Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

2006-2010 ESB Price Control Review

CER Decision Paper on Distribution System Operator Revenues:

Responses to Comments Received

CER 05/137

9 September 2005

1. BACKGROUND

On 26 July 2005 the Commission for Energy Regulation issued a consultation paper on ESB Distribution System Operator (DSO) Revenues for the period 2006-2010 (CER/05/117). This paper responds to the substantive issues which were raise by the parties who participated in the consultation process and should be read with the Commission's final Direction (CER/05/138). The following parties forwarded submissions:

- Airtricity
- BOC Gases
- ESB DSO
- Northern Ireland Electricity

These submissions are published with this paper.

2. SUMMARY OF COMMENTS RECEIVED

- ***General Comments***

The DSO has raised concerns regarding the scale of the Commission's reduction in its submitted revenue arguing that the cuts proposed by the Commission are extremely challenging in terms of managing the cash flows of the business over the next few years.

The Commission recognises that the targets it has set for the DSO are challenging. However, it is wholly appropriate that the DSO allowed revenues should face a critical and objective review by the Commission. These targets have been devised in accordance with standard regulatory practice and, more importantly, to drive out existing inefficiencies within the business. The Commission has conducted a detailed cash flow analysis of the DSO business to ensure that its decision on DSO revenues is consistent with CER's obligations under the Electricity Regulation Act 1999.

Airtricity believes that the proposed regulatory revenues for 2006-2010 are overly generous to the DSO and do not adequately balance the interests of customers who have faced significant increases in their wires charges since the low point of 2003 – mid-way through the initial Distribution Price Review.

The Commission disagrees with this view of the revenue review. The review will result in a 15% reduction in controllable opex by 2010. The DSO's capex proposal has been rigorously reviewed by the Commission and reduced by approximately 15%. The Commission's duty to the final customer has been central to the review. It should be noted that the Commission also has an obligation to ensure that ESB Networks is able to maintain the distribution network to an adequate standard to meet customers' expectations. The Commission believes that the allowed capex and opex achieves a fair balance between these objectives. The Commission's review has led to a 11.5% reduction in the distribution tariff in 2006 from its 2005 level.

- ***Capex***

<u>New Business</u>

The Commission has proposed that, in addition to a general productivity improvement factor, a 7% reduction be applied from 2008 due to the introduction of the Mobile Workforce Management System (MWFM). The DSO has pointed out that this system will impact only on the labour element of the new connection cost and therefore any efficiency improvement arising should only be applied to this component. The DSO has provided CER with calculations detailing the proposed amended unit costs.

The Commission accepts the point made by the DSO and has adjusted the allowed revenues accordingly.

<u>Metering</u>

The DSO has disagreed with the Commission's assessment of its metering costs particularly when compared with similar costs in the UK. The DSO has conducted an NPV analysis of the most common meter installed, the single phase electromechanical meter, which in the DSO's view demonstrates that the costs on a life-cycle basis are almost identical with the UK. DSO sees no justification for reductions in its submission in relation to metering.

The Commission believes that significant savings can be made in metering capex, based on the professional opinion of their consultants and in comparison with UK experience. Prudent specification and procurement of electronic single-phase credit meters in particular should result in such savings while avoiding the problems described by the DSO. Shorter economic lives are indeed an inevitable consequence of a move to electronic meters. However ongoing development should reduce this effect over time. Defining meters as assets with a 15 year lifetime should also ensure that the DSO is able to recover its investment adequately.

Load related Capex

DSO considers the Commission's analysis in relation to proposed reductions in load related capex expenditure to be inconsistent with the licence requirements of the DSO to meet the needs of the economic growth in the country. It also disagrees with the Commission's comments in relation to procurement of materials.

The Commission, with its consultants, has conducted a thorough and independent review of the DSO's proposed load-related capex proposals. It is the considered advice of its technical advisers that the revised load-related capex is sufficient to meet the load–related capex programme proposed by the DSO. The Commission has accepted this advice. The Commission's comments on procurement were aimed at contracting and not materials costs.

