



National Grid

Transco

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Dear Adrienne

OFGEM UPDATE DOCUMENT ON DEVELOPING NETWORK MONOPOLY PRICE CONTROLS

We welcome the publication of this document and the more recent reports by Frontier Economics on Regulatory Mechanisms for Dealing with Uncertainty and Balancing Incentives. Our response below focuses on the following issues:

- periodicity of incentives;
- balancing incentives between opex and capex;
- treatment of non-operational capex;
- alignment of incentives between electricity transmission and electricity distribution;
- dealing with uncertainty;
- 'financial' issues;
- metering; and
- pensions.

Periodicity of incentives

Ofgem is minded to introduce a rolling incentive regime where efficiencies may be retained by companies for a fixed period with effect from 2003/4. We strongly support the principle of this proposal as a step towards incentivising companies to continuously improve efficiency.

In response to the questions posed, we suggest that the retention rate should be 100% for a period equal to the length of the price control period. The Incentives Report suggests that the period for which benefits are retained could be extended beyond this, while reducing the proportion of benefit retained within each year – e.g. 50% retention for 10 years, rather than 100% benefit for 5 years. However, against this:

- There are good reasons for price control periods typically being no longer than 5 years, not least the credibility of the control not being re-opened before it has been completed.
- A longer retention period will complicate the already potentially fraught issue of the interaction between the benefit retention mechanism and normally price control re-setting process. Specifically, as long as the rolling mechanism for retaining benefits from **past** efficiency improvements is to be combined with forecasts of what **future** efficiency improvements a company can make, then there is scope for the former mechanism to be compromised by allowing the efficiency improvement record of a particular company to influence the estimates of efficiency improvement potential for **that** company. The

availability of solutions for solving/mitigating this problem will depend on, inter alia, the ability to benchmark the performance of the company in question. As a result, different solutions may apply to DNOs, on the one hand, and gas and electricity transmission on the other. It will be important that, in its proposed May 'Principles' document, Ofgem indicates how it proposes to deal with this issue, both for the DNOs and for NGC and Transco. However, either way, solving the problem would be made more difficult by having benefits of out-performance retained over more than one price control review.

In sum, we welcome Ofgem's commitment to removing the periodicity distortions inherent in the way that price controls have worked, to date, for gas and electricity networks. However, especially for transmission where the options for benchmarking are less, the strength of incentives for continuous increases in efficiency will depend on blocking the potential feedback loop from the licensee's actual efficiency improvement performance to Ofgem's assessment of the scope for future cost reduction. At least two options exist for doing this:

- First, as part of the price review process, Ofgem could continue to make estimates of the scope for future efficiency improvement but would commit to making these estimates on a genuinely bottom-up, forward-looking basis, rather than by making a top-down judgement of an achievable overall rate of cost reduction. Such a bottom-up approach would be consistent with (and is arguably required by) Ofgem's proposals for regulatory accounts.
- Second, Ofgem could consider a **continuously** rolling incentive for opex, i.e. price reviews would be only about capex, and the opex mechanism would be structured to continuously share the benefits of efficiency improvement between shareholders and customers with appropriate lags. Such a continuous mechanism would be inappropriate for capex because of both the **expected** future capex profiles for NGC and Transco and because of the scope for **unexpected** changes in capex requirements. Such a continuous rolling opex mechanism would therefore preclude a water-style joint incentivisation of opex and capex but, in the section below, it is argued that this latter would be inappropriate for transmission and for gas distribution in any case.

