)
  - making a projection of the future level of costs that an efficient company is expected to incur over the period of the next price control for:
    - operating expenditure
    - o capital expenditure, and
    - o cost of capital, financing costs and taxation, and
  - identifying the incentives that companies require to operate and invest efficiently.

3.3. In setting the price controls and incentives under BETTA, Ofgem will need to take into account the arrangements currently in place and the final allocation of responsibilities between the GB system operator and non-affiliated transmission owners. Any changes from the split of functions currently proposed which arise as the detailed design of the SO/TO interface is finalised could have an impact on Ofgem's price control proposals, and any such impacts will be picked up in subsequent price control and incentive consultations.

## Existing revenue restrictions

3.4. This section provides a summary of the current revenue restrictions in place for NGC, SP Transmission and SHETL, respectively. The revenue restrictions are commensurate with the scope and nature of the activities that the licensees currently undertake.

### **NGC**

- 3.5. NGC's revenue restriction<sup>23</sup> as detailed in its licence has two parts as follows:
  - ♦ Part 1: the transmission network revenue restriction, which applies to the provision of transmission network services
  - Part 2: the balancing services activity revenue restriction, which in turn has two components
    - (i): the balancing services activity revenue restriction on external costs which applies to the external costs of the balancing services activity
    - (ii): the balancing services activity revenue restriction on internal costs.
- 3.6. The Part 1 revenue restrictions is often referred to as the "TO price control" and the Parts 2(i) and 2(ii) together are often referred to as the "SO incentive scheme".

<sup>&</sup>lt;sup>23</sup> See special condition AA5A of NGC's transmission licence.

3.7. Under NGC's charging methodology statement<sup>24</sup>, NGC recovers from users the revenues allowed under its TO price control from TNUoS charges<sup>25</sup> and the allowed revenues under its SO incentive scheme from BSUoS charges to users.

TO price control

- 3.8. NGC's TO price control is an RPI-X form of revenue restriction. It was set for the period 2001/2 to 2005/6, following a review carried out in 2000<sup>26</sup>. The allowed revenues were related to a set of outputs, expressed in terms of the levels of transmission capacity to be provided on NGC's transmission system.
- 3.9. The revenue restriction includes a revenue adjustment mechanism which comes into play if the quantity of new generation connections<sup>27</sup> is higher or lower than the levels specified by Ofgem at the time of the price control review and set out in NGC's licence. At the time the price control was set, this mechanism was introduced to recognise that the evolving generation market was uncertain and exposed NGC to uncertainties with regard to its system reinforcement requirements.

SO incentive scheme

- 3.10. The development of the SO incentive scheme, which is unique to NGC, reflects the market arrangements within which it operates. The SO incentives are intended to incentivise NGC to operate the England and Wales transmission system in an economic, efficient and co-ordinated manner. There are no market arrangements for balancing services in Scotland (although Scottish parties can participate in the England and Wales arrangements via the Scotland-England interconnector).
- 3.11. The SO incentive scheme covers both NGC's internal costs and its external costs associated with operating and balancing the transmission system. The internal

<sup>&</sup>lt;sup>24</sup> It should be noted that there is not a one-to-one mapping between the Transmission Network Activity currently remunerated under NGC's TO price control and the activities that will be undertaken by Scottish transmission owners under BETTA.

<sup>&</sup>lt;sup>25</sup> The amounts recovered from TNUoS charges are the allowed revenues net of income received from pre-Vesting connection charges income.

<sup>&</sup>lt;sup>26</sup> The transmission price control review of the National Grid Company from 2001, Transmission asset owner, Final proposals, Ofgem, September 2000

<sup>&</sup>lt;sup>27</sup> The scheme also includes changes in interconnector capacities.

costs have incentivised targets which were set in 2000 for the period 2001/2 to 2005/6 to coincide with the end of the current TO price control. The internal costs also include a non-incentivised component which mainly relates to the financing of SO related assets.

- 3.12. As regards SO external costs, there have so far been three incentive schemes under NETA:
  - the initial scheme, which ran from 27 March 2001 (NETA go live) to 31
     March 2002<sup>28</sup>
  - the second scheme, which ran from 1 April 2002 until 31 March 2003<sup>29</sup>,
     and
  - the current scheme, which started on 1 April 2003 and is intended to run until 31 March 2004<sup>30</sup>.
- 3.13. The SO incentive scheme as it applies to incentivised internal costs and to external costs takes the form of a sliding scale (profit sharing) scheme.

#### **SP Transmission and SHETL**

3.14. The form of the price controls in place upon SP Transmission and SHETL are broadly similar to each other. The price controls are RPI-X forms of revenue restriction which were set for the period 2000/1 to 2004/5, following reviews carried out in 1999<sup>31</sup>. For each company, the controls apply to all transmission activities, including the pre-vesting costs associated with the Scotland-England interconnector, and activities that might be characterised as system operation. These controls are enforced through Special Conditions J to N of SP Transmission and SHETL's licences<sup>32</sup>.

 $<sup>^{\</sup>rm 28}$  NGC system operator price control and incentive schemes under NETA, Final Proposals, Ofgem, December 2000

 $<sup>^{29}</sup>$  NGC system operator incentive scheme from April 2002, Final Proposals, Ofgem, February 2002  $^{30}$  NGC system operator incentive scheme from 1 April 2003 – 31 March 2004, Final Proposals and

Statutory Licence Consultation, March 2003, Ofgem 16/03

<sup>&</sup>lt;sup>31</sup> Reviews of Public Electricity Suppliers 1998 to 2000, Scottish Transmission Price Control Review, Final Proposals, Ofgem, December 1999

<sup>&</sup>lt;sup>32</sup> In addition to revenues allowed under their revenue restrictions, all licensees are allowed to earn revenues for the provision of certain transmission-related excluded services as set out in their licences.

