Transmission Price Controls and BETTA – Update May 2004

Response by National Grid Transco

1. National Grid Transco welcomes this update document and the opportunity to contribute to the ongoing work to prepare the price controls for BETTA. In particular, we believe the consultation is helpful as part of the process of reducing regulatory uncertainty concerning:

   - the recovery of BETTA implementation costs;
   - the funding of new enduring BETTA obligations and associated activities;
   - recompense for the proposed termination of the Anglo-Scottish Interconnector agreement and future funding of the associated assets.

2. The structure of our response follows the order in which issues are raised in the consultation document.

Price Control Framework (Chapter 2 refers)

3. We agree with Ofgem that it is important to separately identify the main assumptions or outputs required from transmission licensees to roll-forward the price controls from those arising specifically as a result of BETTA.

4. As the roll-forward of the National Grid Company (NGC) price control is the subject of another review, our comments on the roll-forward of the Scottish companies' price controls are solely to note developments that may 1) significantly affect costs which the GBSO will need to manage under BETTA and/or 2) imply the need for reinforcement of our transmission network in England & Wales. We do not think it is appropriate for National Grid Transco (as GBSO designate or in any other role) to provide views on the efficiency or otherwise of proposals or plans brought forward by the Scottish companies for informing Ofgem in the setting of their price controls because such views would immediately confuse the roles of the GBSO and the regulatory authority. It is also the case that, at this time and prior to NGT beginning operation as the GBSO, we have little additional information concerning the external drivers of Scottish transmission activities compared to that possessed by the Scottish companies and Ofgem.

5. In terms of the projections concerning new generation and load in Scotland, we note that the information is consistent with projections that the three transmission licensees have been using to formulate reinforcement proposals (i.e. RETS) and the more detailed information being used to estimate the potential constraint costs that could arise (depending on the allocation of firm GB access rights).

6. In terms of the specific areas of interaction between GBSO and Scottish transmission owners (para 2.12 refers), we note:

   a. <u>Investment planning</u>

   Some additional investment may be required specifically as a result of BETTA if certain connection and access arrangements that have been adopted in Scotland (e.g. non-firm arrangements or ownership boundaries which mean transmission assets are not in accordance with security standards) must be adapted to meet GB connection and access policies determined by Ofgem. At present, it is NGT's assumption that any such arrangements in Scotland can be addressed by site specific agreements and derogations so that no additional investment is required. We would welcome Ofgem's opinion on this matter, not least because it will have a potential impact on the level of constraints and therefore the SO incentive arrangements under BETTA.

b. Outage planning

Given the current integrated operation of Scottish transmission networks and main generation, we suspect there has been little cost incurred within the Scottish companies concerning the need to reschedule transmission outages at short-notice to respond to modified generation plans. However, while such costs may not have been in evidence under the existing arrangements in Scotland, this does not mean they will be negligible under BETTA. We propose a basis on which such costs could be estimated below. Once such costs are agreed, they will need to be included in NGC's price controls but, on the basis that Scottish transmission licensees do not currently incur significant costs of this nature, they may not require any adjustment to Scottish price controls.

c. Transmission switching

We agree that the effect of BETTA interactions on such costs is unlikely to be material and so no adjustment to price controls will be necessary.

d. Provision of transmission services by TOs

As above, we agree that the effect of BETTA interactions on such costs is unlikely to be material and so no adjustment to price controls will be necessary.

e. Connections

We agree that the cost issues associated with connections are those identified in the investment planning section above. This is based on the assumption that the GBSO will not need to refinance connections as part of the process of establishing new agreements with Scottish users. In particular, any repayment of capital contributions made by Scottish users to Scottish companies in respect of connections (including deep connections) will take place before new BETTA agreements are established and not by the GBSO.

Roll Forward of Price Controls – Generic Issues (Chapter 3 refers)

7. These comments respond to the generic issues raised concerning roll-forward of price controls. We will comment in more detail on these topics in our response to the consultation document concerning the roll-forward of our price control by 1 year.

