Company of Proprietors of Whitchurch Bridge

Toll Application 5th November 2014

Dividend Policy and A Reasonable Return on Investment

1) Introduction

a) The Company of Proprietors of Whitchurch Bridge is a public body governed by Act of Parliament, and therefore subject to the provisions of the Whitchurch Bridge Acts 1792 and 1988 and the Transport Charges &c (Miscellaneous Provisions) Act 1954.

b) The dividend policy of the Company is therefore determined in accordance with this legislative framework for the operation (Document 9 – Legislative Framework) which refers to "a reasonable return upon the investment of the Company of Proprietors of Whitchurch Bridge in the Bridge as defined in Section 2 of the Whitchurch Bridge Act 1988", the relevant definition of "the Bridge" being "the Whitchurch Bridge of the Company and all the lands, easements, rights, Toll houses, Toll-gates, signals, offices and other assets of whatever description for the time being held or used by the Company in connection with that Bridge"

c) The operation of this policy requires therefore the determination of two factors

   i) What is the value of the assets encompassed by the definition of "the Bridge"

   ii) What is a reasonable return on this investment.

d) These questions can be answered by reference to the accounts of the Company, and to comparable definitions for similar types of regulated undertaking, e.g. water companies.

e) This note will show that the actual return in terms of dividends paid over the last 15 years and planned over the next 15 years has been and will be constrained below what would normally be regarded as a reasonable level of return in order to repay loans and build up reserves within the Company

2) The Assets of the Company

a) The Balance Sheet of the Company as at 30th June 2014 defines the assets of the Company as follows

Asset	*Basis of Valuation*	*Value as at 30/06/2014*
Reconstructed Bridge	Assets in Course of Construction	£4,963,482
Toll House	Valuation less depreciation	£473,110
Toll Booth & Equipment	Depreciated Historic Cost	£86,982
Investments (Reserve Fund)	Cost	£2,142
Net Current Assets	Cost	(£859,336)
Bank Loans	Loan from Barclays Bank	(£1,338,103)
Total Net Assets		£3,328,277

b) The reconstructed bridge was still in the course of construction at 30th June 2014: it is now complete and the final total cost of the project is £6,549,453. This valuation will be shown in the accounts as at 30th June 2015. This will be matched in the balance sheet as at 30th June 2015 by long term loans, giving approximately the same valuation of net assets.

c) The reconstructed bridge will be classified as a specialized property and will be revalued annually on the basis of depreciated replacement cost (DRC). This is in accordance with UK and International accounting standards, for example International Valuation Guidance Note No8 (International Valuation Standards, Sixth Edition, 2007) and RISC Valuation Information Paper No10 (2007), which has been adopted by HM Treasury for the Government Financial Reporting Manual (FReM)

d) The actual valuation of assets in similar regulated industries is the subject of extensive literature, of which the most relevant to this case is the water industry, which has a similar issue of valuing assets with a very long economic life in order to determine the level of charge for depreciation and dividend policy in relation to their water charges.

e) The bridge will be valued in future on the Equivalent Asset Replacement Cost basis i.e. the replacement cost of the Bridge, assessed by our consulting engineers from time to time, less depreciation over a period of 100 years.

f) The depreciation charge in the annual accounts is based on the same principles.

g) The toll house value was verified at 16th April 2014 by professional valuation, while other fixed assets are shown at cost less depreciation over their useful lives.

h) The value of investments as at 30th June 2014 represents the residual balance of the fund that was accumulated towards the reconstruction of the bridge. The Whitchurch Bridge Act 1988 requires that funds be set aside every year in future to fund the next replacement of the bridge in 2114.

i) The implications of this method of valuation of assets held or used by the Company in connection with the bridge can be seen by following the historical and projected asset value of the Company, as shown below

Asset	*Value 30/06/2008*	*Value 30/06/2014*	*Value 30/06/2015*	*Estimated Value 30/06/2025*
Bridge at DRC	£148,000	£4,963,482	£6,520,172	£8,450,000
Investments	£1,429,000	£2,142	£0	£250,000
Loans	£0	(£1,338,103)	(£3,326,166)	(£1,640,000)
Other assets	£575,000	(£299,244)	£361,335	£365,000
Total Net Assets	£2,152,000	£3,328,277	£3,555,341	£7,425,000

j) The effect of this approach is that the value of the investment of the Company in the assets of "The Bridge" is defined consistently whether the Company is building up assets towards replacement, or whether the bridge has just been replaced but with the assistance of a loan, which reduces the net value, or whether it is part way through its life, as in 2025, but with funds already being built up towards replacement in 100 years time. The same principles are applied, with a vastly greater degree of complexity, by all regulated industries.

