**Energy Networks Association – ENA**

**ENA Response to Ofgem's 'Embedding Financeability in a New Regulatory Framework' Consultation**

**9th April 2010**

# 1 Executive Summary

As part of its RPI – X@20 project, Ofgem has recently published a consultation on how the issue of financeability should be treated in future energy network price reviews – 'Embedding Financeability in a New Regulatory Framework, hereafter referred to as 'Embedding Financeability'.[1] The core messages of the document are that:

– more of the cost of expected investment in energy networks should be borne by future consumers and less by existing consumers, resulting in weaker short-term cash flows for the networks;

– little or no attention should be paid to the resulting deterioration in short-term financial ratios when setting price controls, even when the companies in question are operated and financed 'efficiently';

– to the extent that the proposed might cause problems for existing network financial models, any issues should be resolved by the networks finding different investors and/or reducing gearing;

– in any event, energy networks are inherently low-risk businesses and there is a 'negligible risk' that the proposed changes would cause financeability issues.

ENA has a number of serious concerns with these proposals.

– Ofgem has produced no evidence for its proposition that its proposed change of approach will run a negligible risk of causing financeability issues.

– In the absence of such evidence (and prior to receiving the report which we have commissioned to investigate the issue), there would appear to be a strong a priori case for expecting Ofgem's proposals to lead to a higher cost of financing energy networks and, therefore, to higher gas and electricity prices for existing and future consumers, taken together.

    – One of the main underlying risks in investing in energy networks—and a risk which is likely to be especially important in periods of relatively high network investment—is the fact that (a) investments in energy networks currently pay back over 20 – 45 years, but (b) the regulator makes a firm regulatory commitment to the remuneration of that investment only for one price control period, currently lasting for five years.

    – One of the main ways in which that regulatory 'commitment' risk is mitigated is through the statutory obligation on Ofgem in respect of the financing of energy networks—just as, in the US, risk is mitigated (rather more explicitly and powerfully) by a statutory right to a reasonable rate of return. Ofgem's financing duty has hitherto been implemented by Ofgem having due regard not only to the rate of return which companies could expect to make on their investment in networks but also to the short-term financial ratios which inform credit ratings and which therefore influence costs of raising finance, as well as enabling energy networks to meet their licence obligation to maintain an investment grade credit rating. Ofgem is now proposing to reinterpret its financing duty to revolve more or less exclusively around the prospective rate of return over the expected useful life of the relevant assets.

[1] Ofgem (2010), 'Emerging Thinking – Embedding Financeability in a New Regulatory Framework', January 20th.

This, combined with longer regulatory asset lives and/or the ending of other 'arbitrary' financeability adjustments (like the 50% expensing of gas distribution mains replacement for revenue setting purposes) would imply weaker cash flows than would otherwise be the case at times of relatively high network investment.

– Ofgem is thus asking investors in energy networks to take on trust (even more than is currently the case) that a future energy regulator will hold to its part of the regulatory deal—in particular, by continuing to allow over the longer term whatever premium on the rate of return that has been found to be necessary (in the face of initially weak cash flows) for the investment in question to be financeable.

– It is, on the face of it, unlikely that investors will be particularly trusting on this. For example, they will be aware that one of the few instances of a regulator trying to commit to a premium rate of return beyond the next price control period (the review of BAA's London Airport price controls in 2002/03, prior to the completion of Terminal 5[2]) was followed by the disappearance of that premium at the next price review in the wake of the T5 investment having been undertaken.[3] They will also be aware of (a) Ofcom's recent decisions to not regulate the price which BT charges for wholesale access to fibre optic cables *which have yet to be built*, alongside (b) Ofcom's decision to regulate the wholesale price which BSkyB charges for premium content, *ownership of which results from past investment*.

– Put another way, Ofgem's proposals on financeability—alongside their proposal (in a separate consultation document) to maintain the obligation on networks to maintain an investment grade credit rating—will require a higher proportion of equity investment in networks. However, it is just those equity investors who will be most deterred by Ofgem's proposals. Post-investment regulatory opportunism is inherently a greater risk for equity investors than for debt investors because equity investors can be hit by regulators without causing the network to be insolvent.