3.15. The price controls on SHETL and SP Transmission do not include an adjustment mechanism linked to the quantity of new connections.

### Forms of control under BETTA

- 3.16. As noted in chapter 2, BETTA will change the nature of the revenue flows between users of the transmission system and transmission licensees. NGC as GB system operator will collect all revenues from users. These revenues will be used to fund the allowed revenues of SP Transmission and SHETL and the allowed revenues of the combined system operator/transmission owner.
- 3.17. The revenues that each licensee will be allowed to receive will be determined by Ofgem to enable the financing of the activities for which each is responsible under their respective licences.
- 3.18. For price control purposes, a licensee's activities are normally bundled together since this provides a strong incentive for overall efficiency. For example, all the transmission activities in SP Transmission's area are presently bundled within a single RPI-X price control<sup>33</sup>. Within the bundling of activities for price control purposes, there may be further groupings of activities in order to give the licensee specific incentives in certain areas.
- 3.19. Under BETTA, the transmission licences will prescribe a set of activities which each of the respective licensees is prohibited from carrying out. Broadly speaking, NGC will be prohibited from making available for use high voltage transmission assets in Scotland and the transmission owners will be prohibited from coordinating and directing the flow of electricity on the GB transmission system. There will also be some activities specified in licence conditions which each licensee is required to carry out.
- 3.20. In order to carry out some transmission activities, licensees will need to interact with other licensees, and the details of how these interactions should be carried out will be specified in the STC. In this way, the STC defines the boundary between the GB system operator activities and transmission owner activities.
  Broadly, it will set down provisions associated with three types of matters:

- detailed process and procedures in support of particular transmission owner licence conditions
- detailed process and procedures in support of particular GB system operator licence conditions, and
- demarcation of transmission activities (together with their associated process and procedures) between the GB system operator and transmission owners where the obligations on the respective parties could overlap.
- 3.21. As regards the third type, it should be noted the demarcation of activities between the GB system operator and transmission owners under BETTA may vary over time, depending on the most practical and economic solution prevailing for the transmission sector as a whole (amongst other criteria). Changes in the allocation of activities would generally be implemented by changes to the STC, and if such changes have significant financial consequences for licensees, these may be addressed as a potential STC-related income adjusting event (see below), rather than through the price control review mechanisms. Alternatively, it might be possible in certain cases for changes to be effected through a contractual arrangement between the parties.

#### NGC's form of control

- 3.22. Under BETTA, the GB system operator will have sole responsibility for the provision of transmission services to GB transmission users through obligations under the GB CUSC. The GB system operator will need to ensure that, through the STC, the transmission owners provide the necessary transmission services so that it can meet these obligations.
- 3.23. The allowable revenues for NGC as the combined system operator/transmission owner will need to incorporate sufficient funds for the following:
  - the SO incentive scheme, comprising
    - o the internal costs of system operator activities across GB

<sup>&</sup>lt;sup>33</sup> This also applies presently to SHETL's area.

- o the external costs across the whole of GB of balancing services
- the costs of the affiliated transmission owner activities, and
- the costs of services provided by non-affiliated transmission owners.
- 3.24. Ofgem's current view is that, as regards NGC, the introduction of BETTA does not change the form of the incentives (and the bundling of activities within these incentives) required for efficient service delivery to users under a NETA-based regime. Ofgem does not therefore anticipate altering significantly the form of NGC's controls as a result of BETTA, although it is possible that slight adjustments might need to be made to NGC's incentives as a consequence of interactions between NGC as GB system operator and transmission licensees in Scotland.
- 3.25. Ofgem does not believe that any issues arise with the introduction of BETTA that would necessitate changing the form of NGC's TO price control for its England and Wales activities.
- 3.26. It should be noted that in England and Wales an allocation of transmission activities to different parts of NGC's transmission business is established in the price control arrangements whereby NGC's Transmission Network Revenue Restriction<sup>34</sup> relates to certain transmission activities, and NGC's Balancing services activity revenue restrictions relate to a different set of transmission activities which in aggregate comprise the transmission activities of NGC in England and Wales.

### SP Transmission's and SHETL's forms of control

- 3.27. Ofgem considers that transmission owners are best incentivised by an RPI-X form of control, but also recognises that additional features are necessary to target the efficient delivery of certain services to the GB system operator. Ofgem therefore considers it appropriate for the transmission owner price controls to have two parts:
  - ♦ Part 1: an RPI-X control.

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<sup>&</sup>lt;sup>34</sup> NGC's transmission licence: Special condition AA5A

- Part 2: set of financial arrangements called "TO incentives" may need to be put in place to make adjustments that will allow changes to the allowable revenues of the transmission owners that correspond with changes to the amounts of transmission services provided to the GB system operator. The work programme to develop these TO incentives is outlined in chapter 5.
- 3.28. Ofgem will need to give consideration to the proportions of total revenues it would be appropriate for licensees to recover under the proposed Part 1 and Part 2 revenue restrictions.

Views invited

- 3.29. Views are invited on the following matters:
  - NGC's price controls and incentives under BETTA:
    - the proposal that the existing form of NGC's price controls and incentives is appropriate for NGC under BETTA
  - transmission owner price controls under BETTA:
    - the proposal that the transmission owner controls should have a two part revenue restriction with Part 1 as an RPI-X control, and Part 2 covering the incentives between the GB system operator and the transmission owner (TO incentives) that are being developed.

