

**Manitoba Hydro Undertaking #49**

**Manitoba Hydro consider position on discount rate used on its assessment of major capital projects. Manitoba Hydro to determine whether it is on the public record presently or whether MH would consider putting it on the public record. Manitoba Hydro to also advise how discount rate is constructed.**

Manitoba Hydro utilizes a discount rate that is labelled as the weighted average cost of capital (WACC) for many applications that require a present value analysis such as the comparison of various Power Smart initiatives. An example of such an application is referenced in the response to PUB/MH I-132(b). In this response Manitoba Hydro states that the discount rate that was utilized for determining cost-effectiveness ratios was 6.1% (real) at the time that the 2009 Power Smart Plan was created.

Manitoba Hydro's WACC is calculated using Manitoba Hydro's forecasted long-term interest rate associated with debt and the imputed interest rate associated with equity, which are then weighted by Manitoba Hydro's target capital structure of 75% debt and 25% equity. The schedule below demonstrates the derivation of Manitoba Hydro's WACC both in nominal and real terms utilizing 2010 IFF assumptions. This results in a WACC of 8.35% in nominal terms and 6.1% in real terms. A long-term inflation rate of 2.1% is utilized to determine the WACC in real terms, i.e. without the effect of inflation.

Capital Source	Target Capital Structure	Nominal Rates		Real Rates	
		Rate	Weighted Rate	Rate	Weighted Rate
Long-Term Debt	75%	7.6%	5.70%	5.39%	4.0%
Equity	25%	10.6%	2.65%	8.32%	2.1%
Total	100%		8.35%		6.1%

In the assessment of major capital projects Manitoba Hydro does not necessarily utilize a single discount rate corresponding to the weighted average cost of capital (WACC). In this assessment the internal rate of return (IRR) that is associated with incremental costs and benefits of a development alternative is calculated. This IRR is then compared to a risk adjusted hurdle rate that is deemed to be required for the type of initiative that is being proposed. The risk adjusted hurdle rate for specific projects is considered to be confidential information.