Non-load related Capex

The DSO broadly accepts the Commission's view of its non-load related capex programme.

In relation to the LV Rural aspect of the programme the DSO has said it will review the proposed scope of work for the programme in light of CER's comments to ascertain if the savings against the submitted proposal can be made. DSO believes that components with less than 10 years remaining life should be replaced given the costs of inspection and of bringing materials, crews and equipment to a rural site and the overheads associated with switching.

DSO's forecast reduction in the number of validated complaints was based on the full completion of the electrical improvements in the renewal plan. As DSO believes that the extent of electrical improvement achievable within the reduced allowance is limited it has a concern that more voltage complaints will arise due to the reduction in the electrical works.

In relation to the MV Overhead programme the DSO disputes the CER view that completed work has concentrated on the lines in worst condition and the remaining lines (at end of 2005) are in reasonable condition. 85% of the networks completed by end 2005 will have been done by contractors during the period 2002-2005. To minimise costs, the approach adopted was to complete the entire MV network in a given locality before moving on to a new locality. The Commission's stated reason for not allowing the submitted amount to complete the programme is unfounded.

CER does not approve of wholesale replacement of any asset unless specifically justified on the basis of safety and continuity. The methodology by which NRP1[1] *has been undertaken and NRP2 is proposed involves wholesale replacement on an incremental basis (the DSO has for example said that it is cheaper on a per unit basis to cover a wide area than to focus on lines in poor condition).*

The Commission insists that the DSO undertakes tight control of NRP2 so that the focus is on the renewal of plant that has a serious risk of failure resulting in real public safety and supply continuity effects. In general, the failure of LV plant does not have such effects and it is much more efficient for an operator to respond to reported disconnections than to seek to pre-empt them.

In relation to the MV overhead work, and based on the evidence seen, the Commission has not been convinced that approaching the programme on a geographical basis, rather than prioritising around asset condition, was the most appropriate approach. The two elements the DSO proposed in its submission are the completion of the MV Overhead Renewal Programme (€130M) and the upgrading of pre-2003 20kV lines to the current NRP standard (€46M). This is after nearly €1bn has been spent on NRP1, mainly on MV overhead line renewal.

The CER contended that completion of NRP1 (MV Overhead Renewal) should be amenable to substantial reduction as the completed work should have concentrated on the lines in the worst condition and the remaining lengths were considered to be in reasonable condition and could be addressed on a hazard or as-necessary basis. However, the DSO has clearly stated that this is not the case and that, if anything, the remaining MV lines are in a worse state than those that have been renewed.

CER has allowed most of the requested capex (€111M versus €134M requested; a 17% reduction). This reduction presumes that the DSO can make at least some savings through focussing on tight condition-based asset renewal. The request to re-renew the 20kV lines renewed before 2003 is disallowed.

Response Capex

The DSO states that the Commission's calculations have allowed for a substantially lower forecast of response capex than forecast by the DSO.

The proposed reductions in Response Capex related to known areas of inefficiency and specific areas in which customer contributions can and should be sought to defray capex. However the Commission recognises that this area of expenditure can be difficult to forecast and having considered the DSO's comments agrees to a response capex allowance of €125m. The Commission accepts the principle that response capex expenditure that is efficiently incurred net of charges levied ultimately is recovered by the DSO. Any over or under forecasting of this area of expenditure will be adjusted at the beginning of the next price control period.

IT Programme

The DSO considers that the disallowance of 10% by the Commission appears unreasonable and that additional funding will be required to deliver key IT projects required to deliver efficiencies in both operating and capital expenditure.

[1] Network Renewal Programme

In the Commission's view, based on the information provided by the DSO in its submission and on the advice of CER's IT consultant, the amount allowed is sufficient.