# Approach to adjusting NGC's revenue restrictions for BFTTA

- 3.30. As discussed above, NGC's current revenue restriction has the following components:
  - ◆ Part 1: the transmission network revenue restriction, which applies to the provision of transmission network services
  - Part 2: the balancing services activity revenue restriction, which in turn has two components

- (i): the balancing services activity revenue restriction on external costs which applies to the external costs of the balancing services activity
- (ii): the balancing services activity revenue restriction on internal costs, including both incentivised<sup>35</sup> and non-incentivised components.
- 3.31. It should be noted that there may be changes in the form of NGC's existing SO incentive scheme from April 2004, subject to developments in the transmission arrangements in England and Wales. Ofgem has previously outlined that it considers it appropriate to develop the SO incentive scheme so as to improve the incentives on NGC to develop the transmission system in response to market participants' requirements for transmission capacity<sup>36</sup>. Since Ofgem is considering the introduction of revised SO incentive arrangements before BETTA is introduced, the proposals will be developed on an England and Wales basis, although Ofgem will be mindful of the BETTA proposals in developing these incentives. Ofgem will consult on developments to the incentive scheme for GB application in summer 2004.
- 3.32. As GB system operator, NGC will receive all revenues from users. Ofgem proposes that changes in the funds required by NGC in moving from its current role to that of combined system operator/ transmission owner will be provided through incrementing the level of allowed revenues under each part of NGC's existing revenue restrictions.
- 3.33. NGC's Part 1 revenue restriction applies to a particular bundle of transmission activities which are remunerated under NGC's transmission network revenue restriction. As discussed above, the transmission owner price controls under BETTA will relate to a different bundle of transmission activities. Nevertheless, there will be a large measure of commonality between the different transmission owner activity bundles across the three licensees. Further work will be carried

<sup>&</sup>lt;sup>35</sup> The incentivised internal cost component includes an allowance for capital expenditure to reduce constraints on the transmission system

<sup>&</sup>lt;sup>36</sup> NGC system operator incentive scheme from 1 April 2003 – 31 March 2004, Final Proposals and Statutory Licence Consultation, March 2003, Ofgem 16/03

out to establish the detailed impacts of these differences on components of allowed revenues as the BETTA work progresses.

- 3.34. One approach to adjusting NGC's revenue restrictions for BETTA could be:
  - to increment NGC's Part 1 revenue restriction to provide sufficient funds for it to remunerate transmission owners under the STC payment provisions, and
  - ♦ to increment NGC's Part 2 revenue restriction components to take into account the costs of balancing the entire GB system rather than just the England and Wales system.
- 3.35. The costs to the GB system operator of services provided by non-affiliated transmission owners will equate to the allowed revenues set out in the transmission owners licences. Incrementing NGC's revenue restrictions could be achieved by changing the specific amount of allowed revenues or through providing a linkage in NGC's licence to the relevant parts of the transmission owners licences.
- 3.36. In considering the appropriate method of incrementation, it should be noted that the transmission owner Part 2 revenue restriction conditions might allow for revenue adjustments depending on certain actions taken under the STC (eg outage rescheduling). Since some of the services provided by the transmission owners may result in savings in other costs incurred by the GB system operator, notably balancing services, it may not be appropriate for marginal cost changes experienced by the GB system operator in procuring services from transmission owners to be reflected in the revenues recovered from users. This issue will be discussed further as the design of the transmission owner incentives is taken forward in future consultations.

#### Remuneration of consistent bundles of activities

3.37. This section considers the refinement to the approach described above, so that each component of NGC's revenue restrictions remunerates consistent bundles of activities across the GB transmission system. With this refinement, NGC's Part 1 revenue restriction would only be incremented to provide for the remuneration of those transmission activities carried out by SP Transmission and

SHETL which matched<sup>37</sup> the transmission activities for which NGC is remunerated in England and Wales under its transmission network revenue restriction. Any remaining activities carried out by SP Transmission and SHETL would be remunerated through the appropriate component of NGC's Part 2 revenue restriction.

- 3.38. To achieve such consistency would require the transmission owner price controls to be based on activity bundles that matched the activity bundles remunerated under the different components of NGC's existing form of revenue restriction. The revenues associated with each transmission owner activity bundle would then provide the basis for incremental changes to each component of NGC's revenue restriction as appropriate. This approach would need to apply to all transmission activities including those identified for specific incentivisation as part of the TO incentives work.
- 3.39. As well as ensuring that NGC's regulatory incentives apply to consistent sets of transmission activities whether they are carried out by NGC itself or by transmission owners, this approach could facilitate comparative analysis of the performance of licensees in delivering similar transmission owner responsibilities.
- 3.40. Furthermore, this approach could have benefits in the implementation of a GB charging methodology. Ofgem/DTI has consulted on the proposals for implementing transmission charges under BETTA<sup>38</sup>. As part of this approach, NGC as GB system operator will be expected to carry out a process to establish a GB charging methodology, and there needs to be a clear process for establishing the target revenues NGC is allowed to recover under each component of its methodology, particularly where it impacts on users differently because charges are levied on a different basis. Applying revenue restriction components to NGC that remunerate consistent bundles of activities across the GB transmission system could facilitate this process.

<sup>&</sup>lt;sup>37</sup> The discussion here relates to generic transmission activity types which are necessary for the development and operation of all transmission systems.

<sup>38</sup> Transmission charging and the GB wholesale electricity market, August 2003, Ofgem 86/03 & 86a/03

- 3.41. Views are invited on the following matters:
  - NGC's price controls and incentives under BETTA:
    - the proposal that the additional funds required by NGC to perform its role of combined system operator/ transmission owner will be provided through incrementing the level of allowed revenues under each part of NGC's existing revenue restrictions, and
    - the proposal that NGC's revenue restriction components should each remunerate a consistent bundle of activities within the GB transmission system.