Balancing incentives between opex and capex

We note that Ofgem is considering a combined opex and capex rolling incentive with characteristics similar to the current Ofwat scheme. We would like to make two main points about this proposal:

- First, the effectiveness of such a proposal in both improving efficiency and securing that adequate investment is made depends critically on the ability to adjust any such scheme for:
 - the 'outputs' which opex and capex (but particularly capex) deliver. It is arguable that the 'final' outputs of spend on energy networks (e.g. quality of supply) are typically harder to relate to the spend itself, especially over the sort of time period associated with a price control, than is true with, for example, water networks. This may imply that, if Ofgem is going to encourage capex 'efficiencies' through a rolling incentive mechanism, it may need to link the incentive mechanism to 'intermediate outputs', e.g. measures of network asset age or volume of assets replaced;
 - changes in requirements for opex and capex (but, again, particularly capex) during a price control period. Various measures of such changes in requirements (particularly in relation to distributed generation) have been discussed in the various working groups which Ofgem has been running – but no clear conclusions have emerged to date on the identification/measurement of appropriate cost drivers.

- Second, the energy networks other than electricity distribution have different investment drivers and other capex incentivisation regimes already in place or being developed. For example:
 - In **gas distribution**, Transco has embarked upon a programme to replace 50% of its network for health and safety considerations. A metal mains replacement driver has been agreed to fund this work which incentivises efficient expenditure through the use of unit cost allowances.
 - **Gas transmission** has in place a deep SO incentive scheme. This balances the incentives for System Operator opex–capex interactions and also incentivises efficient incremental capex expenditure where there is a market need. Although this scheme will need refinement (probably substantial refinement) over time, an additional rolling capex incentive, such as that being considered, would not make sense alongside the Deep SO mechanism.
 - **Electricity transmission** does not yet have a deep SO incentive scheme in place (although some adjustment of revenue in respect of changes in capex requirements is provided by the ‘Gt’ term in its current price control). We disagree with the form of Ofgem’s past Deep SO proposals but believe that a version could be developed to appropriately incentivise enhancement expenditure. Such a mechanism would, we believe, be superior to the sort of mechanism which currently exists in water.

In sum, and against the background of a need for investment in energy networks to cope with developments in generation economics and technology and in Government policy:

- It is doubtful whether the conditions exist for a water-style capex incentivisation, linked to genuine ‘outputs’ (e.g. quality of supply), to be effective in encouraging that investment in electricity distribution, albeit that incentivisation could be linked to intermediate outputs (like some measure of investment volume or of asset condition).
- In the case of the transmission and gas distribution networks, other and more appropriate incentivisation frameworks are either in place or are being developed.

Put another way:

- Deep SO price controls **do** offer positive incentives to invest. However, a problem with variants of such controls which either exist or have been proposed is that that incentivisation is limited by the effectiveness of the associated market mechanisms (auctions in the case of the Transco Deep SO control) in valuing incremental capacity.
- Water-style capex incentivisation is premised on an incentive **not** to spend money which is then countered by the requirement on the company to deliver certain outputs (e.g. cleaner drinking water). To the extent that the designated outputs are only weakly linked to the investment, at last within the timescale of a price control, then the incentive not to spend money will dominate. This situation can be retrieved by outputs which are relevant, measurable and have a direct linkage with the investment in the relevant timescale. In the case of energy networks, ‘intermediate’ outputs (e.g. volume of asset replacement) are more likely to fulfil these requirements than ultimate outputs (e.g. quality of supply).

Treatment of non-operational capex

Paragraph 4.19 of the Update Document proposes the **regulatory** treatment of non-operational capex as capex, consistent with financial accounting policy, rather than as opex as it is currently (at least in electricity distribution). We believe that, where the benefit of an

asset is felt over a period of time, it is appropriate for current customers to share the cost with future customers. Conversely, non-operational capex typically concerns assets with a much shorter effective life than main plant items and therefore it would be inappropriate for their cost to be recovered over similar periods to main plant items. Therefore, we believe that inter-generational equity is, in principle (and other things being equal), best served by RAV capitalisation of non-operational assets with depreciation periods similar to typical lives of those assets.

