Notes on Financial Viability Model

prepared by London Economics International LLC (LEI)



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London Economics International LLC (LEI) has been engaged by the Coalition of Large Distributors (CLD) and Hydro One Networks Inc. (HONI) to provide consulting services to the group in the Ontario Energy Board's the 3rd generation IRM proceedings. In follow on to the workshop on March 25-26, 2008, LEI is releasing its financial model which demonstrates the need for a capital expenditure module for an LDC in Ontario, as discussed by Julia Frayer on March 26, 2008. Stakeholders are welcome to use the model to better understand how various assumptions on X factor and inflation impact financial viability. This brief note serves as the "Read Me" companion to that financial model.

Financial Model of a typical LDC

The model is simplified, yet highly indicative financial analysis tool. It is based on Microsoft Excel spreadsheet software and contains two main areas: input assumptions (most can be modified by a user) and analysis results area (output). The main objective of the model is to demonstrate the implications of the price cap mechanism on an LDC's revenues, profits, and rate of return.

Figure 1. Input assumptions		
Input assumptions		
user can modify all inputs in blue		
WACC	8.60%	
Inflation	2.0%	
X factor	0.5%	
Volume Growth	1.0%	
OM&A cost reduction (p.a.)	0.5%	
Implied tax rate	35.0%	
annual capex (\$ millions)	\$45	
interest rate	6.1%	
leverage	60.0%	
amortization rate for pre-existing rate base	4.0%	
amortization rate for new capital additions	7.0%	

The analysis results area shows projected financial indicators of a utility in five years following the base year. The results are grouped into four sections:

- Revenue estimates;
- Net income calculations;

- Return on equity calculations; and
- Book value calculations.

The revenue estimates are based on the price cap mechanism assumptions (which effect distribution rates) and assumptions on volume growth. As contemplated by the comprehensive price cap mechanism, the model shows that distribution rates grow at the rate that is a difference of inflation and X factor.

The resulting revenue forecasts, in combination with expense forecasts are used to derive net income. The model takes into account major expense items, such OM&A expenses, amortization (depreciation of book value), interest expenses, and tax expenses. Finally, the net income estimates along with assumptions on book value evolution (based on capital additions and amortization), and leverage allow us to calculate the estimated return on equity, which is based on the equity portion of average starting book value and year-end book value. The input assumptions can be modified to observe the effect of various factors on the return on equity.