## STC-related income adjusting events

- 3.42. NGC's current licence allows for adjustments to parameters within the SO incentive scheme framework in the case of certain income adjusting events<sup>39</sup>, for which NGC is not remunerated within its specified allowed revenues.
- 3.43. The income adjusting event provisions are intended to provide protection for both NGC and customers in the event that an incident results in costs or savings which were not envisaged at the time that the SO incentive parameters were defined. The SO incentive scheme target includes no allowance for costs or savings linked to such incidents and the income adjusting event provisions enable adjustments to be made to take account of costs or savings linked to such events.
- 3.44. Ofgem/DTI have recently issued conclusion documents on the GB BSC<sup>40</sup> and GB CUSC<sup>41</sup>. The June STC paper concluded that a similar approach to transmission price control revenue adjustments as that employed in relation to the Balancing and Settlement Code (BSC) and Connection and Use of System Code (CUSC)

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<sup>&</sup>lt;sup>39</sup> Special condition AA5A.Paragraphs 10 to 12

<sup>&</sup>lt;sup>40</sup> The Balancing and Settlement Code under BETTA, Ofgem/DTI Conclusions and Consultation on the legal text of a GB BSC, June 2003, Ofgem 40/03

<sup>&</sup>lt;sup>41</sup> The Connection and Use of System Code under BETTA, Ofgem/DTI conclusions and consultation on the legal text of a CUSC to apply throughout GB. Ofgem/DTI June 2003, Ofgem 46/03

should be used to fund STC amendments (ie, to the extent that the costs are material and have not already been allowed for in an allowable revenue, a within-price-control allowable revenue adjustment should be made for funding the amendment). As an example, STC amendments could change the detailed allocation of activities between the transmission owners and the GB system operator, and this could have revenue implications for one or more licensees.

3.45. Ofgem therefore consider that the revenue restriction licence conditions in the GB system operator and transmission owner licences should incorporate conditions relating to income adjusting events. The precise form of these conditions will be considered in a later consultation document.

Views invited

3.46. Views are invited on Ofgem's proposal that the GB system operator and transmission owner price controls should include STC-related income adjusting events.

### Treatment of K

- 3.47. All three transmission companies have arrangements in their licences under which they estimate in advance their charges for a particular formula year to match their allowed revenues. The licences provide for adjustments (the "K" factor) resulting from the difference between the actual revenues (the aggregate of user charges) and the allowed revenues to be calculated at the end of the year. The adjustments are then included in the following year's revenue calculation so that, taking one year with another, both the licensee and users are held whole against over or under recoveries of revenues<sup>42</sup>.
- 3.48. Since the parties from whom the transmission licensees will recover their revenues will change on the introduction of BETTA, it is important to address how, as a transitional matter, the K factor revenue adjustments outstanding at BETTA go-live will be dealt with.

<sup>&</sup>lt;sup>42</sup> See special condition AA5A of NGC's transmission licence, and special conditions J of SP Transmission and SHETL's licences.

- 3.49. Special arrangements may be needed to ensure that any amounts of revenue under or over recovered in relation to the year 2004/5 are minimised. Alternatively, consideration may need to be given to introducing a process whereby any outstanding amounts as at BETTA go-live are levied by the GB system operator and returned to the company to which they are due or to the users from whom they were levied.
- 3.50. The detailed arrangements may depend on the extent to which different groups of customers are affected by any such arrangements and this could depend on the magnitude of the K factors involved. These issues will be addressed in later price control consultations.

# **Duration of price controls**

- 3.51. In the May 2002 report, Ofgem/DTI indicated that there may be regulatory advantages in carrying out all of the transmission owner price controls to the same timetable.
- 3.52. The primary consideration, in looking at whether greater harmonisation of review dates is appropriate, is whether it will improve the protection afforded to consumers. There could, for example, be benefits from:
  - facilitating comparative analysis of the performance of licensees carrying out similar activities, which can be an important part of regulatory oversight, and
  - aligning the assumptions, such as financial market projections, used in setting in the price controls of companies engaged in similar activities, and aligning the incentives they face.
- 3.53. Ofgem's June document<sup>43</sup> therefore sought views on the harmonisation of price control review dates, and in particular on:

<sup>&</sup>lt;sup>43</sup> Developing network monopoly price controls, Initial consultation, Ofgem, June 2003, Ofgem 54/03

- Ofgem's proposal to roll forward the Scottish Transmission price controls to align the timing of the full review with the transmission owner price control review in England and Wales, and
- whether it would be appropriate to increase the level of harmonisation in review dates between electricity transmission and gas transportation, and if so, how this should be achieved.
- 3.54. A total of six respondents to the June paper commented on this issue. Ofgem will be publishing its conclusions on any harmonisation of transmission price control revenue dates shortly.

### Views invited

- 3.55. Views are invited on any of the matters raised in this chapter, however, in particular views are invited on the following:
  - ♦ NGC's price controls and incentives under BETTA:
    - the proposal that the existing form of NGC's price controls and incentives is appropriate for NGC under BETTA
    - the proposal that the additional funds required by NGC to perform its role of combined system operator/ transmission owner will be provided through incrementing the level of allowed revenues under each part of NGC's existing revenue restrictions, and
    - the proposal that NGC's revenue restriction components should each remunerate a consistent bundle of activities within the GB transmission system
  - transmission owner price controls under BETTA:
    - o the proposal that the transmission owner controls should have a two part revenue restriction with Part 1 as an RPI-X control, and Part 2 covering the incentives between the GB system operator and the transmission owner (TO incentives) that are being developed.

•	Ofgem's proposal that the GB system operator and transmission owner price controls should include STC-related income adjusting events.					

# 4. Process and timetable

- 4.1. This chapter sets out the proposed process and timetable for putting in place the price controls and incentives to apply from the planned BETTA go-live date of 1 April 2005. Proposals are also made for developing revised revenue restrictions for transmission licensees in Scotland to apply for an interim period in the event that BETTA go-live should be after 1 April 2005.
- 4.2. The work programme to deliver the price controls and incentives under BETTA is described in Chapter 5.

