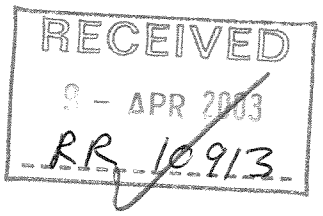
→ Bernard Allen



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Richard Ramsey
Managing Director, Regulation and Financial Affairs
Office of Gas and Electricity Markets
9, Millbank
London
SW1P 3GE

Our ref *Your ref* *Date*
08 April 2003

Dear Richard

Frontier Economics' Reports - Workstreams A and B

I attach Western Power Distribution's comments on Frontier Economics' paper on Workstream B.

In relation to Workstream A, we welcome the clarity provided by making the decision-making process clear, and would support Ofgem's commitment to following the decision-making process laid out in the paper.

If you have any questions regarding our comments or wish to meet to discuss them further, please do not hesitate to contact me.

Yours sincerely

R G WESTLAKE
Regulatory & Government Affairs Manager

c.c Martin Crouch, Ofgem

COMMENTS ON FRONTIER ECONOMICS PAPER – WORKSTREAM B, MARCH 2003

Introduction

Frontier Economics ("FE") Paper is a thorough and useful airing of the issues to be considered in setting network price controls. In particular the concept measuring of efficiency by reference to DNO's operating performance and not solely on cost is most welcome. FE have clearly had considerable experience of the water industry and while this usefully informs their analysis in most areas there are differences between the water and electricity sectors that result in some of their analysis being in need of some further work.

These comments are structured as follows:

Section A: Consideration of assumptions behind FE' paper that have not been fully explored.

Section B: Comments on issues raised in their conclusions/executive summary

Section C: Detailed comments on the paper

SECTION A

Measuring Incentive Power

Much of FE's analysis relies on the concept of how savings are shared between consumers and companies, to measure the strength of incentives, imbalances between incentives, the kind of incentives required for social quality and so on.

This concept of sharing savings between firms and consumers is fundamental to the analysis.

In the water industry the connection between the network operator and consumers is direct and the relation between cost and quality is also clearer.

In the electricity industry the connection between consumers bills and DNO's regulated prices is both indirect and tenuous. DNO's *serve* consumers, but a DNO's customers are supply businesses. Supply business are separated from DNO's legally and commercially and, in practise, each DNO will have over twenty suppliers as customers. Supply businesses are not price regulated but operate in a competitive market.

In these circumstances any analysis that makes the fundamental assumption that regulatory incentives can be measured by balancing the utility to consumers against the retention of benefits by firms has fundamentally misunderstood the electricity industry, by assuming that any price reductions will automatically be reflected in customers' bills (as they are in the water industry).

Over the past 2 or so years, suppliers have not passed a significant reduction in wholesale electricity prices onto consumers. There is therefore little reason to suspect that suppliers would pass any of the benefit from a reduction in a DNO's charges to lower consumers' bills. In practise, as commercial organisations, suppliers are entitled to use the increased margins they would see from a DNO's price reduction to further their own strategic aims including, for example:

- Increasing marketing efforts to increase their market share, and/or
- Offsetting the costs of expensive inherited power purchase contracts and/or
- Improving their IT systems and/or
- Investing in other customer-facing businesses (e.g. financial services, telecoms)

Further, because suppliers taking different strategic or tactical decisions will operate within each DNO's area, and suppliers may target different types of consumer for acquisition and retention, the effect on consumers will be even less clear.

Therefore, although some decisions taken by suppliers may benefit some consumers it is equally likely that a reduction in DNO's charges may result in poorer service for consumers while those consumers' bills either stay the same or increase, depending on suppliers' tactical marketing decisions.

The link between cost and quality

FE assume that quality and cost move together. For they say, at page iv:

> "Since improving quality is costly, there is a trade off between cost reduction and the provision of quality"

and again at page v:

> "Since a regulated company profits from reducing its costs, but quality tends to increase with cost, there is a trade off between cost efficiency and the delivery of improved quality"

In the water industry this link is particularly direct and clear because what is measured in order to determine quality is the quality of the product delivered and processed; for example, the quality of drinking water, or the quality of effluent discharged. In the water industry if a firm wants to improve quality that firm

constructs treatment works (a capital cost), that require greater operating costs in order to run them.