Of the specific issues raised by Ofgem in para 4.19:

- On the issue of whether a distinction needs to be drawn between different types of non-operational capex, our view is that no distinction should be drawn. One of the reservations which Ofgem has had in the past about capitalising of non-operational capex has been about monitoring of over-capitalisation by companies. This task would be unnecessarily complicated by making distinctions over and beyond what is required for financial accounting purposes and would drive another wedge between financial accounting and regulatory accounting.
- On the regulatory asset lives to be assumed, this should reflect the average accounting lives of the relevant assets in the different sectors (gas transmission, electricity transmission and electricity distribution).
- There would seem to be no obvious reason for non-operational capex to earn a different RAV rate of return than other assets.
- RAV treatment of over-spend or under-spend on non-operational assets, relative to what has been assumed in setting price controls, should be governed by whatever is required for consistency with the chosen method for rolling retention periods.

Alignment of incentives between electricity transmission and electricity distribution: replacement of Grid Supply Point (GSP) assets

There is no necessary reason why the incentive mechanisms for electricity transmission and distribution should be the same. It may or may not be appropriate to introduce Deep SO-type mechanisms in distribution (although if, as Ofgem expects, distribution networks become technically more like transmission networks, then the difference may be more difficult to justify in the longer term). However, it will be important that incentive mechanisms for distribution do not conflict with those for transmission. For instance:

- There are several reasons, not least cost, why it would be efficient for NGC and DNOs to replace GSP assets at the same time.
- Although NGC and the DNOs do strive to carry out work jointly to obtain these benefits, the current incentive regime on DNOs has arguably changed DNO rankings of investment projects in favour of those which most produce short-term improvements in supply quality and reliability. We have found that this has generally made it harder to agree work at GSPs, thus affecting our own asset replacement plans. It is also arguable that Ofgem's use of asset risk management surveys, although important in its own right, is not by itself sufficient to counteract financial incentives.

Whatever, the form of capex incentivisation eventually adopted for DNOs, it will be important that it facilitates, rather than hinders, optimal replacement of GSP assets.

Dealing with uncertainty

We have read Frontier Economics' findings and are broadly in agreement with the methodology of assessing each uncertainty against a set of criteria to determine the appropriate regulatory response. We note that a somewhat mechanistic approach has been developed which combines the criteria into a single decision tree. Clearly, this decision tree simplifies through the use of 'yes'/no' answers where the real answer will typically lie somewhere in between and where the right decision depends on exactly where on that spectrum the answer actually lies. However, we understand that Frontiers intends the decision tree to be a useful oversimplification and that Ofgem intends to use it as a heuristic/thought clarifier, rather than as the sole basis for decisions. We support this approach.

As a flavour of how we could see the Frontier framework being applied to NGC and Transco price controls, we offer the following examples:

- **Bad debts.** Network companies clearly have some control over bad debts but the degree of that control is mitigated not just by changes in the financial health of customers but by constraints on disconnection or on rejection of customers with poor credit histories. This mixture of controllability and uncontrollability might suggest an ex ante allowance for bad debts, combined with a mixture of sliding scale and caps on liabilities if actual debts move outside some prescribed range.
- **Lane rentals.** Transco has embarked upon a scheme to replace approximately half of its distribution network over a thirty year period. As a result, the potential cost of a national lane rental scheme could be very considerable. However, it is unknown if and when lane rental charging will be rolled out and, if it were rolled out, which authorities would apply it, which roads would be affected and what the charges would be. We therefore believe that, in the early years, lane rental charges should be passed through. In due course better information should emerge to allow a more incentivised approach which might have some combination of: an ex ante allowance; cost drivers/unit cost allowances; and a sliding scale.
- **Unexpected demand for network investment.** At present, NGC has a Gt term in its price control which varies revenue according to the MW of new generation connecting to the transmission system and Transco has a Deep SO price control. Both mechanisms have the effect of, in principle, mitigating the uncertainty associated with changing requirements for network investment and both can certainly be refined to better achieve this purpose.

