

Northern Ireland Electricity Limited

**Assessment of Potential Financing
Options for Utility Networks**

Discussion Paper

NIE's Response

18 February 2011



1. Summary

Northern Ireland Electricity (NIE) welcomes the opportunity to submit its comments in relation to the financing of infrastructure in Northern Ireland following the publication of a paper by First Economics¹ and the Utility Regulator's conference on 12 January 2011.

Given the need to attract investment, and to incentivise the efficient and timely delivery of the investment programme, NIE strongly advocates the retention of the traditional and proven equity financing model to support investment in electricity infrastructure. As we discuss below, neither of the innovations put forward in the First Economics paper are likely to bring about any reduction in the costs that need to be borne by customers when compared to the prevailing equity model; indeed in our view they would introduce both cost and risk to the delivery of the infrastructure programme. In any event, First Economics' conclusion that utilities are presently inefficiently financed is based on a flawed analysis of only a subset of the relevant information. The remainder of this paper is comprised of the following sections.

- In Section 2 we provide an overview of the past performance of the traditional equity model of financing, which reveals it has an impressive track record.
- Section 3 notes that there are no automatic benefits associated with highly geared financial structures which pass risk to customers and lack incentives to control costs.
- In Section 4 we then review briefly the analysis put forward by First Economics in Section 2 of their paper, which we believe is flawed and does not provide a foundation to argue for substantial changes to existing regulatory arrangements.
- We then discuss in Section 5 the merits of the delivery of major projects by third parties in the specific context of NIE, concluding that the proposal is unlikely to deliver any meaningful efficiency savings, could well increase costs and would certainly introduce risk to the delivery of the programme.
- In Section 6 we discuss First Economics' proposal for RAB separation. Again, we conclude that there is no evidence, compelling or otherwise, to believe that this proposal will reduce the costs that must be borne by customers and in fact actions that change the treatment of the existing RAB may well increase costs.

Finally, at a time when public finances are under severe strain and will be for the foreseeable future; it is important that the private sector is not discouraged, or indeed prevented, from providing the funding for vital infrastructure

¹ "Financing Networks: A report for the Utility Regulator", First Economics, 30 November 2010, published as a Discussion paper by the Utility Regulator December 2010.

2. Equity Model

Proven record

The equity model has a proven ability to deliver value for money for customers and remains central to regulatory best practice. The impressive track record of the equity model, combined with efficiency incentives, means that the potential risks of a move to a different regulatory model would be high. The equity model has also delivered an effective management and governance structure, and a radical departure from that model would bring with it material implementation risks, particularly at a time when there is the need to undertake a very significant investment programme. The success of this long established and well understood approach to regulation implies that policy makers should be cautious when considering whether to make very material and uncertain changes to those arrangements. Unless there is incontrovertible evidence that the proposed alternative will deliver significant and sustainable savings for customers, policy makers should seek stability.

Precedent

The stated position of GB regulators including Ofgem, Ofwat and the Competition Commission is that it is not for them to impose a particular capital structure but to set price control incentives within which companies are free and incentivised to optimise performance. Financing structures such as mutuals have not been promoted by market participants and policy makers, suggesting that they typically do not bring clear benefits.

No need for government funding or guarantees

Victor Hewitt's presentation highlighted concerns in relation to NI public finances. NIE is proposing to invest c£2bn in the electricity network over the next 10 years without government support. This investment includes the connection of additional renewables capacity in order to meet DETI's target for 40% of electricity consumed in Northern Ireland (NI) to be generated from renewable sources by 2020 (as per the Strategic Energy Framework, published in September 2010).

3. Financial structures involving increased gearing

Financing theory shows that there are no automatic financing benefits from higher gearing, and that inappropriately high gearing can actually increase financing cost and increase the risk of financial failure.

In the case of Mutual Energy, the highly geared debt structure has been achieved through a regulatory regime that passes all risk on to customers, and effectively places no incentives for ongoing cost efficiency on the business. It is a significant shortcoming of the mutual model that no such incentives, or penalties, are possible.

The incremental benefit of mutualisation is not clear, since any perceived benefit is countered by:

- (i) the mutual model's heavy reliance on sustained supportive legislation including the need to grant long term licences with no/limited periodic price control reviews;
- (ii) reduced regulatory flexibility. Once the mutual entity has been established the regulator has little/no control. It would be costly to reverse and would provide a significantly less flexible response to adverse credit conditions and cost shocks;
- (iii) lack of incentives to control costs, given that the mutual model currently applied in NI relies on a regulatory guarantee of 100% cost pass through of all finance and operating costs;
- (iv) lack of protection for consumers in the event of financial distress. A Special Administration regime is shortly to be put in place in Northern Ireland (similar to the existing arrangements in GB) to protect consumers. There is unlikely to be such protection in the mutual model where debt-like funding to a very highly geared entity would only be provided through project finance type structures where financiers have security over the assets and rights to 'step-in' and manage the assets if financial covenants are breached. These enhanced rights would increase the risk of disruption to customers;
- (v) increased debt funding costs associated with acquiring assets at a premium to RAB and the need to fund debt service and maintenance reserve accounts which are not required under the equity model ; and
- (vi) duplication of Board and management structures (for simple assets).

