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National Grid House Warwick Technology Park Gallows Hill, Warwick CV34 6DA

Rachel Fletcher Director Distribution Ofgem 9 Millbank London SW1P 3GE

Paul Whittaker UK Director of Regulation

paul.whittaker@uk.ngrid.com Direct tel +44 (0)1926 653190 Direct fax +44 (0)1926 656520

www.nationalgrid.com

5 June 2009

Dear Rachel

## Electricity Distribution Price Control Review – Methodology and Initial Results Paper

National Grid owns and operates the high voltage electricity transmission system in England and Wales and, as Great Britain System Operator (GBSO), we operate the Scottish high voltage transmission system. National Grid also owns and operates the gas transmission system throughout Great Britain and, through our gas distribution business, we distribute gas in the heart of England to approximately 11 million offices, schools and homes.

Through our subsidiaries, National Grid also owns and maintains around 20 million domestic and commercial meters, the electricity Interconnector between England and France, and a liquid natural gas importation terminal at the Isle of Grain.

We take a keen interest in the development of network regulation, particularly as it affects energy networks. Our lack of familiarity with the specific issues related to electricity distribution network operators (DNOs) means that our comments on this paper are, for the most part, general in nature.

## **Overview of FBPQ Forecasts**

The report states that 20% of the 65% increase in network investment is identified as being driven by real price effects (RPE) and workforce renewal (WFR) although it is not immediately clear how this increase breaks down between the two. This 16% above RPI cost increase for capex for the price control period is consistent with our experiences in electricity transmission.

## Operational cost assessment methodology and results

We support the use of a variety of techniques to assess network operating costs and indirect costs. Such an approach enables the result of each technique to be sense checked giving a more robust set of final allowances. For example, setting final allowances purely on the basis of bottom-up analysis would risk a "cherry picking" effect caused by uncertain allocation boundaries; this can be mitigated by top down analysis.

We believe it is important to recognise the impact of different investment policies and the potential for capex/opex trade-off; benchmarking opex activities separately from capex ignores this trade-off. A company that seeks to repair and maintain its assets will have a higher level of opex than one which replaces them on failure. Some form of total cost benchmarking (for example, total spend per customer) would help to mitigate this.

When using regression, or similar statistical, analysis it needs to be recognised that not all the gap between a company's performance and the benchmark will be down to efficiency. There will be legitimate reasons for company/network variations (e.g. network sparsity/density, regional labour costs, congestion charges, etc.) although we acknowledge that companies have a role to provide sufficiently robust evidence.

We agree that adjustment should be made for the higher labour and contractor costs associated with working in London (within the M25).

With reference to paragraphs 3.66 to 3.71, National Grid uses "open book" alliance contracting which gives us greater visibility of the costs incurred by our contracting partners, particularly the ability to identify the direct cost of work execution activities separately from management support, planning, finance, human resources, etc. which would otherwise have been "rolled up" into schedule of rates and reported under work execution. Given the different contracting strategies adopted by companies, we believe the full cost of contractors should be reported under the appropriate work execution activities.

We agree that atypical costs should be excluded from regression analysis (or equivalent) although this should not be used as a justification for excluding the most expensive jobs on the basis that they *must* constitute an outlier.

## Methodology – Core network investment

As with operating costs, we believe that use of a variety of techniques is appropriate to ensure a robust set of final allowances. Investment activities can vary widely between networks which makes statistical analysis difficult and unreliable. However, for those activities that are largely homogenous across networks, and where there is sufficient volume of work, we believe that statistical analysis can be appropriate.

As regards the asset replacement modelling methodology, the approach adopted by Ofgem appears to share features with that used in TPCR4. It is wrong to automatically assume that any backlog in asset replacement should lead to an asset life extension (as opposed to being for example the short-term outcome of a physical constraint such as system access), nor should it be assumed that it is symptomatic of networks having a "hidden" set of technical asset lives.

## **Ongoing efficiencies and input prices**

This is a complex area and it is vital that any assumptions about productivity or RPE are appropriate to the specific industry. We agree that assumptions should be made regarding productivity although it is fundamental that any elements associated with catch-up are excluded as this is already built in via the results of the regression analysis. The productivity assumption should relate to frontier shift.

We support the inclusion of specific allowances for RPE, although we acknowledge that there are many different forecast sources. During GDPCR we provided historical evidence to support differential growth rates for contractor costs between London and the rest of the UK and external evidence to support a continuation of this differential into the future. Whilst Ofgem acknowledged that labour costs were higher in London it believed that market forces would remove the differential growth rate compared with the rest of the UK; as a result the same RPE for contractor costs was applied to all networks. Historical evidence did not appear to support this contention and a differential rate should be applied to London networks relative to others.

During TPCR, we presented extensive evidence regarding the risk of above-RPI cost increases and argued for indexation; a lump sum allowance was eventually agreed. In general we support the introduction of a better mechanism for reflecting cost increases that are outside the networks' control.