– Talking all of the above together, it is thus likely, at least on an a priori basis, that the effect on network financing costs of Ofgem implementing its proposed approach would be significant, to the detriment of Ofgem's obligation to existing and future consumers.

The rest of our response is structured as follows:

– Section 2 describes the main propositions in the consultation.

– Section 3 contains our analysis of each of the major issues raised.

– Section 4 summarises our conclusions.

# 2 What Ofgem is proposing in Embedding Financeability

Embedding Financeability brings together a number of the concerns of the wider RPI – X@20 project, including:

– the requirement for a high level of spend on energy networks to facilitate the achievement of broader government energy and environmental goals;

[2] Competition Commission (2002), 'BAA plc: a report on the economic regulation of the London airports companies (Heathrow Airport Ltd, Gatwick Airport Ltd and Stansted Airport Ltd)', November, para 2.374.

[3] Fear of similar regulatory opportunism probably underpins BT's wariness about investing in Next Generation Access and BSkyB would certainly see the same issue arising in Ofcom's recent proposals on regulating the price which it charges other retailers for premium content.

– the need to balance the interests of existing and future consumers in paying for that expenditure;

– as noted by Ofgem's CEO when launching RPI – X@20, the fact that network regulatory asset lives are, in some (but not all) sectors, substantially less than the likely useful lives of the relevant assets.

The underlying message which Ofgem has distilled from these elements is the desirability of having the option to spread the payback on network investment over a longer period than currently happens in respect of some networks. Given that one of the main reasons for reducing the length of this payback for electricity networks (in DPCR4 and TPCR4) has been the desire to maintain the financeability of those networks—not least through maintaining the short-term financial ratios used by credit rating agencies—this has led Ofgem to question:

– what is required to maintain the financeability of network operators (NWOs);

– its own role (under its 'financing duty') in that maintenance.

The logic that Ofgem brings to answering these questions is as follows:

– NWOs are very low-risk businesses—indeed, so low-risk and so securely backed by regulatory covenants, that investors (or, at least, some investors) will 'look through' even prolonged periods of poor or negative cash flow when deciding whether to fund these businesses and at what price.[4]

– As a result, the sort of short-term financial ratios which have so much influence on credit ratings should be more or less disregarded in setting price controls. Insofar as there is a need to address financeability as a distinct issue from profitability, the relevant measures would be looked at over a longer period than five years. As expressed by Ofgem, 'There may therefore be a rationale for placing less, or no, emphasis on short-term cash flow ratios and the levels assumed by the ratings agencies and either ignoring ratios or considering a set of ratios that more accurately captures the particular features of energy networks and considering the level of these over the long term rather than a five-year price control period.'[5]

– Not least on the basis of consumer inter-generational equity, regulatory asset lives—the main vehicle for adjusting cash flows to ensure financeability in the past—should be set on the basis of the average expected useful lives of the relevant assets and should not be used to prop up short-term financial ratios.[6]

– No adjustment to revenues (like shortening of regulatory asset lives or partial expensing of replacement CAPEX for revenue purposes) would be made where short-term financial ratios fall below credit rating agency norms for a comfortable investment-grade credit rating, but are adequate on an unspecified longer-term basis.[7]

– Insofar as NWOs have (debt or equity) investors who do worry about short-term financial ratios, they should consider looking to attract a different class of investor who would be more focused on the long term.[8]

[4] Embedding Financeability, paras 1.8, 4.17 - 4.18 and 5.11.
[5] Ibid., para 4.18.
[6] Ibid. para 5.6.
[7] Ibid., paras 5.11 and 5.12.
[8] Ibid., para 6.1.

This logic is then embodied in Ofgem's 'straw man' for how financeability should be considered at future price reviews.