# Current transmission price control review dates

- 4.3. The current Scottish transmission price controls are intended to last until 31 March 2005 and are due for renewal from 1 April 2005. Ofgem has consulted on extending these by 1 or 2 years<sup>44</sup> to 2006 or 2007, so that the price controls would expire on 31 March 2006 or 31 March 2007 respectively.
- 4.4. As regards England and Wales, NGC's TO price control is due for renewal from 1 April 2006. NGC's external cost SO incentive scheme is due for renewal from 1 April 2004 while its internal cost SO incentive scheme is due from renewal from 1 April 2006. Ofgem has consulted on extending the NGC TO control by 1 year to 31 March 2007.

## Price controls and incentives under BETTA

4.5. During the remainder of 2003 and through 2004, Ofgem intends to develop proposals for the price controls and revenue incentives to apply to the GB system operator and the transmission owners under BETTA and Ofgem will publish its final proposals in October 2004 for SP Transmission and SHETL and in early 2005 for NGC.

<sup>&</sup>lt;sup>44</sup> Developing network monopoly price controls, Initial consultation, Ofgem, June 2003, Ofgem 54/03

4.6. If the licensees accept Ofgem's final proposals, the timetable will allow the associated licence conditions to be implemented for a BETTA go-live date of 1 April 2005.

### **Development of licences and STC**

- 4.7. The price controls on each transmission licensee and the financial interface arrangements between transmission licensees under BETTA will need to be developed in parallel with the development of the transmission licences and the STC, and it will be important to maintain consistency between these components of BETTA as the project progresses.
- 4.8. In progressing the development of the STC, Ofgem/DTI have continued to receive technical advice and information from the transmission licensees through their participation at regular meetings of the SO-TO Expert Group ("STEG" <sup>45</sup>), and associated Development Groups<sup>46</sup> (DGs).
- 4.9. Ofgem/DTI have been refining the concepts of what Ofgem/DTI consider to be the main areas of interaction between the transmission licensees under BETTA. The main areas of interaction are system operations, outage planning, making assets available and investment planning. Discussions within STEG have focussed on establishing what it means to perform each of these tasks. Taking into account this advice, Ofgem/DTI are developing the rights and obligations to apply to transmission owners and the GB system operator in their licences and in the STC. These issues are discussed further in the Licences Consultation and the June STC paper.
- 4.10. It is anticipated that a third consultation paper on the development of transmission licences under BETTA will be published towards the end of 2003, and that will contain second draft text of the proposed transmission licence conditions. It is intended that a conclusions paper and the legal text for the transmission licence conditions that it is proposed will be designated by the Secretary of State will be published in spring 2004. Licence conditions will then

<sup>&</sup>lt;sup>45</sup> Terms of reference and minutes of STEG meetings are available on the Ofgem website at www.ofgem.gov.uk.

<sup>&</sup>lt;sup>46</sup> Development Groups (DGs) have been established to progress technical matters. There are at present five such Groups: Control Room and Outage Planning; Commercial and Charging; Investment Planning; Data

be designated by the Secretary of State after the proposal legislation has been given Royal Assent.

4.11. As regards the STC, it is anticipated that a further full consultation including expanded legal text for the STC will be published in spring 2004, with the legal text of the STC available for designation by the Secretary of State after the proposed legislation has been given Royal Assent.

### Development of price controls and incentives to apply from BETTA go-live

- 4.12. The proposed process and timetable for further development of price controls and incentives to apply from BETTA go-live to the combined system operator/transmission owner and the transmission owners are set out below.
- 4.13. The interactions between the GB system operator and transmission owners which arise under BETTA are new and therefore financial arrangements need to be developed to support these interactions. The development of the form of the transmission owner revenue restrictions to reflect these arrangements will form an important part of the work programme and is the subject of a specific consultation in January 2004.
- 4.14. The proposed timetable for developing the transmission owner revenue restrictions is as follows:

Transmission owner price controls: Initial thoughts on form of transmission owner revenue incentives	January 2004
Transmission owner price controls: Initial proposals	April 2004
Transmission owner price controls: Draft proposals	July 2004
Transmission owner price controls: Final proposals	October 2004

- 4.15. The transmission owner price control papers will develop the price controls appropriate to SP Transmission and SHETL.
- 4.16. The transmission owner consultations described above will also address any adjustments to the level of NGC's TO price control for the specific items described in chapter 5 to the extent that these apply to England and Wales. These consultations will also address the adjustments to the NGC's Transmission Network Revenue Restriction necessary to allow for the recovery of funds from users to support the aggregate of GB activities funded under that revenue restriction as discussed in chapter 3. Final proposals in relation to these matters will be published in October 2004.
- 4.17. NGC's SO incentive scheme (GB wide) will need to be developed in the light of the transmission owner revenue incentives work and with timely information on electricity wholesale market developments<sup>47</sup> in the period leading up to BETTA go-live. The programme for developing NGC's SO incentives is therefore planned to be completed to a later timetable than the transmission owner price controls. Consideration will be given to the form of NGC's internal SO incentive scheme to reflect BETTA in summer 2004. Further consideration of these issues together with consideration of NGC's external cost SO incentive scheme under BETTA will take place in Autumn 2004, with final proposals for NGC's Balancing Services Revenue Restriction in early 2005.
- 4.18. To assist with the development of the price controls and incentives, Ofgem intends to seek financial and performance information from the existing licensees via questionnaires to be completed and returned to Ofgem. In addition to the questionnaires, clarifications and additional information will be requested from companies as the detailed arrangements under BETTA are developed.
- 4.19. During autumn 2003, Ofgem will be discussing with the existing transmission licensees the incentive/remuneration arrangements between the GB system operator and the transmission owners under BETTA in order to inform the January 2004 paper.

Price controls and incentives under BETTA Ofgem/DTI

<sup>&</sup>lt;sup>47</sup> Particularly, changes in pricing information which may affect the setting of parameters used in setting the balancing services activity revenue restriction on external costs.