The Glas Cymru model is superficially more relevant for an entity which is exposed to ongoing operational, demand and investment risks. However, in order to manage these risks, Glas maintains an equity-like buffer of around 30% of RAB to reflect the riskiness of a network operator under incentive-based regulation. Glas Cymru's equity cushion came, in the first instance, from an owner that wished to achieve a quick sale at the time investor sentiment was typically depressing water company valuations. Absent these specific circumstances, any attempt to replicate the Glas Cymru model would require an equity injection from customers to create such a buffer and to cover the acquisition premium. In addition, there is a significant risk that over time incentives would be weakened to facilitate a cost of capital that would be lower only because cost risk had been transferred to customers, and this could be of far greater long term cost than any financing benefit.

4. Evidence of inefficiency in the prevailing financing model

First Economics argues that there are reasons to believe that utilities are not at present being financed efficiently, specifically that:

'companies might be paying their investors too high a cost for providing capital, given the apparent risks they face.'²

² Page 12, text box paragraph 1.

First Economics provides a stylised representation of the different activities undertaken by most network utilities (i.e. an “operating business”, a “projects business” and a “capital recovery business”) stating that these activities have different risk profiles. It then goes on to develop the position that the higher risk parts of a regulated business ‘taint’ the lower risk elements of the business and the risks of such businesses in aggregate are overstated. Consequently, it is argued that the current financing approach is sub-optimal and greater separation is desirable.

In our view, the stylised arguments put forward by First Economics are without merit. The argument depends on the view that debt and equity investors are unable to adequately understand the risks of any entity that undertakes more than one type of activity. First, we would argue that the great majority of businesses undertake a range of activities and financial markets have become accustomed to dealing with such companies. We are unaware of any literature that suggests that the value of such enterprises might be fundamentally misrepresented. Second, the prevailing model of utility financing has been in operation for over 20 years. We would argue that this long term relationship between utilities and investors has provided investors with a wealth of experience from which to draw robust conclusions over the risks those businesses bear. The notion that investors acting through financial markets are unable to estimate the average risk of an enterprise engaged in a range of activities, and/or that there is insufficient competition to ensure finance is secured at a competitive rate, is implausible.

First Economics also presents a range of analysis³ that they believe demonstrates the existence of inefficient financing, focusing on an increase in the ratio of equity to annual total expenditure for the E&W water and sewerage companies and NIE. First Economics is unable to find any reasonable explanation for the increase in this metric between vesting and the present day and imply that since they believe that risk has fallen (or at least not increased), therefore the value of this metric should not have increased. The First Economics analysis ignores a number of important factors that suggest that the risks borne by these businesses will have increased since vesting. For example, regulated companies have driven substantial pre-privatisation inefficiencies from their businesses creating a far more material risk that cost allowances going forward might prove unachievable than was the case at privatisation. Additionally, the First Economics analysis takes no account of the finance risk now borne by regulated companies arising from substantially increased debt finance compared to the level in place at vesting. In any event, if we look at the level of equity involved in financing the water and sewerage sector, we find all of the increase First Economics highlights occurred during the first 5 or 6 years after privatisation, during which time the sector invested amounts that more than doubled the size of its RAB. Since then, the trend has been for a reduction in the value of equity involved in financing the sector⁴.

In summary we believe that the stylised arguments presented by First Economics are flawed and their analysis of data incomplete and misleading. Consequently,

³ See for example Table 2.2 and 2.3 on pages 9 and 10.

⁴ See Ofwat’s annual reports on the financial performance of the water companies in England and Wales, over the period 1995 to present.

their conclusion that the prevailing arrangements lead to inefficient financing is not proven and in our view is simply wrong. In this context it is tempting to dismiss their proposals, given that they are designed to address a problem that does not exist. However, notwithstanding this, in the following two sections we consider the merits of each of their proposals and assess whether they might deliver savings for customers.

5. Delivery of Major projects by third parties

The First Economics paper recognises that only certain projects may be suitable for this model of procurement because of the need for each identified project to be:

- discrete enough to enable clarity of role, responsibility and risk separation; and
- of sufficient overall scale to merit the relevant financial transaction costs.

It would also be unwise to increase the involvement of third parties unless there was reason to believe that those third parties might be better placed to manage the risks associated with the tendered project.

There are very few (if any) proposed major projects within NIE that would fit these basic criteria. All of the projects to be undertaken are either too small to warrant a costly procurement process or too intermeshed with wider network operations for the risks and responsibilities to be separated. Even for identifiable projects (such as the Interconnector) that might theoretically be capable of such separation, it should be recognised that the primary sources of risk (and cost escalation) such as those associated with planning approval and land owner consents, and those associated with interfaces to both the NIE and ESB networks, would remain with NIE and the electricity customer. In our view, these risks, and associated costs, would rise substantially as a result of the artificial separation of activities and risks between the involved parties.