For DNO's the relationship is different and more complex. For DNO's the quality measured is the performance of the delivery system for a pure commodity product. The product itself does not admit of being measured for its quality. Therefore adding assets, and therefore both capital and operating cost, does not improve quality as directly as it does in the water sector.

Secondly, FE's assumption of the link between cost and quality flies in the face of the empirical evidence provided by the electricity sector since privatisation. Appendix 1 shows the movement in costs for WPD (South West) over the last 10 years – a reduction in real terms of 68% in operating costs and a smaller reduction in capital costs producing an overall reduction in costs of 49 %. At the same time as this *reduction* in both operating costs and capital costs performance has improved as follows:

- Customer minutes lost *improved by* more than 60%
- Interruptions per 100 customers *improved by* more than 30%
- 1 hour restoration rate *improved* by more than 100%
- Regulatory complaints improved from 1,113 per 100,000 customers (including supply) to 0.22 per 100, 000 customers

Thirdly, because in the electricity sector network performance is measured, rather than product quality, management action can have an immediate effect, depending on the age/quality of the particular network concerned. For example, Appendix 2 shows the minutes lost by month for WPD South Wales covering the 24-month period starting 12 months before the acquisition of the company by WPD. This shows an immediate improvement in minutes lost of over 20%, accompanied by an immediate reduction in operating costs with no additional capital expenditure being required.

The relationship between cost and quality, and the impact of regulatory incentives is discussed further below.

SECTION B

Executive Summary: Incentives in regulation

Executive Summary: Capitalisation of operating expenditure

The nature of capital expenditure in the water and electricity sectors is different. In the water section significant civil engineering projects can have values of over £100m and as a result capital expenditure is the major part of total costs. For DNO's, capital projects tend to be far smaller and operating costs a greater proportion of total costs.

a) Whether or not expenditure is capital or operating costs is a question of fact as determined by accounting policy. Therefore, although this is a judgemental area, "reclassifying operating costs as capital when it would be more appropriately classified as an operating cost" (page vi) is not simple (without committing the criminal offence of false accounting) and will need to satisfy various conditions and rules set out in FRS 15.

   Before any discussion of comparison of capitalisation can have any practical content, clear rules on what counts as capital activity, and on which indirect costs can be capitalised would need to be in place. Benchmarking is, as FE conclude, attractive in principle and how benchmarking should be calibrated is discussed further later in this response.

b) The management decision between capital expenditure and incurring operating costs is much less clear-cut for a DNO than it is for a water company. DNO's are principally engaged in maintenance of assets and replacement of assets either on a scheduled basis or as a result of faults. Maintenance is typically an operating cost while asset replacement is capital expenditure. Therefore given the nature of electricity networks, and in particular overhead networks, the choice between capital and operating expenditure is therefore usually determined by events for management – faults occur and need to be dealt with.

   The decision that does need to be made by management is the replacement policy, as result of which the difference between capital expenditure *saved* and capital expenditure *deferred* may become blurred. However, given that excessive deferral will result in deterioration of the performance of the network, in the same way that unspent maintenance expenditure would, performance incentives should be set to enable management to determine how much risk of asset failure it is prepared to take. Regulatory intervention in a decision to "undertake capital expenditure when operating expenditure represents the most efficient option" would result in Ofgem taking management decisions. This is clearly undesirable. Ofgem should determine the performance required from each network, and the cost required to produce that performance, both based on the assets and circumstances of each network using appropriate incentives. Management should manage the networks and should set the level of risk of failure within Ofgem's incentive framework.

c) Finally, as explained above, the statement that "Either policy might lead to higher prices for consumers" contains an assumption about the behaviour of suppliers that cannot be supported by the facts.

Executive summary: Periodicity

- FE conclude that periodicity "distorts companies' incentives to time their efficiency savings, rather than making savings as soon as possible". (page vii). Whilst we agree that rolling adjustments may be beneficial, for other reasons, FE's conclusion is incorrect.