- 4.20. The initial proposals document in April 2004 will consult further on the form of the transmission owner revenue incentives and give indications of the associated adjustments to the proposed transmission owner price controls.
- 4.21. The final proposals for the transmission owner price controls and incentives will be published in October 2004. If these proposals are accepted by the companies the revenue restriction conditions reflecting these proposals will be introduced alongside the licence conditions designated by the Secretary of State after the BETTA legislation has been given Royal Assent. In parallel with this work, proposals for NGC's balancing services revenue restrictions will be developed, with final proposals in early 2005.

#### **Contingency planning**

- 4.22. The licensees will each have an opportunity to accept Ofgem's final proposals. If licensees accept Ofgem's proposals, then the necessary licence amendments specifying the revenue restrictions can be put in place using the powers under section 11A of the Electricity Act 1989 (as amended). However, if licensees indicate that they are not prepared to accept Ofgem's final proposals, then Ofgem would expect to refer the matter to the Competition Commission under section 12 of the Electricity Act 1989.
- 4.23. Considerations by the Competition Commission may extend beyond BETTA golive, and therefore if the final proposals are not accepted by a licensee then DTI/Ofgem would consult as soon as possible thereafter on a set of default price controls and incentives to apply to that licensee. Following this consultation, provisions associated with the set of default price controls and incentives would be introduced by the Secretary of State using the powers to modify licences provided for in the proposed legislation.
- 4.24. The default price controls would be specified by Ofgem/DTI since there will be no existing BETTA price controls which could be extended during the Competition Commission enquiries. The arrangements would be designed to provide a revenue restriction framework within which licensees will be able to carry out their activities pending resolution of the matters referred to the Competition Commission.

4.25. Further details on the proposed default price control arrangements will be published with Ofgem's final proposals.

# Price controls and incentives if BETTA go-live is later than 1 April 2005

- 4.26. Legal certainty regarding the BETTA proposals will not be achieved until the proposed BETTA legislation has gained Royal Assent. In addition, the precise go-live date for BETTA will be subject to operational factors and confirmation from licensees and other relevant parties that the BETTA implementation arrangements have been completed successfully.
- 4.27. The timetable for the review of electricity transmission price controls and incentives is described above. In particular, the current Scottish transmission price controls are due for renewal from 1 April 2005, and arrangements need to be in place to continue to protect the interests of consumers from that date, if BETTA go-live is later than 1 April 2005.
- 4.28. The controls developed under this programme of work will apply as follows:
  - Scottish transmission companies: The controls will apply in the event that BETTA did not proceed, or BETTA has a go-live date after 1 April 2005
  - NGC's TO price control: Adjustments will be made to apply from BETTA go-live, and until that date the arrangements in place in England and Wales will continue.
  - ♦ NGC's SO incentives: Proposals are currently being developed for the external cost incentives to apply from 1 April 2004. Adjustments will be made to apply from BETTA go-live, and until that date the arrangements in place in England and Wales will continue.

4.29. The proposed timetable for this work is:

Scottish transmission price controls (from 1 April 2005 to BETTA go-live)

Initial thoughts

Draft proposals

April 2004

Update

July 2004

Final proposals

October 2004

Implementation of price controls (if appropriate)

From 1 April 2005

4.30. Ofgem has consulted recently on increasing the level of harmonisation in review dates between electricity and gas transportation<sup>48</sup>. Ofgem's conclusions on the harmonisation of review dates will be published shortly.

## Views invited

4.31. Views are invited on the proposed processes and timetable for developing the price controls and incentives for application prior to BETTA and under BETTA.

<sup>&</sup>lt;sup>48</sup> Developing network monopoly price controls, Initial consultation, Ofgem, June 2003, Ofgem 54/03

# 5. Work programme

- 5.1. This chapter sets out the programme of work required to set the price controls and incentives for the three electricity transmission licensees under BETTA and seeks the views of interested parties. The work programme is discussed under following headings:
  - TO incentives
  - scope of controls
  - level of controls
  - enforcement of controls, and
  - ongoing work.
- 5.2. The work programme to set the price controls to apply to the price controls applicable prior to BETTA go-live will be discussed in Ofgem's proposed January 2004 Initial thoughts document.

### TO incentives

- 5.3. As discussed in chapter 3, Ofgem/DTI propose that the transmission owner controls should have a two part revenue restriction with Part 1 an RPI-X control, and Part 2 covering the incentives between the GB system operator and the transmission owner (TO incentives).
- 5.4. The TO incentives will be designed to provide incentives on transmission owners that support the GB system operator in meeting its incentives in relation to the transmission sector as a whole, including:
  - maintaining and improving quality of supply
  - minimising losses
  - minimising long-term balancing and constraint costs, and
  - minimising short-term balancing and constraint costs.

- 5.5. As a consequence of the TO incentives some slight adjustments might be need to be made to the balancing services incentives on NGC to reflect the interactions between NGC as GB system operator and transmission owners in Scotland.
- 5.6. During autumn 2003, Ofgem will be discussing possible TO incentive arrangements with the existing transmission licensees in order to inform the January 2004 paper.

# Scope of the price controls under BETTA

- 5.7. BETTA will introduce the following changes in the scope of the price controls for all three transmission licensees. These changes will affect different licensees in different ways and to different degrees:
  - the allocation of functions between transmission owners and the GB system operator
  - recoverable BETTA implementation costs
  - possible changes to planning and operating standards
  - possible changes in the assets remunerated as connections, and
  - the remuneration of the Scotland England interconnector assets.
- 5.8. Ofgem's initial views on the effect of these matters on the price controls will be published in the proposed April 2004 document.
  - Allocation of functions between transmission owners and the GB system operator
- 5.9. The current price controls and incentives reflect the current set of activities undertaken by licensees. The split of functions between transmission owners and the GB system operator under BETTA will change this set of activities. Essentially, NGC will undertake a greater range of activities, reflecting its role as combined system operator/transmission owner, and SP Transmission and SHETL will undertake activities as transmission owners.

