

# Price controls and incentives under BETTA

## *Response by National Grid Transco*

### Introduction

1. National Grid Transco is pleased that the consultation process concerning price controls and incentives under BETTA has commenced. Whereas we and the other transmission companies are developing the processes required under BETTA, and codifying them in codes and procedures, we believe that the success of BETTA will ultimately depend on an effective alignment of commercial motivations with these obligations so that parties properly co-operate in the development and delivery of BETTA.
2. Our response is structured as follows:
  - a. Our views on the topics summarised in paragraph 3.55:
    - i. Form of NGC's price controls and incentives under BETTA
    - ii. Approach to adjusting NGC allowed revenues
    - iii. Mapping of revenue restriction components to consistent bundles of activities within the GB transmission system
    - iv. Form of transmission owner price controls under BETTA
    - v. STC-related income adjusting events
  - b. Our views on the proposed processes and timetable for developing price controls and incentives (paragraph 4.31 refers)
  - c. Our views on the work areas identified and Ofgem's proposed programme of work (paragraph 5.39 refers)

### Form of NGC's price controls and incentives under BETTA

3. We agree with Ofgem's view that the general form of our incentives need not change with the introduction of BETTA. However, there are some key issues that arise from the proposed relationship between the Great Britain System Operator (GBSO) and the separate Transmission Owners (TOs) in Scotland. These issues suggest to us that there will need to be significant adjustments as a consequence of the interactions between our activities and those of the transmission licensees in Scotland.
4. As noted in the consultation, our revenues funding the provision of transmission network services (recovered through Transmission Network Use of System charges and connection charges) are subject to the incentives arising from a RPI-X price control. As well as strong efficiency incentives on capex and opex, the RPI-X control provides funding for investments deemed to be efficient on a forward looking basis. We believe this feature of the regulatory regime will remain important, particularly in connection with the reinforcement of the transmission networks to accommodate renewable generation.

5. Our exposure to external operating costs via the sliding scale SO incentive scheme, as well as incentivising efficient balancing and system operation, also internalises some of the consequences of our opex and capex decisions. We agree that investment incentives would be further improved if SO external cost incentive schemes were longer in duration. However, in order to reduce the risks that would arise under longer schemes, it would be important to have a mechanism that adjusts our allowed revenue to reflect changes in the market's requirements for network capacity (i.e. in a more comprehensive fashion than the current generation entry correction mechanism, Gt). However, this has proved a difficult objective to achieve even in the context of the well established England and Wales scheme. It is therefore particularly challenging to take forward this development when at the same time BETTA is being implemented.
6. The setting of sliding scale SO incentive scheme parameters (targets, sharing factors, caps and collars) permits NGC to share risks arising from exposure to prices arising in the market with customers. Such risks are likely to be larger and of a different nature within Scotland due to the different relationship between the GBSO and Scottish TOs compared to the relationship between the GBSO and the affiliated TO function within England & Wales. The GBSO sliding scale incentive scheme will therefore need to reflect these different risks.
7. The key advantage of a bundled scheme (giving us an equal exposure to the various external balancing costs that will eventually be passed to end-customers) is the avoidance of any incentive to favour (or a perception that we might favour) one set of external costs over another. However, we believe that there are particular issues within Scotland, in view of the likely arrangements with the Scottish TOs, which might require a departure from this principle.
8. Under BETTA there are costs over which we will have significantly less direct control than we currently have within England and Wales but over which other transmission owners will have a significant influence. In particular, given that Scottish transmission companies will plan, develop and maintain their networks, their activities and actions will be an important factor in determining the constraints that will arise in Scotland and the effectiveness of measures that might be taken to reduce the cost of such constraints. While the SO-TO Code should provide certain mechanisms for us to request responses from the Scottish companies, these procedures are unlikely on their own to be sufficient to produce a proportionate response given the costs and benefits that would arise for end customers. To this end we welcome Ofgem's proposals to introduce "TO incentives" as these could provide a similar alignment of Scottish transmission incentives to the interests of the end customer as those that arise from the combination of our TO and SO controls in England and Wales.
9. However, the benefits of TO incentives could be substantially negated if there was a perception that any additional revenues gained by a Scottish network company (as a result of responding to its incentives) were at the expense of the GBSO or vice versa. Such arrangements would establish an unhelpful adversarial relationship between GBSO and TOs rather than one that seeks co-operation to minimise costs to the end-customer. For example, exposure of the GBSO to the costs of actions that a Scottish TO may take to help reduce constraints will incentivise us to scrutinise the costs of an already regulated company, effectively subjecting that company to double regulation, and confusing the role of the GBSO with that of the regulator. Moreover, if the TO was able to negotiate the price of its actions with the GBSO, it would have an incentive to seek a price that is equal to the external cost savings that the action would provide and so capture all the benefits including those that should accrue to the end-customer.
10. To maintain and support the co-operation that will be essential between the GBSO and Scottish companies for successful operation of BETTA, we therefore believe it is imperative, particularly at these early stages, that the incentives

developed for Scottish TOs by Ofgem should involve remuneration that is not determined by the GBSO and bundled with other costs in our incentive scheme.