- ***Opex***

DSO believes that the Commission's proposals in relation to operating costs are overly severe. According to the DSO significant savings were already incorporated under this area in its submission for the period 2006-2010. The revised allowances set by the Commission represent further reductions. These reductions are deemed to be extremely challenging resulting in a requirement to reduce overall operating costs by 15% by the end of the regulatory period. In addition, the Commission has not made any allowance for the costs associated with achieving such efficiencies.

The CER has undertaken a very detailed review of the DSO's opex. This has revealed that the DSO in comparison with comparable utilities needs to drive out further efficiencies from its cost base. The DSO disputed the extent of this inefficiency with CER, nevertheless it accepted that its opex needed to reduce over the next regulatory control period. The CER believes that the opex reductions contained in its proposal represent the minimum expected of the DSO.

In relation to corporate overheads Airtricity supports the Commission's focus on the elimination of all non-essential Corporate overhead from being recovered through the regulated businesses. However it believes that activities that are currently Corporate, but relate to each of these businesses, should be moved into each business and included in the general opex cost reduction incentive.

The benchmarking of the total operating costs of the DSO showed that operating costs are higher than its peer group. There is still some way to go to reduce operating costs to international benchmark levels, and this would also apply to Corporate Overheads which are allocated to the DSO. The current review has made a clear distinction between those corporate expenses that can be directly attributed to the DSO business and those that appropriately remain within the corporate centre.

Meter Reading

Airtricity's experience is that the current target of four actual meter readings per annum is far from being achieved. It is not only remote, unmanned sites that are not being read, but urban, commercial premises. If a new target of six readings per year is to be implemented, with a commensurate increase in cost to Suppliers and hence to customers, we would want to see some significant penalties imposed on ESB DSO for failure to deliver on this important aspect of customer service. In particular, it is essential that this activity is separately identified in DUoS tariffs and that Suppliers should be able to dispute payment where the service is not being delivered over an extended period.

The Commission has decided to maintain the number of meter reads at four per annum for the present.

- ***RAB and WACC***

<u>WACC</u>

DSO is of the view that the cost of capital proposed by the Commission does not provide adequate returns relative to other assets/similar entities that have comparable risk and on this basis request the Commission to reconsider their proposal. At a minimum the equity risk premium allowed to DSO should be the same as allowed by the Commission for the best new entrant generator and ESB Power Generation, as this is an overall market parameter and not related to an individual business' risk.

In the Commission's view the return allowed to the DSO on its investment is a reasonable reflection of the risks associated with that investment. The Commission acknowledges that the equity risk premium for ESBPG as set out in the consultation papers issued in July, differs from the Networks business. This has now been rectified. The DSO WACC remains at 5.63%.

Airtricity made a number of points in relation to different elements of the WACC.

The Commission has already explained in its consultation paper that ESB competes for capital on national and international markets as does any other business. Its cost of capital is therefore related to the riskiness of its return is relative to businesses with other similar assets, which does not depend on the ownership structure of the company. Therefore, for a company such as ESB, which does not have traded equity, the cost of capital must be determined by assessing the returns to assets that have comparable risk because it competes with such businesses for scarce capital.

<u>Network Asset Lifetime</u>

The DSO believes that in order to ensure that it recovers the efficiently incurred cost of network assets which have a lifetime of less than 45 years, such assets should be included as part of the RAB for 45 years.

Efficiently incurred expenditure on Network assets that are retired prior to 45 years will remain in the asset base until fully depreciated. The DSO must advise the Commission on an annual basis of the retirement of such assets and ensure that appropriate documentation is maintained to vouch for the condition of the assets at the time of retirement. The Commission may conduct on audit of such retirements on an annual basis or at such frequency as the Commission deems appropriate.

Airtricity believes that instead of using a single value for asset life, ESB DSO's assets should be grouped on the basis of reasonable expectation of similar life expectancy and depreciated accordingly. Switchgear and some transformers appear to have a significantly longer mean life expectancy than 45 years.

The research presented in the CER/05/117 supported the increase in Network Asset lives. The Commission believes that the asset life chosen represents a prudent estimate of the average asset life of these assets.