– 'The allowed rate of return would be set to reflect the riskiness of the network company's revenue and cost streams, based on that company operating in an efficient and economic manner and assuming a notional capital structure'.[9]

– 'The depreciation allowance would be set to reflect the average expected useful life of the asset base'.[10]

– 'If both the allowed return and depreciation are set appropriately [i.e., as above and with no explicit consideration of short-term financial ratios], the notional company should be financeable'.[11]

– If there is then a financing problem for the actual company because of (a) operating inefficiently or (b) having a significantly different financial structure from the notional one, then that is for the company to sort out.[12]

– If an efficient company, with a capital structure close to the notional one, has short-term financial ratios which depart from what credit rating agencies would expect for an investment grade credit rating, then 'Given the negligible revenue risk faced by regulated networks and the limited cost risk, this should not raise financeability issues'.[13]

– 'Under the straw man, no adjustment to revenues would be made to compensate when the actual company faced financing difficulties associated with one or more of the above reasons' (ie, inefficiency, a highly leveraged financial structure or a short-term mismatch between revenue and financing costs even when an efficient company was not highly leveraged).[14]

Ofgem accepts that there is at least the possibility that the premium that financial markets may demand to fund companies that are cash flow negative for a number of years may be to the detriment of consumers.[15] It says that it will investigate the issue. However, the overall tone of the consultation document is sceptical as to whether this is a material issue—thus, its reference (quoted above) to the 'negligible risk' that a mismatch between the timing of revenue and financing costs would raise financeability issues.

# 3 The problems with Ofgem's proposals

Issues which are raised by Ofgem's straw man and associated analysis include the following:

– What does the proposal to link regulatory asset lives to the expected useful lives of the relevant assets entail, in the absence of far more clarity than currently exists about how Ofgem is going to treat regulatory capitalisation?

– What does Ofgem's financing duty comprise, given what Ofgem is proposing to exclude from the duty?

[9] Ibid., para 5.6.
[10] Ibid., para 5.6.
[11] Ibid., para 5.8.
[12] Ibid., para 5.9.
[13] Ibid., para 5.11.
[14] Ibid., para 5.12.
[15] Ibid. para 4.19.

– Exactly how low-risk are energy network businesses likely to be against the background of current government energy policy and in the wake of the final conclusions from the RPI – X@20 project and the future price controls which will be informed by those conclusions?

– What are the implications of Ofgem's proposed disregard of short-term financial ratios, when setting price controls, for its proposal (in a separate but related consultation paper[16]) that NWOs should continue to have an obligation to maintain an investment grade credit rating?

– What is likely to be the impact of Ofgem's proposals on the cost of financing NWOs and thus on the cost of networks to existing and future consumers, taken together?

## 3.1 What do Ofgem's proposals on regulatory asset lives mean?

Ofgem is proposing that asset lives should equal expected useful lives. However, what this might actually mean for price controls is complicated by Ofgem's recent (DPCR5) approach to regulatory capitalisation (the capitalising of spend into RAV). In DPCR5, Ofgem de-linked regulatory capitalisation from CAPEX and, instead, deemed that a fixed percentage of *network* expenditure would be capitalised into RAV. No precise basis for derivation of that fixed percentage was given.

In other words, in DPCR5, the capitalisation rate has, thus far, become another variable to be varied according to the cash outcome which Ofgem wants for the price control in question. Without knowing how this will be determined in the future, it is hard to evaluate the implications of aligning regulatory asset lives with expected useful asset lives. This is because the cash received by companies in a particular price review period will depend on both regulatory asset lives and the rate of regulatory capitalisation.

However, to the extent that Ofgem is planning that, in future, the regulatory capitalisation rate will be determined without reference to financeability considerations, Ofgem's proposals for regulatory asset lives would imply longer payback on network investment for electricity networks.

## 3.2 What does Ofgem's financing duty actually consist of?

Ofgem makes many references in Embedding Financeability to its 'financing duty'. However, taking the consultation paper as a whole, it is not at all clear what that duty actually entails. In particular, it is not clear exactly where is the line which divides what is the responsibility of the regulator from what is the responsibility of the company for ensuring a company's financeability.