11. On the basis of this assessment, we believe a mixture of RPI-X on our TO activities and a sliding scale exposure to the external costs arising from our operational and investment decisions will continue to be an appropriate form of incentives for us under BETTA. We support Ofgem's proposals for TO incentives to provide aligned objectives for Scottish TOs. However, we believe it is not in end customers interest for the GBSO to be exposed to the prices Scottish companies may suggest for services that would help us reduce constraint costs. Rather, we suggest that TO's responding to their incentives should receive regulated revenue streams determined independently of our incentives. Also, given that the relationship between the GBSO and Scottish TOs will inevitably give rise to different risks and higher uncertainties than we are currently subject to in England & Wales, we expect the parameters of the GBSO scheme to reflect the particular circumstances under BETTA (including, for example, the effectiveness of incentives that Ofgem can establish for Scottish TOs).

## **Approach to adjusting NGC allowed revenues**

12. Ofgem's consultation seeks to draw a distinction between our SO and TO price controls and the revenue restrictions that apply to our various charges. We understand that this is so that, in our role as GBSO, we can recover the revenue for services provided by non-affiliated TOs using charging methodologies (i.e. the yet to be approved GB transmission network use of system and balancing service use of system methodologies) in a manner that is consistent with how we currently charge for equivalent bundles of activities.
13. We note that a framework in which the GBSO is responsible for setting and levying all charges raises the issue of which party carries the risks and consequent costs of over or under recovery of revenues and credit issues. In particular, as customers will be able to choose between alternative methods of financing connections, the associated risks will need to be passed to the appropriate TO or carried by the GBSO. To the extent that it is decided that such risks should fall on the GBSO and not be passed to the TO, we would expect the costs and risks associated with managing such issues to be reflected in our price controls and/or incentive schemes.

## **Mapping of revenue restriction components to consistent bundles of activities within the GB transmission system**

14. We agree that it is a sensible approach to fund equivalent transmission activities from revenues obtained from the various GB transmission charging methodologies and use the existing split of activities under NGC's current price controls as the template. For example, if there is a requirement to recover additional revenues for TO services not covered by a RPI-X control (such as the costs of adjusting outages), then these revenues will need to be recovered from BSUoS rather than TNUoS because the latter are not currently adjusted within year. We note that the definition of activity bundles for the Scottish TOs is a work item that will be necessary in advance of setting network charges and would suggest that it should be an explicit item included in the BETTA implementation plan. Given the close relationship between these charges and the form of TO incentives, the work item on TO incentives identified by Ofgem will need to be scheduled accordingly.

## Form of transmission owner price controls under BETTA

15. As mentioned above, we believe that there is significant merit in establishing a form of price control for transmission owners not affiliated with the GBSO which combines a main RPI-X element with other incentives. This could:
  - a. Align the incentives of such TOs with the interests of end customers, and thereby
  - b. Align incentives with those of the GBSO and so enhance scope for co-operation between the GBSO and unaffiliated TOs.
  - c. Provide such TOs with the additional revenue required to finance the activities associated with providing these additional services.
16. As we stated above, we believe an important consideration in the design of the incentives is to avoid a situation in which benefits achieved by one party are at the expense of the other, as this will lead to inefficiency to the ultimate disbenefit to the consumer.
17. We agree with the objectives for such incentives set out in paragraph 5.4 (i.e. with respect to maintaining quality of supply, minimising losses, and managing constraints). We can envisage such objectives being delivered by the following alternatives:
  - i. Direct exposure of the unaffiliated TO to total GB external costs (or at least constraints and losses) and/or performance measures of GB wide quality of supply.
  - ii. Direct exposure of the unaffiliated TO to relevant external costs and/or performance measures of quality of supply in their licensed area.
  - iii. Indirect exposure of the unaffiliated TO by establishing performance metrics in which improved results would generally (but perhaps not universally or unambiguously) give rise to improvements in costs eventually passed to end customers. The revenues required to reimburse the costs associated with improving such metrics may be provided from either the GBSO or some other regulated revenue stream. As mentioned above, we believe the former option establishes inefficient incentives and so the analysis below assumes a regulated revenue stream.
18. The first approach (direct exposure of unaffiliated TOs to total GB external costs), has the advantage of simplicity and comprehensively incentivising all actions that an unaffiliated TO may take to reduce balancing costs wherever they may occur. However there would be practical difficulties and unhelpful properties as follows:
  - a. A sharing of any savings in external costs between NGC and other transmission companies would result in a dilution of incentives on any one party to control the costs. (This is particularly the case when sharing factors, caps and collars are introduced to share risks and benefits with end customers as is required in practice).
  - b. It would expose transmission owners to costs arising in areas and from activities not under their ability to control and therefore impose additional risks upon them.
19. The second approach (direct exposure to relevant external costs in the unaffiliated TO's area of influence) has the benefit of:

- a. Providing focused and undiluted incentives on the TO most able to address the cost or quality issue.
  - b. Remove risks arising in areas not within a TO's ability to control.
- 20. To implement this approach it would be necessary to have a practical methodology for identifying which costs should be allocated to which company. While it is the case that there is no mathematically unique way to allocate constraint costs, nevertheless a suitable methodology might be agreed. For example, it might be possible to determine a set of rules or an ex post procedure which identifies congestion arising from Scottish network unavailability.
- 21. Other issues with this approach are:
  - i. The unaffiliated TO would face some market risk arising from exposure to external costs. These costs would also be influenced by GBSO actions.
  - ii. The GBSO may, as a result of allocation of costs to other TOs, receive different exposure to constraints in different areas. This might give scope for some bias in the selection of congestion management services in different areas.
  - iii. The methodology for allocating constraint costs may itself give rise to disputes and disagreement and indeed might take some time and cost to develop.
- 22. The third approach (indirect exposure of unaffiliated TOs to external costs via performance metrics) offers the potential for market risk and unwanted interactions with GBSO activities to be avoided. Such metrics would need to be closely linked to external costs such that improvements in the performance metric would almost always be associated with a reduction in external costs (and/or improvements in quality of supply).
- 23. A performance metric which would appear to be compatible with the split of responsibilities between TO and GBSO would be a measure of network capacity delivered (perhaps then augmented by volume of losses and other quality of supply measures). However, summary measures of network capacity may not be strongly linked to specific market requirements and congestion costs.
- 24. For example, one summary measure would be overall network availability (the percentage of circuits in service at a particular time). However, such a measure would not reflect the importance of co-ordinating certain key circuits with the requirements of certain power stations. As a result the TO might achieve high overall availability by expending effort on what are less critical circuits, but low availability on a specific key circuit might result in high constraint costs. On this basis, the end customer may face high constraint costs as well as high performance payments for availability.
- 25. A higher resolution metric might reflect the degree to which the TO has been able to meet requested changes in network outage placements and durations. Such an approach would need to be based on a default position which permits the TO a reasonable degree of access to undertake maintenance. If we as GBSO then find that an adjustment to an outage (given regulated prices) would be cheaper than the constraint payments that would otherwise occur, we could request the TO to adjust the outage. The TO would choose to undertake this action if the actual cost of adjusting the outage was less than the additional regulated revenue that would result from successfully responding. The use of regulated prices for outage adjustment actions avoids the scope for inefficient behaviour identified above.

26. In summary, we believe that TO Incentives for TOs unaffiliated with the GBSO could be based either on direct exposure to external costs or by remunerating such TOs in accordance with improvements in a performance metric. We believe the former option gives rise to severe practical difficulties and risks that would be very difficult for a TO to manage. The latter approach (based on performance metrics) is likely to be more practical to implement but unlikely to give incentives that are proportionate to the size of the actual constraint costs that arise.

## **STC income adjusting events**

27. We agree with Ofgem's views that transmission licenses should incorporate conditions related to income adjusting events and we look forward to seeing Ofgem's further thinking on the form of these conditions.

## **Timetable issues**

28. We note the need to prepare alternative price controls for Scottish companies to cover the situation arising should BETTA be delayed. However, the consultation document would appear to imply a significant work load for both Ofgem and the Scottish transmission companies in order to establish these controls. We are concerned that this could represent a significant diversion of resources during a period critical in the design and implementation of BETTA. Following the announcement by Ofgem that our current main electricity transmission price control and those of the Scottish transmission licensees will be extended until April 2007, we would suggest that there is scope to minimise resource requirements for this activity by choosing a suitable scope for the "mini" rollover review required.
29. As noted above, given the important interactions between the form of transmission price controls and the transmission charging developments required for BETTA, we suggest the interactions are made explicit in the BETTA project plan.
30. If there is a delay to BETTA so that it is activated mid-year there will need to be additional developments to all price controls in order to determine the revenues to be recovered under the GBSO charging methodologies.