<u>RAB calculation & Efficiency Savings retention</u>

The DSO has pointed out that the Commission's proposals do not include an allowance for the retention of efficiency savings achieved during the 2001-2005 period and spend on premises that drove efficiencies. This is contrary to the principle of retention of efficiency savings on a 5 year rolling basis as outlined by the Commission and accordingly DSO is of the view that this needs to be reconsidered.

The Commission has considered the DSO's comments on this issue and appropriate amendments have been made to the allowed revenue calculations.

Airtricity has asked to what extent has the Network has been reviewed for under-utilisation and how has asset valuation been carried out.

The Commission's review included consideration of stranded assets within the regulated asset base. This covered:

- *Consumer connection assets where the consumer has moved or otherwise ceased consumption*
- *Substations or feeders built to serve projected loads that did not materialise.*
- *Excess transformer capacity across the network.*

The number of assets that fall into one of the above categories and their contributions to the RAB value is very small in ESB's case.

Airtricity believes that in view of the scale of the asset base required by ESB DSO and the impact of any valuation errors on retail tariffs, that an independent system design expert should be retained to develop a reference Network design for Ireland, to be used as the basis for future RAB valuations. Airtricity also raises a question on the Commission's proposed Replacement Cost basis of asset valuation, as it is not clear from Section 5.1.2 whether "Replacement Cost basis" refers to a decision to use MEA, Indexed Acquisition Cost, or a combination of the two.

The Commission believes that its recent economic and technical review of the DSO asset base effectively calculates the appropriate value of the DSO RAB and that the type of analysis suggested would add unnecessary costs to the distribution tariff. The Replacement Cost basis is Indexed Acquisition Cost.

Airtricity has said that it is not clear whether network renewal is brought into the asset base. The Commission has allowed additional capex to be brought into the asset base if assets are found to have deteriorated unexpectedly, but Airtricity does not believe it is correct to treat expenditure of this sort in this way. As ESB DSO moves towards condition-based replacement, rather than time-based replacement, some assets will be found to last longer than expected and others to last for a shorter time. Airtricity believes that the only assets that should be brought into the RAB are those that increase the value of the Network, by increasing its reach or the marginal expenditure on increasing its capacity or reliability.

Please refer to the Commission's response to the DSO on asset lifetimes above.

- ***Incentives***

Customer charter

The DSO has provided the Commission with details of the proposed Customer Charter management system and the criteria for generating defaults under each of the twelve customer network guarantees.

The Commission is currently considering the information provided by the DSO and will respond separately on this issue.

Losses

The DSO broadly welcomes the Commission's proposals in relation to the treatment of losses. The DSO recognises that it will be important to review this issue once results of bulk supply metering are available as if actual losses are different there will clearly need to be an adjustment to the targets.

The Commission agrees with the need to review loss targets in the light of the results of bulk supply metering and with the preference towards LRMC valuation of losses.

<u>Continuity incentive</u>

DSO welcomes the Commission's approval of the measures proposed to improve continuity and acceptance of the Customer Interruptions (CI) and Customer Minutes Lost (CML) targets proposed. The DSO has modelled both CI and CML improvement based on the planned measures, and considers it inappropriate not to adopt the CI improvement as forecast by the DSO.

Please refer to CER decision paper 05/138.

- ***Other issues***

<u>Revenue Formula</u>

Under the Commission's proposed revenue formula there will be an adjustment similar to the DPR1 formula whereby account is taken of higher/lower customer number than forecasted. Given that costs are incurred by the DSO in relation to new connections as opposed to new customers DSO proposes that this adjustment should apply to connections rather than customers.

The Commission agrees with this suggestion.

<u>Tariff disaggregation</u>

Airtricity raised a number of points in relation to the distribution tariff structure.

These issues will be addressed as part of the distribution tariff structure review. This review is currently on hold but will be recommenced as part of the Commission's 2006 work programme.