This lack of clarity is brought into sharpest relief by Ofgem's proposal that it would not make any adjustment to revenues in the event of a company being not financeable due to:

– the NWO having chosen a 'significantly different financial structure' (presumably, significantly different from the notional structure assumed by Ofgem when estimating the company's cost of capital);

– the NWO operating inefficiently;

[16] Ofgem (2010), 'Review of the 'Ring Fence' Conditions in Network Operator Licences', April 23rd.

– the company facing ‘a mismatch in its cash flows, which means that the available revenues fall short of the necessary financing costs at a particular point in time, though not on average over time’.[17]

Ofgem is explicit (para 5.12) that no adjustment of revenues would be made in the event of non-financeability arising as a result of one or more of the above reasons. The first two reasons raise no particular issues, at least as long as the obligations on NWOs to operate efficiently are construed to cover financing as well as operations in the narrow sense. The third point, however, seems to show Ofgem venturing into startlingly new territory. The implication of this third point is that, even if a NWO operates efficiently and has a capital structure consistent with what Ofgem itself has assumed in setting a price control, Ofgem will nevertheless take no responsibility for ensuring the company’s financeability as a result of a timing mismatch between revenues and financing costs.

Ofgem seems to try to avoid this implication by asserting that such a timing mismatch ‘should not raise financeability issues’. However, in the absence of evidence to back up this assertion, this sounds rather like getting rid of the problem by (unproven) assumption. The problem is all the more troubling because it seems to illustrate at least two of the accusations which are often made against economists – i.e., not only do they solve problems by assuming that they do not exist but also that they are vague about the time periods to which their propositions relate. Thus, in the above quote, Ofgem defines the problem relating to a timing mismatch at a point in time but ‘not on average over time’. It is not at all clear what sort of time period ‘over time’ might refer to—over a five-year price control; over the (partial) longer-term price control period which Ofgem is suggesting in its Emerging Thinking document; or over some longer period.

In sum, a core problem with Embedding Financeability is that:

– Ofgem’s characterisation of NWOs as ‘low-risk’ hinges in large part on Ofgem’s financing duty;

– in this consultation, that financing duty looks so nebulous as to provide little comfort to anyone thinking of investing in a NWO, certainly little attraction to anyone wanting to invest in a low-risk business.

## 3.3 How low-risk will energy network businesses be?

There is little controversy over the proposition that energy network businesses currently sit towards the low end of the corporate risk spectrum. This is recognised by, for example, the ‘business risk’ category usually assigned to such businesses by the credit rating agencies.

However, this does not mean that the low-risk nature of such businesses is somehow immutable in the way that Ofgem sometimes seems to imply in Embedding Financeability.

– First, the need to replace ageing network assets and the need to evolve networks to meet the requirements of government energy policy will mean higher levels of network investment. Higher investment will, by itself, mean more risk for networks because of the increased proportion of network value which will be pushed further into the future, with all the uncertainty that that entails, not least in respect of future regulatory commitment to the appropriate remuneration of past investment.

– Second, by looking to spread the payback on network assets over a longer period of time than is currently the case, Ofgem is looking to compound the regulatory commitment problem associated with the mismatch between the length of price controls

[17] Embedding Financeability, para 5.9.

and the payback periods for network investment. The decision by the Competition Commission not to maintain the 'Terminal 5 premium' in the assumed cost of capital for Heathrow Airport for the 10 years implied by a previous Competition Commission price review showed that, even when regulators try to make commitments beyond one price control period, their successors may have other ideas. Thus, any attempt to compensate for longer payback through a higher rate of return will meet scepticism about the extent to which that higher rate of return will be maintained for more than one price control period—thus increasing the rate of return which would be rationally required.

– Third, and as noted above, part of the low-risk nature of energy network businesses has, up to now, been premised on Ofgem's financing duty—but, in Embedding Financeability, Ofgem is looking to redefine that duty in a way which is likely to increase perceptions of risk.