Opex Incentives

8. In their February 2003 document, Ofgem indicated that a rolling opex incentive should apply from 1 April 2003 and permit companies to retain out-performance benefits for 5 years. We support such an approach. However, we note that if OPEX targets are not reset for the roll-forward years, such rolling mechanisms are not required in order to retain out-performance benefits. On this basis, we believe Opex targets for the roll-forward years should be set on a basis consistent with the assumptions used in the previous price control review and a rolling incentive mechanism not actioned until the next full price control.

Capex Incentives

9. We agree with the proposal that, in the light of the current consultation on the treatment of network investments for renewable generation, further development of capital investment incentives should be a topics for the next main price control review.

Pension Issues

10. We believe pension adjustments should be calculated and included in the allowances for the roll-forward years.

Cost of Capital

11. We support an approach which considers the outcome of DPCR4 work on cost of capital.

RAV Opening Value for Roll-forward period

12. We support the proposal for a proportionate assessment of RAV opening value for the roll-forward years (given that capital investment will be subject to full review at the next full price control review).

BETTA Price Controls (Chapter 4 refers)

Treatment of BETTA Implementation Costs

13. We agree with the proposal that BETTA implementation costs are recovered via GB BSUoS charges following BETTA go-live.

14. We believe that IT assets should be depreciated over 5 years but accept that 7 years is consistent with the treatment of such assets developed for NETA.

15. We agree to the proposal to recover operating expenditure for BETTA implementation over the first two years of BETTA implementation. However, in a similar manner to the treatment of NETA implementation costs, the allowed revenues should be calculated such that the present value of such revenues equals the present value of the implementation costs that companies have incurred and financed. The allowed revenues will also need to be adjusted into money of the day by a suitable adjustment using the relevant RPI.

Treatment of Connections

16. As well as reallocation of assets between connection and infrastructure, the introduction of a shallower connection boundary under BETTA will also require revised connection agreements with customers. We understand that the agreed treatment of Scottish transmission user capital contributions (which under the deep connection charging methodology used in Scotland may be relevant to both connection and infrastructure assets) will be resolved by Ofgem and the Scottish companies prior to and independent from the definition of new agreements with Scottish users by the GBSO.

17. Following Ofgem's views expressed in the March consultation document, we are working on the assumption that connection charges (applying on the shallow "plugs" connection boundary) would be treated as an excluded service revenue for both GBSO and Scottish TOs. In particular we are assuming for the purposes of implementing BETTA systems and procedures that, as Ofgem stated in the March document, "the charges for connections by the TOs to the GBSO are likely to be based on the same, or an identical methodology, such that the GBSO is not exposed to a difference between payments it makes to the TOs and the charges it is entitled to levy on users, except to the extent that these represent the GBSO's own costs in making and maintaining the connection". We would welcome confirmation that this assumption remains valid.

18. In addition, we note that the treatment of new connections within the respective price controls differs significantly between NGC and the Scottish TOs. In

Scotland new connections are not included in the Regulatory Asset Base (RAB), and the income is restricted by reasonable rate of return provisions (i.e. a 'dual till' approach). For NGC the assets are included in our RAB, and whilst the charges to users for new connections as well as existing connections, are regulated by a defined reasonable rate of return, our overall revenue position is linked to the wider TO revenue control driven from the RAB (i.e. a 'single till' approach). If these variations persist, then the potential implications for BETTA and the SO/TO interaction need to be closely examined.

<u>Anglo-Scottish Interconnector Circuit Capex</u>

19. We confirm that we will not need to undertake the asset replacement spend to replace conductor on the interconnector circuits if the reinforcements required to accommodate renewable generation in Scotland, which include reconductoring the interconnector circuits, take place.