- 5.10. In the absence of changes to price controls and incentives to reflect these revised responsibilities, other things being equal, NGC would be under-funded against its licensable activities and the allowed revenues for SP Transmission and SHETL would be too high. In particular, NGC's existing SO incentive scheme parameters would take no account of the external costs associated with balancing the entire GB transmission system rather than just the England and Wales transmission system.
- 5.11. Adjustments to price controls will need to reflect licensees respective roles under BETTA and any arrangements for the transfer of assets between the licensees.

BETTA implementation costs

- 5.12. Ofgem/DTI have issued a conclusions document on the recovery of implementation costs under BETTA<sup>49</sup>. The costs incurred by transmission licensees that meet the criteria set out in that document will need to be reflected in Ofgem's final price control proposals. However, some implementation costs may not have been finalised at BETTA go-live and so adjustments to the implementation costs allowed in Ofgem's final proposals may need to be made at subsequent price control reviews.
- 5.13. Any adjustments identified will be expressed as a separate component within the transmission owner price controls so that the GB system operator can allocate the allowed revenues for BETTA implementation costs to the appropriate charging component<sup>50</sup>.
- 5.14. Under the arrangements that will apply post BETTA go-live, recoverable BETTA implementation costs could be included as part of NGC's Part 1 or as part of NGC's Part 2 revenue restrictions. Ofgem's view is that these costs should be allowed for recovery under NGC's Part 2 revenue restriction.

<sup>&</sup>lt;sup>49</sup> Recovery of costs under BETTA: An Ofgem/DTI conclusions document, July 2003, Ofgem 66/03. Addendum to Recovery of Costs under BETTA: An Ofgem/DTI conclusions document 66/03, July 2003, Ofgem 75/03

<sup>&</sup>lt;sup>50</sup> Ofgem 66/03 concluded that if GB transmission charges are substantially in the form of the current charges, the Balancing Services Use of System charges (BSUoS) represents the most appropriate charging base, and that costs for recovery under a GB BSC should be recovered on the basis of physical volumes.

Planning and operating standards

- 5.15. Ofgem/DTI has recently concluded on the issue of planning and operating standards under BETTA<sup>51</sup>. The principal conclusions are:
  - that a more detailed review of existing operating standards be undertaken with a view to identifying which aspects of the existing operational standards may be practically harmonised under BETTA from day one, such that the GB system operator staff have a common set of definitions that apply across the assets owned by each of the three transmission owners
  - that the work will be progressed by the transmission licensees and report back to STEG
  - it is not currently anticipated that there will be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they received prior to the implementation of BETTA, and
  - to the extent that different standards apply to different users of the GB transmission system, the appropriate commercial treatment of such differences needs to be considered.
- 5.16. At the request of Ofgem/DTI, licensees have commenced work to consider the harmonisation of operational standards and associated costs. Any proposals relating to harmonisation of operational standards identified as part of this analysis will be the subject of an industry-wide Ofgem/DTI consultation.
- 5.17. It is not intended that the conclusions of this work should lead to significant additional new investment in transmission. However, it is possible that the conclusions might result in some additional costs being incurred by licensees, which may result in adjustments being required to price controls.

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 $<sup>^{\</sup>rm 51}$  Planning and operating standards under BETTA, An Ofgem/DTI consultation document, June 2003, Ofgem 61/03

#### Treatment of connections

- 5.18. BETTA will involve the application of common connection charging arrangements. These may redefine the boundary between connection assets and system assets for charging purposes, leading to a reallocation of assets between connection and system assets which could require consequential changes to regulatory asset bases, and therefore to allowed revenues. Such adjustments would be applied to the transmission owner price controls and to NGC's TO price control as appropriate.
- 5.19. Changes of this nature may be implemented in England and Wales prior to BETTA as a consequence of developments in the connection charging methodology for England and Wales currently being progressed by NGC, and the price control implications have been discussed by Ofgem<sup>52</sup>. It is possible that similar issues may need to be considered in relation to connectees in Scotland under BETTA.
- 5.20. For example, potential changes could lead to adjustments to the capital contributions provided by users to the transmission companies under existing agreements, and possibly to payments from transmission companies to users. Such payments could affect the cash flow position of companies and this will need to be considered alongside any arrangements for the phasing of payments to users.

Treatment of Scotland-England interconnector assets

5.21. The creation of a single GB transmission system includes the removal of the separate contractual (and regulatory) treatment applied to the assets comprising the Scotland-England interconnector. The assets in place at the time of vesting (pre-vesting assets) are already included within the respective price controls. Under BETTA it is proposed that the investments made since vesting (post-vesting assets) will also be incorporated into the regulated asset bases of the respective transmission licensees. This will, in turn, increase the revenue stream allowable under the respective price controls.

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<sup>&</sup>lt;sup>52</sup> Potential changes to NGC's transmission licence consequential to possible changes to its transmission charging methodology, A consultation document, Ofgem, October 2003, Ofgem 120/03

- 5.22. Ofgem will be examining different ways in which this can be achieved. This will include progressing work to identify the appropriate value at which such assets should be incorporated into the regulated asset bases.
- 5.23. To incorporate the England-Scotland interconnector into the GB transmission system, it is recognised that terminating the existing arrangements may give rise to certain contractual matters that need to be considered to establish whether or not there may be impacts on the setting of the allowed revenues for transmission licensees.
- 5.24. The interconnector has components which may be regarded as connection assets and therefore the outcome of the consultations on GB connection charging arrangements may affect the work required to incorporate the England-Scotland interconnector into the respective price controls.

Views invited

5.25. Views are invited on Ofgem's proposed programme of work to adjust transmission licensees revenue restrictions for changes in scope as a result of BETTA.