– Fourth, some of the other ideas which Ofgem has discussed as part of RPI – X@20 (and which remain as part of Ofgem's Emerging Thinking) might well increase perceptions of risk—for example, the idea of 'enhanced incentives' where a NWO would be exposed to the utilisation of network capacity enhancements or, potentially (and, depending on the detail), the proposal for 'partial longer-term price controls'. More generally, and although the Ofgem supporting paper 'Incentivising efficient long-term delivery of desired outcomes' explicitly avoids the setting of incentive rates for future price controls[18], the underlying message of the paper would seem to be to increase the financial exposure of companies to not efficiently achieving desired outcomes.

Altogether, whatever the current perceptions of the risks associated with energy network businesses, much of what Ofgem is proposing in Embedding Financeability and elsewhere in RPI – X@20 would seem to be pointing in the direction of greater future risk—and, therefore, a greater probability of disregard of short-term financial ratios leading to increased financing costs for energy networks.

## 3.4 How does Embedding Financeability fit with the obligation to maintain an investment grade credit rating?

Embedding Financeability proposes that Ofgem should, to a greater or lesser extent, disregard short-term financial ratios when setting price controls. However, as noted above, since publishing Embedding Financeability, Ofgem has issued for consultation a review of the 'ring fence' conditions in NWO licences.[19] In this latter consultation, Ofgem proposes that NWOs continue to have the obligation to maintain an investment grade credit rating.

Thus, Ofgem is proposing to:

– (more or less) disregard short-term financial ratios when setting price controls;

– require NWOs to maintain credit ratings which depend on those same short-term ratios.

Ofgem presumably sees these two propositions as being consistent with each other. It thus may be assuming that companies will move over time to capital structures which include substantially more equity than is currently either actually the case or has, up to now, been assumed by Ofgem to be the case when setting price controls, albeit that there is nothing explicit in the consultation paper to this effect. However, without this assumption, it is not obvious how to square Ofgem's desire to spread pay-back on network investment over a

[18] Ofgem (2010), 'Incentivising efficient long-term delivery of desired outcomes', January 20th, para 5.26.

[19] Ofgem (2010), 'Review of the 'Ring Fence' Conditions in Network Operator Licences', April 23rd.

longer period of time, at least for electricity networks, with the maintenance of investment grade credit ratings.

The implications of lower gearing, as well as other aspects of Ofgem's proposals, for NWOs' cost of financing are considered in the next section.

## 3.5 What will be the impact of Ofgem's proposals on the cost of financing energy network businesses?

On the basis of the above, Ofgem would seem to be proposing that:

– at least for electricity networks (and quite possibly for gas distribution networks via the regulatory treatment of mains replacement investment), pay-back on network investment will be spread over a longer period than is implied by existing regulatory asset lives, not least to strike a different balance between the interests of existing and future consumers;

– against this background, Ofgem will not 'prop up' short-term financial ratios, either by adjusting regulatory asset lives or any other 'arbitrary' mechanisms (the 50% capitalisation rate for gas distribution pipeline replacement investment, for example);

– NWOs will continue to have an obligation to maintain investment grade credit ratios and, as a consequence of the other proposals, will thus to need to reduce the gearing in their balance sheets.

Ofgem recognises that its proposals could raise the costs of financing energy networks, to the detriment of existing and future consumers, taken together.

– It acknowledges that its past approach to financeability 'has contributed to a significant reduction in the allowed rate of return over the last 20 years'[20], implying that its new approach could reverse that process.

– It also says that the premium that financial markets may demand 'to fund companies that are cash negative for a number of years may be higher' and says that 'this is an empirical issue, which we will investigate'.[21]

ENA has also commissioned Oxera to examine this issue. However, in advance of that work being completed, we would make the following comments:

– Against the background of the problem of regulatory commitment, and the scope for regulatory opportunism after the completion of a major investment programme, it would be surprising if implementation of Ofgem's proposed approach did not lead to an increase in the premium required for investing in the affected energy networks—and, thus, to an increase in the costs borne by existing and future consumers when taken together.