<u>Adjustments related to TO Incentives</u>

20. We note Ofgem's views that we should be fully exposed to the cost of rescheduling Scottish TO outages at short-notice. We are preparing an assessment of the potential magnitude of these costs by extrapolating the costs we have incurred in England & Wales. However, there is considerable uncertainty concerning whether such extrapolation will be valid for determining the magnitude of such costs in Scotland for the following reasons:

- Network topology in Scotland (particularly at 132kV) is different from that in England and Wales.

- The year-ahead outage plan for the first year of BETTA (which forms the outage baseline about which modifications may be required) will not have been developed in conjunction with the GBSO in the manner that is envisaged under the enduring BETTA process.

- Whereas we expect the majority of outage modifications to be instigated by the Scottish TOs as a result of asset health developments, and such changes (together with consequential plan changes) will not be paid by the GBSO, it is likely that a full analysis and agreement to all consequential changes will not be possible in the timescales available so that some additional liability will arise for the GBSO.

21. As mentioned above, an allowance to reflect the cost of rescheduling Scottish TO outages at short notice should be added to NGC's price control, but it is not necessarily the case that such costs are currently being incurred by the vertically integrated Scottish companies and so it may not be appropriate to subtract this sum from their price controls as a BETTA adjustment.

22. For the avoidance of doubt, our interpretation of Section 4.29 is that the GBSO will recover from Users the sum total of the allowed price control revenues of each transmission licensee. This is a different revenue model to the notion that the GBSO recovers revenues for the GB network and apportions revenues to SP and SSE based on their separate revenue restrictions leaving only a residual for NGC's own costs.

England-Scotland Interconnector Regulatory Asset Values

23. As National Grid Transco has said in response to previous consultations, we accept the logic for ending the current interconnector arrangements so that the associated assets can be used in the GB transmission system like any other transmission assets.

24. Whereas (as paragraph 5.14 refers) we understand that Ofgem will need to satisfy itself that the financial arrangements to take effect under BETTA are consistent with its statutory duties, balancing our interests with those of the public interest, we also believe that Ofgem should recognise the desirability of preserving the value of rights established under the current regulatory/commercial regime as we transition to those that will apply under BETTA (for example, in a manner consistent with the principles sought for the transition of users' rights).

25. Given a suitable valuation of the interconnector assets, National Grid Transco would, for our part, agree with Ofgem's proposal that the current interconnector agreements should, on a voluntary basis between parties, cease to have effect at BETTA go-live with no payment of the termination amounts or other liabilities contained within the contracts taking place.

Adjustments to price controls

26. We agree that the adjustments required to the price controls are in respect of:

a. remunerating future operating expenditure associated with maintaining the interconnector assets (maintenance, business rates, etc);

b. remunerating future capital investment, either for asset replacement or reinforcement (recognising that the latter is associated with a separate consultation and may supersede current plans for asset replacement);

c. financing of earlier investment in the interconnector assets (through a depreciation allowance and return on a suitable RAB opening value for 1 April 2005).

27. We believe it is appropriate to recover these costs from GB transmission users through transmission network use of system charges because these users will receive the benefits arising from improved competition in energy markets that BETTA is intended to deliver.

RAV Opening Value

28. National Grid Transco believes that Ofgem's preference to use market-based valuations of the interconnector as a basis for determining the RAB opening value is appropriate because such methods offer the only basis by which value created under the current regulatory/commercial arrangements can be recognised and not sequestrated through the application of a more arbitrary treatment. A market-based valuation approach is also consistent with the focused valuation of NGC's transmission assets and interconnector business in 1995 which has formed the basis of subsequent price controls.

Interconnector Asset Risks before and after BETTA

29. Ofgem notes that the risks associated with the investments in the interconnectors will reduce once their financing is provided through the transmission price controls. This is reflected by the fact that the value ascribed to the interconnector (in the RAB opening value) will, in the future and under BETTA, be subject to the same depreciation and return treatment as all other transmission asset investments. However, if the value under existing arrangements is to be preserved, then the RAB opening value for the interconnector assets should represent the value that the market would ascribe to the expected future cash flows discounted in a manner that reflects the risk arising under the current regulatory/commercial arrangements.