Much of the electricity transmission development that will take place over the next number of years will involve upgrading parts of the existing 110kV system e.g. by re-conductoring 110kV overhead lines or adding additional transformers to existing substations or adding additional circuits to existing routes. By definition these assets will be fully integrated within the existing transmission network and the practical difficulties associated with unbundling them to facilitate any separate financing structure are likely to be substantial, cumbersome and complex to the point of adding to, rather than reducing, costs and risks to their delivery - e.g. each asset would have to be separately financed and economies of scale would be lost. First Economics acknowledges that such investments would not be suitable for third party delivery⁵.

Even if such projects did exist, it is not clear that the First Economics proposal will create material incremental benefits. A key element of their argument is that third party activity will bring competitive pressures to bear in procurement and also in ensuring that delivery risks are assigned to the party best able to bear them.

⁵ Page 13, Section 3, paragraph 2.

However, this is already a critical part of NIE's proposed strategy for delivery of major infrastructure projects since these will in all probability be delivered through EPC (Engineer, Procure and Construct) contracts under which a competitively procured commercial contractor would undertake detailed design, procure relevant materials and sub-contractors etc for civil works, manufacture erection etc, and deliver a finished "turnkey" package at agreed interfaces, all within a contracting package that would assign relevant risks as appropriate between the contracting parties. It is difficult to see how the proposed Design Build Finance Transfer (DBFT) approach would deliver reduced construction costs when compared against NIE's preferred EPC approach, other than by transferring risks that should normally and correctly be taken by an EPC contractor back to NIE in the interests of obtaining a reduced headline EPC cost. Such an approach would be counter intuitive and against the long term interests of customers, since NIE's share of the residual risk would rise disproportionately in the absence of control. The majority of the competitive benefit (that arising from competition to perform detailed engineering design, supply materials and carry out erection works) will be secured since these activities are outsourced in any event. It is therefore difficult to realise any practical benefit from this process, and there would be a substantial risk of increasing, rather than reducing, the overall costs that would eventually be borne by electricity customers.

6. RAB separation

Finally, we review First Economics' proposal for the separation of the RAB from the existing licenced business.

The First Economics proposal appears to bring nothing new to the debate. In our view, it is essentially a modest evolution of Dieter Helm's idea of a split cost of capital. The notion of splitting the RAB in this way was considered explicitly by Ofgem in its RPI-X@20 review and rejected. Indeed, Ofgem has now rejected the split RAB approach twice, following its consideration in their financing networks consultation from 2006. The starting point for any debate over the introduction of a split RAB model should be Ofgem's careful consideration of this proposal, yet the First Economics paper does not even provide a summary of Ofgem's conclusion.

We foresee a range of material issues with the split RAB proposal.

- Separation of RABs to reduce risks in one component of the business, as postulated by First Economics, has the inevitable consequence of raising the level of risk (and associated financing costs) in the other component(s). Fundamental business risks will not evaporate as a result of structural modifications. First Economics recognises this point in their conclusion that any overall reduction in financing cost would have to come from a transfer of risk to customers (see page 28 bullet 3).
- The First Economics proposal to have bank debt underwritten by primary legislation is undesirable and unworkable. The public finances are under severe stress in any event and do not have the capacity to offer guarantees of this kind to private companies.

- First Economics takes no account of the likely increase in the cost of capital that would arise simply from adopting a model that is materially different from standard international practice, which would add to the reality and perception of increased regulatory risk. Investors are likely to regard moves in this direction as a material specific risk arising from investing in NI utilities.
- First Economics does not consider the need for a root and branch re-evaluation of the incentives associated with investment and stewardship of networks to ensure that they continue to provide adequate reliability and quality of service, which would inevitably add further to the reality and perception of increased regulatory risk.
- First Economics' analysis ignores the need for a level of debt funding to purchase the RAB at market rates, which would typically involve a premium, and to cover the need for debt service and maintenance reserve accounts. Other transaction costs of restructuring, such as investment bank fees, are also ignored.
- First Economics ignores the important role that debt finance plays in increasing the resilience of the sector to substantial shocks. Under the traditional equity model a company subject to a severe shock could restructure its debt and continue to operate. Under First Economics' proposal, the costs of such a shock would need to be borne by customers (or the taxpayer) as payments to debt holders would be guaranteed.
- Under the equity model, companies are provided with strong incentives to minimise the cost of any debt financing they put in place. Such incentives would be materially weakened (potentially removed entirely) under the First Economics proposal.
- Creating operational / interfacing risks and reducing the clarity of responsibility and accountability under all foreseeable circumstances, bring the grave danger of increasing the customers' exposure to additional electricity supply risks as well as those related to cost.

In summary, we do not believe that the prospective customer benefits that are practically capable of delivery under the alternative financing mechanism suggested by First Economics are sufficiently material or sufficiently secure to merit the transactional complexity and the overall risks arising from such a significant departure from the proven regulatory approach.