## Output Measures

#### Asset Replacement Measures:

National Grid agrees with the general principle that the measures are there to capture outcomes such as performance, asset health, network capacity/headroom and network risk. However, there is no mention within the measures or the longer term development requirements of safety and environmental considerations. National Grid considers that the inclusion of such considerations is important.

The drafting of the document implies that condition information is a surrogate for fault rate. This is not necessarily the case as condition could deteriorate and an asset still perform as required, until it was called upon to operate. In these circumstances the risk to loss of supply has increased but this is not reflected in the fault rate.

## Additional safety nets

National Grid notes that the replacement volumes will be monitored as part of Ofgem's investigations of efficiency and value for money of investment. However, while such monitoring may help identify whether too much or too little investment is taking place, it is not likely, on its own, to identify whether the right solutions are being developed and used. This approach may also have the effect of constraining innovation and reduced improvements in asset management capability which would clearly not be in the best interest of the consumer.

Great care should be taken using monitored volumes to determine "implied asset lives" where a volume backlog against policy has resulted from actions taken by the company in the consumers' interest. In this circumstance, using implied asset lives to determine volumes can result in a level of network risk that would be unacceptable to the consumer.

It is to be expected that investment volumes will change during a review period - this can be for a number of reasons:

- Asset management advances resulting in changes of asset lives
- Incidents leading to discovery of unknown/unexpected failure modes transmission examples include cable tape corrosion and corrosive sulphur
- o Improved condition information
- System events outside of control of the operator which impair the ability of the operator to take outages

#### Further measures

There is an expectation that, as the DNOs develop their asset management capability, new measures will be available to the regulator; the timescale of such developments is unknown.

It is imperative that the designed outputs have a use within the relevant businesses; an approach which places an obligation on the DNOs to produce outputs for the sake of it will be an inefficient use of operational expenditure and not in the interest of the consumer. The right measures should always be useful to both business and regulator.

#### Incentivisation

Well formed and accurate measures may be useful for incentivisation but, until fully developed and without some operating experience, there is a risk of unintended consequences.

At this early stage, it is more likely to be sensible to promulgate and monitor the measures and use this as a starting point for reviewing how input changes are affecting outputs rather than leap immediately to incentivisation. As confidence in the stability of the measures increases, it may then be possible to move to more mechanistic incentivisation.

#### **Cost incentives**

We consider the proposal to equalise incentives between capex and opex may have merits but we are keen to understand the new incentives created by such a change.

The approach will deal with known issues with the current approach such as:

- o consistency of reporting across networks, and
- the bias it creates in capex/opex trade-off decisions.

However, it will create new incentives and there should be a formal assessment of these as part of the review.

#### Managing uncertainty

#### Balance between specific and general reopeners

It may be desirable for specific reopeners to be established for a small number of items which are known to be volatile and which have a material impact on network returns. Where possible, revenue changes should be mechanistically achieved using clear cost indices. Where the change is difficult to index, the re-opener should clearly allow for the identification of the additional efficient costs associated with that change.

A more general re-opener – along the lines of an IDoK – would also allow a review of allowed revenues to take account of material unforeseen changes which are outside of networks' control. Such a mechanism could sit alongside and complement a small number of specific formulaic adjustment mechanisms.

These mechanisms should not be seen as replacing Ofgem's duty to have regard to the need to secure that licence holders are able to finance their activities, nor the ability of Ofgem to reopen or disapply price controls mid-term should this be necessary and justified.

The form of re-opener needs to be addressed in the context of the overall price control, including the decision on cost of capital, moves to equalize incentives whilst maintaining efficiency incentives, and the existence of cap/collars on incentives schemes – though the extent to which the overall network risk can be reduced by such mechanisms is likely to be relatively limited.

It is not clear that these mechanisms actually reduce risk, rather than forming a necessary part of a balanced price control settlement in an environment where risk has significantly increased. In some circumstances, introducing such mechanisms may increase risk.

The paper appears to identify most of the main factors that would influence which option might be applied to a particular risk, though a further factor is whether the risk is such that its impact can be included in an automatic adjustment mechanism (e.g. impact of a change in input costs), or whether the impact of a change cannot be pre-defined (e.g. a new or changed legal requirement).

It is important that the networks retain incentives to take steps to manage and/or mitigate risks where possible and cost-effective, so as to minimise any adverse impacts on consumers, both in the short and longer term.

#### Additional risk mitigation mechanisms

Generally, Ofgem appear to have defined the full range of options.

As regards logging up there is a least an argument for this only to be applied to one-off or temporary changes, and not to ongoing and sustained changes which (in the interests of achieving predictable and stable prices) should be passed on immediately.

It may be possible for certain risks to be addressed by up-front hedging strategies rather than through pass-through or sharing factors – Ofgem could encourage such approaches by treating any the costs of such strategies as allowable.

We would be happy to expand on any of the points made above.

Yours sincerely

[By e-mail]

Paul Whittaker UK Director of Regulation