Interconnector Availability

30. In terms of availability incentive, Ofgem says that consideration will need to take into account that, in the future, we will be subject to incentives arising from the SO incentive scheme. However, in terms of producing a market valuation of the interconnector under current arrangements, consideration should be contained to deciding whether the market would expect future availability performance to match that currently achieved if current arrangements were to continue. Although the target for NGC's interconnector asset availability is relatively high at 95%, past performance has shown that out-performance is possible and so it would be reasonable for the market to expect this level of out-performance to continue.

RAB Roll-Forward Method

31. Ofgem state that a starting point for considering the opening RAB value of the interconnector assets is to consider how they would have been valued if they had always been included in the licensees' price controls and so part of the RAB. This non-market approach would appear to be inconsistent with Ofgem's stated aim of using market-based valuation methods. Also:

   a) The method makes no representation of our out-performance of the expected costs and performance agreed when the contract was negotiated.

   b) It is sensitive to particular asset depreciation assumptions that do not match the profile of value arising under the fixed price interconnector contract.

32. The second point is an important limitation of the RAB roll-forward methodology. The profile of regulatory depreciation allowances does not affect the return achieved by a licensee within a price control. On this basis, a regulator may choose an arbitrary depreciation profile (usually a straight line) such that RAB values of particular investments will fall in accordance with this schedule over time. However, the project returns for fixed-price contracts remunerating large capital investments (like the current Anglo-Scottish Interconnector agreement) are not constant through time. This means that the residual contract values at any particular date in a contract will depart significantly from the simple straight line regulatory depreciation assumption used in the RAB roll-forward model. This mismatch between the RAB roll-forward model and actual project values seriously limits the applicability of this model to valuing the existing contract and, as a result, we do not believe that it can provide a meaningful lower bound estimate of the market value of the contract.

Present Value of Future Cash Flows

33. Whereas Ofgem have reported a range of values calculated by NGC, we believe the value of £108m for NGC's assets (which is based on a discount factor/cost of capital of 10%) represents the correct market-based valuation of the expected future cash flows from our existing contracts given the risks of such investments that are outside the main price controls.

34. Ofgem state (para. 5.36) that they will need to look (over the project life times) at the returns that are expected to be achieved up to 1 April 2005 (BETTA go-live) and the projected returns beyond that date. We understand that Ofgem will need to ensure cash flows are in accordance with NGC's existing license conditions (to charge not more than a reasonable rate of return), and they will need to ensure projected revenues and cash-flows align with those actually achieved. In terms of returns over the lifetime of the project, our interconnector investments and costs will exceed contract revenues in the period prior to 1 April 2005 so that the overall return achieved for the period up to this date will be negative. Acceptable

project returns depend on the receipt of future revenues (beyond 1 April 2005), in accordance with the terms of the existing contracts and for the remaining life of the contracts.

35. NGC believes, given the strategic importance of the interconnector assets resulting from the disposition of both conventional and renewable generation in Scotland, that it is reasonable to expect the existing contracts (or future renegotiated versions) would achieve the cash returns projected if the current pre-BETTA regulatory/commercial framework remained in place. Indeed, the benefits that Ofgem/DTI have attributed to BETTA are themselves an illustration of the significant long-term value that can be attributed to the interconnector assets. On this basis we believe the present value calculations we have presented to Ofgem are robust.

Contract termination amounts

36. As noted by Ofgem the termination amounts that would be payable by the Scottish companies if they terminated the Anglo-Scottish Interconnector Agreement at 1 April 2005 would be in the order of £60m (in 2003/4 prices).