## **Ofgem work programme**

31. We agree with the list of main work areas identified by Ofgem and offer the following additions and comments:

### TO Incentives

32. Our comments above on the importance of TO incentives, the issues that must be considered to make them effective, and their interaction with transmission charging and other work streams means that we support Ofgem's plan to have set out arrangements in January 2004 price control paper.

### Scope of price controls under BETTA

33. We note Ofgem's plan to set out the effect of the various changes in scope of licensees duties in an April 2004 document. In addition to the work items identified, we would also highlight the need for an allowance to reflect a potential

increase in constraint costs as congestion management across the Anglo-Scottish interconnector changes from the current administrative arrangements to the GBSO counter-trading arrangements associated with all other transmission infrastructure. Additional constraint costs will also be expected as a result of the particular mechanisms and incentives that will be put in place in Scotland between the GBSO and Scottish TOs.

#### Allocation of functions between TOs and the GBSO

34. We agree that this work item is required. We note that it is somewhat interactive with the form of TO incentives selected and the final form of STC procedures.

#### BETTA implementation costs

35. We note Ofgem's proposed treatment of implementation costs following BETTA go-live. As the actual implementation costs are strongly dependent on design and project decisions that have yet to be taken by Ofgem, we note that the specific level of costs that may be recovered in future price controls cannot be fully assessed until the BETTA design is finalised and will not be known until the project is complete. Costs will also be dependent on when in the programme these decisions are taken. We expect the actual level of implementation costs that can be recovered to be determined within the BETTA project management process.

#### Planning and operational standards

36. We agree with Ofgem's approach to this issue. While we believe Ofgem are correct in assuming that significant new costs are unlikely to arise from this work, we would draw attention to the additional constraint costs that would be expected to arise as the administrated access arrangements across that Angle-Scottish interconnector are removed and the specific process and regulatory arrangements between GBSO and Scottish TOs are established (see above).

#### Treatment of connections

37. Under the existing arrangements in England and Wales, charges associated with connections made or modified since vesting are treated as excluded service revenues, and this income is outside of the RPI-X price control mid price review. If this income remains as an excluded service for the GBSO then the GBSO would be exposed to variances in this income stream, and we would expect this risk exposure to be reflected in our price controls and/or incentive schemes.
38. Part of the excluded service revenue relates to activities which may remain outside of the GB CUSC framework such as overhead line diversions for third party's. If the TO retains control of this income stream then it would be necessary to revise the treatment of excluded services revenue within the respective price controls.

#### Treatment of Scotland-England interconnector assets

39. We note Ofgem's intention to examine different approaches to valuing these assets. As we stated in our response to the December 2001 BETTA consultation, it is logical that these assets should be incorporated into the Regulatory Asset Bases of transmission licensees and such incorporation should be at a value that is consistent with the current contractual arrangements.
40. Incidentally, the summary included in paragraph 5.21 of Ofgem's consultation document may be misleading because the revenue associated with pre-vesting interconnector assets are only included in Scottish price controls and not NGC's.

41. Terminating the existing arrangements will give rise to certain contractual matters relevant to both the pre-vesting and post-vesting interconnector assets and these will need to be considered in setting the allowed revenues for the respective transmission licensees (as noted above).

#### Level of controls

42. In addition to the factors mentioned by Ofgem concerning the changes in revenues we would like to highlight the issues that may arise from the specific charging arrangements that, subject to approval, may also arise.

## **Conclusions**

43. The key points we would like to highlight in our response are:
- a. Our agreement that the form of NGC's current price controls (RPI-X with a sliding scale exposure to external costs) is appropriate for our role under BETTA.
  - b. The need for incentives that do not create an adversarial relationship between the GBSO and TOs not affiliated with the GBSO but rather encourage co-operation in managing costs for the benefit of the end customer.
  - c. Our support for the development of TO incentives that will support the GBSO in managing constraints and losses and maintaining quality of supply.
  - d. Our assessment that TO's should receive additional remuneration for costs incurred in assisting the GBSO where such costs were not allowed under the RPI-X control. However, such revenue should be a separately regulated revenue stream rather than one on which the GBSO is also incentivised.
  - e. That the Ofgem workstream examining the level of controls should make allowance for the additional constraints that will arise following the ending of the administrative access arrangements across the interconnector circuits and that can be expected to result from the particular GBSO/TO relationship in Scotland.
  - f. That the valuation of the Anglo-Scottish interconnector assets for incorporation into transmission licensee Regulatory Asset Bases should be consistent with current contractual arrangements.
  - g. That the various implications for post-BETTA contractual and charging arrangements should be quickly resolved and managed explicitly in the BETTA project plan.

NGT 01 December 2003.