### Level of controls

- 5.26. An important objective of price control reviews is to ensure that companies operating efficiently have sufficient funds to finance their activities. Under existing price controls, business risks are borne by the transmission licensees through their combined system operator and transmission owner activities. Under BETTA, these roles are separately identified, and it may be appropriate for the balance of risks associated with each role to be assessed separately.
- 5.27. The current price controls are essentially RPI-X controls which were set on the basis of certain assumptions or output measures (for example, projections of generation and demand), but also recognising that the licensees will from time to time during the price control period wish to make changes from these assumptions in order to maintain operational performance and comply with their on-going obligations.

- 5.28. The allowed revenues set under the existing price control reviews therefore take into account the fact that companies face financial exposure as transmission grid requirements change from the projections used at the time of setting the price controls<sup>53</sup>. As regards industry structure, the revenues were set on the basis that any decisions to make changes in projections would be taken by each licensee independently, although they may consult with other licensees<sup>54</sup>.
- 5.29. Under BETTA the development of an efficient, coordinated and economical system will still require the transmission system to respond to such changes. For example, the transmission owners will have responsibility for long-term investment planning and, after consulting with other parties (particularly the GB system operator), will produce their own investment plans. However, in certain circumstances the transmission owners will need to make changes to their plans at the instigation of the GB system operator, for example to enable the GB system operator to optimise balancing services costs.
- 5.30. Consideration will need to be given as to whether as a direct result of BETTA any financial issues affecting the ability of the licensee to finance its functions need to be revisited in setting the price controls under BETTA. Ofgem will be developing its thinking in this area in the light of the work being carried out to develop the transmission licences, the STC and TO incentives, and will give its initial thoughts in the proposed April 2004 paper.

## Enforcement of revenue restrictions

5.31. Ofgem has in place a number of arrangements for monitoring the performance of the transmission licensees during the price control period and to support the price control review work at the end of the period. For example, all licensees are required to provide Regulatory Accounts<sup>55</sup> and NGC reports on its balancing activities<sup>56</sup>.

<sup>&</sup>lt;sup>53</sup> Where a company considers that the changes are of sufficient magnitude as to affect its ability to finance its activities it may ask Ofgem to review the allowed revenues set out in its licence.

<sup>&</sup>lt;sup>54</sup> Information on network decisions is currently exchanged between industry parties through the published Seven Year Statements. The British Grid Systems Agreement also provides for the exchange of information between licensees and for agreeing operational matters.

<sup>55</sup> Standard licence condition B5

<sup>&</sup>lt;sup>56</sup> NGC: Special condition AA4.

- 5.32. It is important that Ofgem has sufficient information to confirm that each licensee recovers the appropriate levels of revenue in aggregate from users and to assess the performance of each licensee against its licence obligations including its revenue restrictions. The introduction under BETTA of financial transactions between transmission licensees requires consideration of what changes, if any, are required to the information provided by licensees to provide the appropriate degree of transparency.
- 5.33. Under BETTA, changes instigated by the GB system operator may lead to changes in the transmission owner's capital and operating expenditures. Also, transmission owner activities could influence the costs incurred by the GB system operator. In both cases, the profitability of one licensee could be affected by the actions of another licensee. It may therefore be important for there to be transparency over the actions taken by licensees where these have a financial impact on other STC parties. Ofgem may wish to review whether such actions have affected the efficiency of transmission solutions, considered on a GB basis.
- 5.34. Ofgem will be reviewing the information it needs companies to provide on a regular basis to support the price control review process under BETTA including the appropriate form of the Regulatory Accounting Guidelines (RAGs). The information requirements may depend on the form of the incentives put in place. One possibility would be for licence conditions to be introduced to implement a system of formal monitoring of expenditure including the route by which decisions in specific areas were made. Such monitoring arrangements would need to sit alongside the reporting of regulatory accounts.

Views invited

- 5.35. Ofgem's thinking in this area will be developed as work progresses to develop the TO incentives.
- 5.36. Nevertheless, initial views are invited on whether additional reporting arrangements by transmission licensees would be appropriate to support the price control enforcement and review process and what form such arrangements should take.

# **Ongoing work**

- 5.37. Ofgem's June consultation document on developing network monopoly price controls<sup>57</sup> provided a framework for developing price controls. This document covered a number of areas that have relevance to setting the price controls and incentives under BETTA in the long term including:
  - dealing with the periodicity of incentives by allowing companies to retain the benefits of an efficiency saving – both capex and opex – for a fixed period of time regardless of when the saving is made. A similar approach is also proposed in relation to the benefits received from asset disposals made for the purpose of improving efficiency
  - dealing with potential distortions of incentives between opex and capex, including through improved reporting of costs through the Regulatory Accounting Guidelines (RAGs) to help ensure that companies do not misallocate costs (for example by inappropriately capitalising costs)
  - the period of time that companies should be allowed to retain efficiency savings before they are passed to consumers
  - the treatment of non-operational capital expenditure
  - how to deal with uncertainty or new obligations that companies are exposed to between price control reviews
  - the incentives to invest, and
  - a number of financial issues including cost of capital and pension fund costs.
- 5.38. These areas of work are the subject of on-going analysis not specifically related to BETTA. Ofgem proposes to address these issues as part of price control reviews subsequent to the introduction of BETTA.

<sup>&</sup>lt;sup>57</sup> Developing network monopoly price controls, Initial consultation, Ofgem, June 2003, Ofgem 54/03

## Views invited

- 5.39. Views are invited on any of the matters raised in this chapter, however, in particular views are invited on the following:
  - whether Ofgem has correctly identify the areas of work necessary to develop the price controls and incentives to apply under BETTA
  - Ofgem's proposed programme of work to adjust transmission licensees revenue restrictions for changes in scope as a result of BETTA
  - whether additional reporting arrangements by transmission licensees would be appropriate to support the price control enforcement and review process and what form such arrangements should take.