37. Negotiated as part of the overall interconnector contract, the termination amounts sought to ensure that, on an ex ante basis, if the Scottish companies defaulted NGC would receive a sum derived from a formula that considers elements related to the historic capital costs incurred and the future non-capital costs. However, as such amounts do not reflect the revenues that will be achieved by out-performing the assumptions on which the contract was agreed or even the foregone revenue in the absence of out-performance, they are considerably less than the market value of the contract.

Modern Equivalent Asset Values

38. We agree with Ofgem that, in theory, the gross replacement value of the assets could be used to establish an upper-bound to the market value of the existing contract because it would represent the value of an alternative to using the existing assets. As the interconnector contract also remunerates maintenance and asset replacement, to make a valid comparison, the gross replacement value of the interconnectors should also include a capitalisation of such costs.

39. We have not been provided with the assumptions that Ofgem have used to estimate the MEA value of our interconnector assets at £60m. Our assessment of the capital cost we would pay today for our interconnector assets (127km of double circuit 400kV overhead line plus substation connection works at Harker and Stella West), their engineering and capitalised maintenance costs but excluding all other project costs associated with environmental studies, obtaining consents and wayleaves, necessary environmental mitigation costs, interest during construction, etc, would exceed the £108m present value of cash flows that we have calculated.

40. The significantly lower value of Ofgem's MEA estimate compared to ours may be due to depreciation to reflect the fact that some of our interconnector assets are not new. However, in so far as only the gross replacement value can be compared to the contract value in a meaningful way, it would be incorrect to use a depreciated MEA value.

Ofgem's Discussion of Issues (para. 5.50 onwards refers)

41. NGC supports Ofgem's proposal to seek values for the interconnector assets which appropriately transfer them from non-price control to price-controlled regimes.

42. Ofgem correctly states that price control adjustments that would effectively maintain the current level of revenues would not reflect the reduction in revenue risk that companies would experience once the assets were incorporated under the main price controls. However, Ofgem is incorrect when it states that NGC has argued for this outcome. The approach that we have advocated (and which is repeated above):

1) Assesses the value of the contracts by calculating the present value of remaining contract cash flows with a 10% discount rate to reflect the risk of these assets outside a price control (giving £108m in 2003/4 prices). This reflects the price that any party would need to pay to purchase the assets commercially if there was no change in the interconnector commercial regime.

2) Use this market valuation to set the opening value for the interconnector assets in the RAB, such that subsequent remuneration of the assets under the price control would be subject to the lower regulatory returns consistent with other transmission assets funded by the price control. This reflects the costs that will be incurred by the price controlled transmission activity in financing the investment necessary to “purchase” these assets from the commercial regime.

Such an approach would be consistent with the market-based valuation of NGC (including a focused valuation of NGC’s interconnectors business) by OFFER in 1995.

43. Ofgem argues that the interconnector contracts do not expose companies providing the services to full market risks because some pre-vesting interconnector capacity is funded by transmission users under a price control. However, as all NGC’s interconnector assets are remunerated from a contract negotiated post-vesting, we do not believe that this consideration is relevant to NGC’s interconnector assets.

44. Ofgem also states that it may not be appropriate to burden transmission users with payments relating to out-performance of targets that have been at the low-end of the performance expected of transmission assets. Again, we do not believe this is relevant to NGC’s interconnector contract (which does not have low performance targets).

45. Whereas Ofgem states that contract termination amounts may provide a valid measure of the value of the contracts at a given date, the analysis provided above leads us to believe that termination amounts would under represent the full market value of the contracts.

46. As described above, we believe the use of a RAB roll-forward methodology would significantly under represent the value of contracts of the form used in the interconnector agreements. The extent that it can be used as a “sense-check” on market-based methodology for determining the value of the interconnector contracts is therefore limited.

47. We agree with Ofgem that the HCA valuation method should not be used because it is not a market-based valuation methodology and is also inconsistent with the regulatory decisions made in 1995 concerning the opening values of NGC’s price controlled assets and the focussed valuation attributed to NGC’s interconnector business.