Financial Issues

Gearing

We support the view in paragraphs 6.11 & 6.27 of the Update Document that companies should have flexibility of finance if they are to support projected levels of future investment. We therefore support the proposition that estimates of network companies' cost of capital should be based upon sensible levels of gearing and credit ratings comfortably inside investment grade.

Taxation

We believe that companies should be incentivised to be tax efficient and therefore, on that basis taken by itself, cost of capital should be estimated on a pre-tax basis (or on a pre-determined post-tax basis). However, since privatisation, the tax regime has changed,

especially for long lived assets such as those employed by energy networks. Partly as a result of this, taxation rates can be expected to rise and we expect individual licensees will face unavoidable increases in taxation rates. We believe that this should be reflected in calculations of allowed revenue.

Regulatory Asset Value and the approach to depreciation

Paragraph 6.22 of the update document expresses Ofgem's view that the basis for calculating RAV should not be re-opened. We also note Ofgem's intention to publish its financial model this autumn. We welcome such moves to reduce regulatory uncertainty.

Paragraph 6.23 of the Update Document considers adjustments to depreciation profiles. We note those distribution networks whose pre-vesting assets become fully depreciated during the current distribution price control will have accelerated depreciation profiles applied. Furthermore, in the last Transco review it was agreed that an element of replacement expenditure be expensed for regulatory purposes. Both of these regimes have the effect of increasing cash-flow in the short-term to offset imbalances between (1) expenditure which adds to the RV and (2) RV depreciation allowances.

Overall, we recognise that Ofgem will need to balance interests of present and future consumers, while allowing companies to finance their activities. Both accelerated regulatory depreciation and partial expensing of repex are reasonable ways to achieve this dual objective, with the precise mixture depending on the circumstances of the individual companies.

Metering

We agree that, against the background of metering services being progressively opened up to competition, there will be an initial requirement for some form of regulatory protection until effective competition has developed. However, regulatory controls should not present a barrier to developing competition. Such barriers might be created by, for example, regulated cross-subsidisation of pre-payment meters.

The requirement for regulatory control is likely to diminish considerably over the next few years as commercial agreements for metering services are developed in the competitive marketplace to replace the 'regulated' provision of metering services. The 'regulated' activity should diminish to a residual activity and it may therefore be appropriate to flesh out the criteria by which regulatory controls and obligations with respect to metering should be lifted.

Pensions

As Ofgem has recognised in various statements it has made, the treatment of pension costs is one of the most important issues to be decided in the re-setting of all the energy network price controls. Ofgem has stated that it will set out its position on this issue in more detail in its May document but, in the meantime, has set out points which will need to be taken into account when deciding what pension costs will be recovered from customers. These include:

- how pension benefits in regulated companies compare with practice in non-regulated companies;
- how any deficit or surplus arose or is expected to arise;
- how the pension scheme is valued;
- the nature of the deficit or surplus, i.e. whether it is permanent or expected to be short-lived;

- the impact that funding a pension scheme deficit may have on the financial position of the company.

We look forward to Ofgem providing more detail in the May document on its proposed approach to the pension issues. In the meantime, we would make the following points:

- The cost of pension provision has risen sharply since the mid 1990s. The main factors have been increasing life expectancy, falling bond yields and declining equity markets.
- Pension benefits are part of an overall remuneration package and, therefore, an 'efficient' level of pensions must be seen in the context of that package.
- The issue of how deficits have arisen (or may be expected to arise) implies that allowability of pension costs for price control purposes could depend on whether deficits have arisen for 'good' reasons (implying recoverability through price controls) or 'bad' reasons (implying non-recoverability). The only point which we would make at this stage is that any such categorisation should take into account benefits to customers which have resulted from company actions, e.g. from the use of pension surpluses to part-fund severance programmes in excess of those assumed when price controls were set.

I would be very happy to discuss further any of the issues raised in this letter (or indeed any of the other issues raised in Ofgem's documents which have not been covered above).

Yours sincerely

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