– Ofgem's own approach to estimating cost of capital in past price reviews would itself suggest that lower gearing, an apparently inevitable concomitant of Ofgem's proposed approach, would itself be associated with an increased cost of capital. Thus, Ofgem has (unlike with the orthodox Capital Asset Pricing Model approach) not seen increased gearing as necessarily leading to an increased cost of equity. In fact, allowing for the fact that Ofgem has tended (rightly or wrongly) to see transmission as lower-risk than distribution, Ofgem has, through successive price reviews, continuously reduced its

[20] Embedding Financeability, para 4.2.
[21] Ibid., para 4.20.

estimate of cost of equity at the same time that it has increased its assumed level of gearing. Thus, if Ofgem was to stay consistent with its past approach to estimating cost of capital, then lower gearing would imply a higher cost of cost of capital—cost of equity would increase (or, at the very lease, not reduce); the weighting accorded to cost of equity would increase; and the cost of debt would continue to be that associated with an investment grade credit rating.[22]

# 4 Conclusions

In advance of getting the conclusions of the work which we have commissioned to investigate the likely impact of Ofgem's proposal on the financing costs of NWOs, our main thoughts on Ofgem's proposals in Embedding Financeability are as follows.

– By proposing to increase the proportion of network costs borne by future consumers, Ofgem would look to be proposing a significant increase in the business/regulatory risks facing NWOs and would thus seem to be proposing that the costs of energy networks to be borne by existing and future consumers, taken together, will rise, albeit that the extent of that impact is uncertain.

– Ofgem's characterisation of energy network businesses as low-risk abstracts from regulatory changes which may result from the RPI – X@20 project itself, one of the themes of which has been the desirability of giving stronger incentives to efficient delivery. Such stronger incentives will typically entail more risk.

– Ofgem's assumption that not dealing with timing mismatches between revenues and financing costs (for an efficient company with an efficient financing structure) will run a 'negligible' risk of causing financeability issues is just that—an assumption which has no evidence to back it up and which is made more difficult to test because of a failure to articulate the time period over which mismatches would be allowed.

– Ofgem's assumption that NWOs are low-risk businesses depends, at least in part, on Ofgem's 'financing duty', but this consultation seems to envisage a change in how Ofgem will interpret that duty which would be likely to undermine the low risks which Ofgem assumes flow from the duty.

– Ofgem's simultaneous desire to (a) more or less disregard short-term financial ratios when setting price controls and (b) maintain the obligation on NWOs to maintain an investment grade credit rating would seem to entail making the (implicit) assumption that companies will reduce their gearing from current levels. On the basis of Ofgem's own approach to estimating cost of capital at past price reviews, this would imply a higher cost of capital (which is what one would expect anyway from the increase in underlying business and regulatory risk implied by Ofgem's proposals).

Overall, at a time when investment on energy networks as a whole is expected to increase substantially (and, thus, when underlying business risks are expected to increase), Ofgem is proposing to require investors to trust more than now to the actions of a future regulator. It is unlikely that this trust will be cheap to acquire. Unlike in the US, GB utilities do not have a statutory right to a reasonable rate of return. There is, therefore a risk of future opportunistic behaviour by regulators, especially once major investments have been undertaken. As noted above, this is arguably the story of the last BAA price review. Two recent proposals/decisions by Ofcom give additional, albeit contentious, credence to this view—on the one hand, the

[22] Ofgem suggested in its Final Proposals for the Gas Distribution Price Control Review of 2007 (paras 9.20 – 9.21) that, although theory might suggest that, other things being equal, higher gearing should lead to higher cost of equity, this was not borne out by the data.

decision to not regulate the charges which BT makes for wholesale access to its NGA network *which is yet to be constructed* and, on the other hand, the decision to regulate the wholesale prices which BSkyB charges for premium content, where BSKyB's current market position represents the results of *past investment*.

Against this background, Ofgem's past approach to financeability (20 year regulatory asset lives for electricity networks, 50% expensing of the costs of pipeline replacement in gas distribution, financeability checks through the use of short-term financial ratios) has constituted a way of providing some assurance to NWOs that the regulatory deal was not all about 'jam tomorrow' or, at least, not all about jam many years into the future. Against the background of regulatory opportunism in other UK utility sectors, it is likely that the changes proposed in Embedding Financeability will significantly increase the cost of financing energy networks and will thus be to the disadvantage of existing and future consumers, taken together.