Transmission Owner Incentives

<u>Investment Planning</u>

48. We agree with Ofgem's views (para. 6.6 refers) concerning the extent that one transmission licensee should comment on the decisions of another (and we have followed this principle in our response concerning the future investment plans of Scottish companies above).

49. We also agree with Ofgem's conclusion that the proposed price control framework (RPI-X controls for Scottish TO's, RPI-X plus SO incentives for NGC) is the most appropriate given the current affiliation between networks and generation interests in Scotland. We note that the resulting incentives on Scottish TO's will not include an internalisation of the external balancing cost consequences of their investment actions (unlike the incentives on NGC). However, we welcome Ofgem's willingness to consider adjustments to Scottish revenues if Scottish companies wish to respond to information provided by the GBSO.

Outage Planning

50. We agree with Ofgem's views on the need for payments by the GBSO to TOs for rescheduling outages at short-notice. Our experience suggests that many requirements for rescheduling outages at short-notice arise from considerations related to the TO activity (specifically, asset health considerations) and we agree that the most appropriate treatment for such rescheduling requests is not to require payment by the TO to the GBSO but to ensure all consequential outage changes are agreed without further payment by the GBSO to the TO. However, as it may not be possible to fully identify consequential outages arising from a TO instigated change, the GBSO may bear some additional liability for resolving consequential changes.

51. We also agree that inter TO payments for consequential outage changes would be unduly complex but note that, in the absence of such a mechanism, the GBSO may need to make a payment to one Scottish TO as a result of changes requested by another.

Transmission Services

52. Ofgem argue that because the GBSO is liable for constraints as a result of the unavailability of TO transmission, then it follows that the GBSO should also be liable for CAP048 disconnection compensation as a result of TO transmission failure. Whereas we note the argument for consistency, the resulting treatment would not recognise the different scope between these cases for the GBSO or TO to take action to improve customer service and reduce costs. Many constraints can be anticipated and so the GBSO may choose between alternative operational and commercial actions to mitigate their effect. This is not true of a sudden transmission failure that disconnects a customer. These can only be mitigated by suitable investment, maintenance and switching by the TO.

53. However, while we believe the treatment of CAP048 costs is less than ideal in terms of economic and efficient incentives, we accept the materiality of this issue may not warrant additional commercial complexity given pressing timnescales for BETTA implementation. We would accept that the GBSO should accept this liability subject to suitable SO incentive scheme allowance and on-going regulatory scrutiny of resulting TO performance.

54. With respect to the effect of different commercial boundaries within Scotland, the resulting security of connections and the need for new transmission agreements, Ofgem have stated that such matters should be addressed in bilateral agreements with the GBSO. We note, however, that these arrangements are interactive with the policy approach to be taken on GB access which we expect Ofgem to make later this summer.

Allocation of costs

55. We note Ofgem's conclusion concerning NGC's exposure to the cost of rescheduling outages at short-notice in Scotland. Whereas we believe the proposed treatment results in commercial incentives that will mean some opportunities to reduce end-customer costs will not be taken, we accept that the expected materiality of this issue is low. We look forward to receiving Ofgem's thoughts on the appropriate GBSO allowance for such rescheduling costs.

56. NGC agrees with Ofgem's suggested treatment of any additional revenues that Ofgem allows Scottish TOs for investments/actions not anticipated at the previous price review (other than the costs of outage rescheduling at short notice). As these additional investments/actions are most likely to be in response to new user requirements, it will not be the case that suitable total revenues will already have been allowed to the GBSO. On this basis the GBSO should be permitted to recover additional revenues to fund the additional payments to Scottish TOs (leaving NGC's own revenues unchanged as a default).

Next Steps and Timetable

57. We note the timetable and interactions with other work to determine the appropriate regulatory framework for funding investments to accommodate renewable generators and extend NGC's main price control until April 2007. NGC believes the proposals put forward in this consultation document are helpful in addressing such interactions.