3) A Reasonable Return on Investment

a) In the case of this evaluation, we have taken a long term view in comparison with other forms of investment in order to assess a reasonable rate of return.

b) Typical rates of return that have been regarded as reasonable in other relevant circumstances are as follows (source: Barclays Equity Gilt Study 2014)

i)	Typical returns on equity in other regulated industries	5 - 7%
ii)	Current yields on long term Government securities	2.5%
iii)	Average real return on Government securities 30 years	1.3%
iv)	Typical dividend yield on equity	4 – 5%
v)	Average real return on UK equities 30 years	5.5%

c) Whitchurch Bridge as a Company regulated by Act of Parliament is regarded as a regulated public utility. Therefore reference may also be made to the determination of cost of capital in other regulated industries. The standard approach to this issue was set out in a detailed paper commissioned by a number of regulatory bodies and published in 2003 http://www2.ofcom.org.uk/static/archive/oftel/publications/pricing/2003/capt0203.pdf , see also an updated review published in 2006 (Jenkinson, Regulation and the Cost of Capital, Said Business School 2006). This approach depends on an assessment of the standard Capital Asset Pricing Model (CAPM) which takes into account the weighted average cost of capital between loan and equity finance. It should be noted that these models tends to assume that for most regulated industries the cost of equity capital is higher than the cost of loan capital, as equity cost is based on the risk free rate, plus the general equity risk premium, adjusted for the specific risk associated with the particular undertaking.. As noted above, the risk free rate can currently be assessed as about 2.5%, being the rate of return on government securities, and an equity risk premium of 2.5 – 4.5% is typically used in regulated industries to give an expected return on shareholder assets of approximately 6%.

d) This rate of 6% is also the rate used in the specifically parallel case of the Dunham Bridge Inquiry 2006 which was approved (Inspector's Report para 7.28). This rate was reconfirmed by the approval of an updated toll rate in 2013.

e) Against this background we can consider the return on assets available to shareholders in Whitchurch Bridge, both historically and as assumed in the toll application

	30/06/1999	*30/06/2008*	*30/06/2016*	*30/06/2023*
Net Asset Value	£1,227,000	£2,152,000	£4,058,000	£7,040,000
Dividend Payments	£28,200	£49,350	£53,677	£99,000
Return on assets	2.3%	2.3%	1.3%	1.4%

f) It should be noted that in this case the dividend yield is the correct measure of the rate of return on equity as the Whitchurch Bridge acts do not allow the distribution of the Reserve Fund, and therefore the dividend payment is the only possible source of return to shareholders. A dividend yield of 2.3% was included in the Toll Application which was approved in 2009, but a lower rate is assumed here because of the need to finance the loan costs, which are higher than anticipated at that time.

g) It can be seen that in this context the actual and forecast return on investment for the Company is significantly below what would be regarded as a reasonable return in any other situation, being comparable only to that on index linked gilt securities – however, it should be emphasised that returns on government products are regarded as "risk free" and hence they are lower than the higher returns demanded when holding equity interests which are subject to much greater risk.

h) The reason for such low returns to shareholders is that historically because of low toll levels the Company has for a long time been in a situation where the sums available for transfer to reserve funds have lagged behind the ever-increasing costs of reconstruction, and the present toll application in effect perpetuates this situation as for the next 20 years the Company will be either repaying loans taken out to finance the reconstruction costs or building up reserves for the next replacement.

i) An important implication of this situation is that the general assumption about gearing works in reverse: as the projected return on assets to Whitchurch Bridge shareholders is lower than the cost of loan capital, it follows that a higher proportion of loan capital increases the weighted average cost of capital (WACC) to the company. This is the reverse of the situation in most regulated industries, which assume a higher cost of equity and a lower cost of debt (which large utilities can achieve but which is not open to small companies like Whitchurch Bridge). The result of this is that despite paying small company rates for loan finance the WACC in this case is significantly below the average allowed for other regulated industries, and falls over time. This can be seen in the table below

Date	*Return to shareholders %*	*Loan finance cost %*	*WACC at 40% gearing*	*WACC at 20% gearing*	*Average WACC regulated industries 2012-2014*
2016	1.3%	6.0	3.18%		4.38%
2025	1.5%	6.0%		2.4%	

4) Conclusion

It can be concluded from this analysis that the dividend policy and the return on investment assumed in the toll application is in fact below the level that would normally be regarded as a reasonable return upon the investment of the Company of Proprietors of Whitchurch Bridge in the Bridge. It is also below that approved in the 2008 Toll Application. Therefore the weighted average cost of capital used in the evaluation of the required level of toll charges is likewise very low in relation to comparable industries, and is fully supportive of the proposed level of tolls being neither more nor less than required in accordance with the relevant statutory directives.

Company of Proprietors of Whitchurch Bridge

April 2015