  It is truistically the case that companies benefit more from making savings earlier in the regulatory period rather than later. However, the incentive to pursue both operating and capital cost savings continues throughout the regulatory period. Assuming that managers will always try to maximise shareholder value:

  a) Shareholders are neutral between, for example, £1 spent on a cost that could be saved and £1 lost due to regulatory price change – in either case it is £1 not available to shareholders
  b) If a cost saving is available in, say, year 4 of a 5 year regulatory period then if the saving is made 2 years of the saving are available to shareholders as positive value
  c) If the cost saving is *not* made but management wait until after the next review before making the saving then, firstly, the saving will only be available if the regulator's benchmarking exercise misses the fact that the saving would be made and/or no other company makes the saving and as a result the regulator allows the otherwise unnecessary cost in setting allowed revenues.
  d) Given both the number of companies involved and competent regulation it is very likely that either the review process or some other company will reveal the cost as unnecessary.
  e) Therefore, by waiting to take action management are risking otherwise certain shareholder value in the hope that both the regulator and all the comparator companies are less capable of identifying savings than they are.
  f) Further, if implementing the saving has a cost attached then the risk is not that they will only lose 2 years of the saving, but that that they will need to bear the cost of the saving without realising any benefit whatsoever.
  g) Given the significant risk involved in such a bet, a rational management would be better served by making savings as soon as possible.

SECTION C (using FE's paragraph numbering)

2.1 FE rely on the concept of a "managerial firm" as central to the insights of regulatory economics, and state as an assumption that:

"Managers attach a positive value to the profits they create for shareholders, but they dislike profit variability (risk) and also value other aspects of their role that may have a non-pecuniary benefit"

Whilst not disagreeing with the assumption as stated, it requires further elaboration because it has considerable importance to the analysis. In particular:

- Managers dislike variability because the capital markets, both equity and debt typically respond to variability by increasing the cost and availability of capital. Therefore, managers' "dislike" of variability is important in order to maintaining a low cost of capital and liquidity
- It is unclear what "non-pecuniary benefits" means and may be a gloss over some important issues. In practise, managers have legal obligations to their firms as well as their shareholders and so non-pecuniary benefits will include managers obligations to long term financial security of the firm, the necessity to enable smooth operations to continue by not disrupting relationships with the workforce and for a DNO in particular, the long term security of the network.

2.2.1 The power of an incentive regime as measured by FE requires certainty on the company's part in knowing how long a benefit will be retained. Under current regulation the company can only assume that it will retain a benefit until the next review.

2.2.2 *Defining an operating expenditure efficiency saving*: under current regulation companies are not rewarded for making savings compared to their operating expenditure projections. Rather they are rewarded for making savings against the operating expenditure that the regulator believes they require for the period.

2.2.2 Capital expenditure savings are more complex than those shown in this section. For DNO's almost all capital expenditure is what is described as "maintenance capex" in the water sector. There is therefore a need to distinguish clearly not only between "one off" savings and recurring savings, but also between a permanent capital expenditure savings and situations where capital expenditure projections are unspent during a regulatory period because work has been deferred. For example:

- A permanent and recurring capital expenditure saving might be achieved by reducing the total level corporate overheads, so that when the correct proportion of those overheads is capitalised, capital expenditure is reduced on an ongoing basis. This could be measured by examining the quantum of overhead capitalised as well as the percentage.
- A permanent and one-off saving might be achieved by redesigning a capital scheme so that it requires less capital expenditure. Because DNO's capex is largely maintenance capex and, unlike the water

sector, it is not possible to hypothecate the capital forecast across very large capital schemes, measuring these savings is difficult

- Deferrals as opposed to genuine savings can measured in a number of ways:
  - By looking at the state of the network – for example the number of unreplaced decayed poles in an overhead network
  - By examining the fault rates in the network under stress conditions, e.g. storms

In structuring incentives/penalties each of the circumstances needs to be catered for, and balanced in order to ensure that companies are not incentivised to take action that would be detrimental to service quality.

2.5 Customer benefits and optimal retention periods: As discussed in Section A above, there is no longer any direct connection between DNO's prices and customers' bills. It is therefore incorrect to say that:

"Whether an increase in incentive power benefits customers depends on how large the increase in savings is compared to the impact of the diminished share of benefits retained by customers"

Therefore, although increased prices might be not be absorbed by a competitive supply market, decreases in prices are not the principal gain for customers from reduced DNO charges. Rather, the equation is between whether customer disbenefits, in the form of a deterioration of quality of supply, follow a decrease in costs/charges – as was witnessed in recent storm performance.

2.6 and 3(a) Before providing incentives for quality FE point out that it is necessary to benchmark companies so as to ensure that a performance level is set for a particular level of cost. FE also point out that in setting the benchmarks certain factors should either be excluded or dealt with through "normalising for factors outside the direct control of companies". There are various, different, questions to be dealt with within this that require further exploration during the course of the review. These are:

- Items to be excluded should include those financial impacts not under companies' control, for example Local Authority Rates, and pension costs – these are best dealt with by exclusion from the price control as a pass-though mechanism of the sort used by Ofgem during the 2000 price control review
- External operational factors should also be excluded – for example storms - and we support Ofgem's approach to storms set out in the report to Ofgem by Mott Macdonald and BPI in February 2003.
- Management also have no control over the network configuration inherited at privatisation. In electricity distribution the variation in the type of network to be regulated is far greater than that experienced in

the water sector which adds to the complexity of the normalisation process. A largely underground, urban, network will have different cost and operational performance characteristics to a largely overhead and rural network.. These effects should be normalised for both cost benchmarking and operational performance (as they are for in operational terms for IIP)

(b) Having made whatever exclusions, adjustments or normalisation is appropriate, in order to be in a position to evaluate total cost benchmarking or other approaches to benchmarking it is first necessary to determine which *activities* are to be benchmarked and then cost them. Unlike the water industry the costs to be benchmarked include almost entirely operating costs and maintenance capital expenditure, and the choice between operating costs and capital expenditure is less clearly defined. Thereby, the process should be one in which:

- The direct operating cost of maintaining each DNO's asset base would be benchmarked on an asset-type by asset-type basis given the amount of each type of asset that exists to be maintained, and
- Indirect operating costs could be benchmarked on a total cost basis – thereby avoiding the subjectivity involved in decisions of allocation and capitalisation
- Capital expenditure requirements (i.e. maintenance capex) should be determined by the age and condition of the assets assessed in the light of previously reported outputs and costs. (i.e. companies should be allowed the capital expenditure needed to renew assets as they reach the end of their useful lives, but should not receive more than one allowance for the same renewal because the work was not done in an earlier period).

Only after this benchmarking had been undertaken could the efficacy of total cost analysis as a means of avoiding inefficient incentives be judged.

Appendix 1

Cost reductions at WPD (South West)

£m at 2002/03 price level	1992/93	1997/98	2002/03	Saving £m	Saving %
Network costs	46.9	36.9	25.7	21.2	45%
Meter Operator	11.4	8.6	5.7	5.7	50%
IT & Comms	17.8	8.9	2.8	15.0	84%
Customer Service	8.8	5.2	0.8	8.0	91%
Corporate Costs	36.6	16.7	3.8	32.8	90%
Insurance	4.2	3.0	0.9	3.3	79%
Total O&M Expenses	**125.7**	**79.3**	**39.7**	**86.0**	**68%**
Non Operational Capital Expenditure	11.5	4.4	3.0	8.5	74%
Network Capital Expenditure	63.8	64.1	60.7	3.1	5%
Total Cash Spend	**201.0**	**147.8**	**103.4**	**97.6**	**49%**

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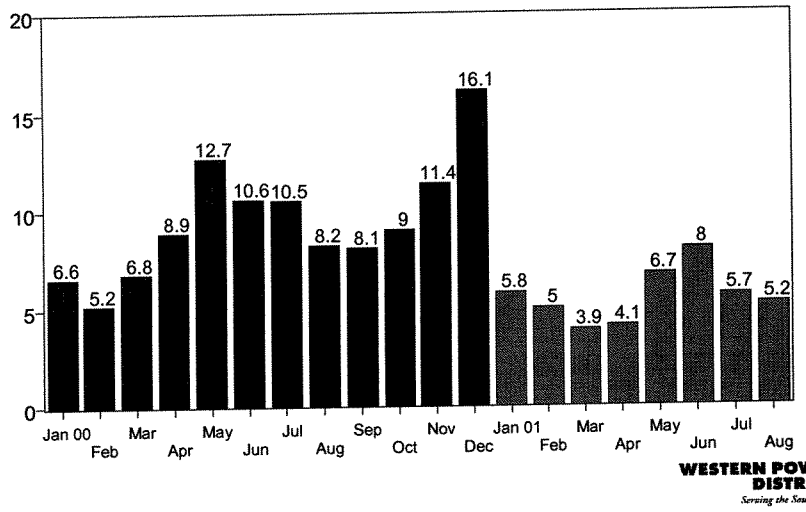
Appendix 2

Customer Service Improvements

Customer Minutes Lost - Wales



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