Ontario Energy Board

Commission de l'énergie de l'Ontario

Ontario

Presentation on Cost of Capital

to Participants of September 18 22, 2006 Technical Conference

Outline

- Cost of Capital in staff's July 25, 2006 discussion paper
- Responses to Guide for Presentations at this Conference
- Q&A

Cost of Capital and 2nd Generation IRM

Guiding Objectives

- Protect customers in relation to prices.
- Predictability and stability.
- Promote economic efficiency by providing appropriate pricing signals and system of incentives for distributors to maintain appropriate level of reliability and quality of service.
- Ability to raise the financing necessary to invest in distribution infrastructure to enhance service quality and reliability.
- Minimize the time and cost of administering framework.
- Establishing a common capital structure and incentive framework for all distributors.

Cost of Capital   Staff s July 25th Discussion Paper

	% of Rate Base	**Return**
Debt		
Long Term Debt	Actual percent of rate base (52%)	New third party – market rates. New affiliate - riskless rate plus bond market spread. Existing affiliate and third party as approved.
Short-term Debt	Match to working capital allowance (8%)	Board approved short-term rate for variance and deferral accounts (1 year).
Tot Debt	60% rate base	Weighted average of LT and ST debt rates.
Equity		
Tot Equity	40% rate base (including max 4% preferred shares)	For common, riskless rate plus ERP updated annually. For preferred, as approved.
Total	**100%**	**Weighted average of debt and equity rates.**

Cost of Capital   ROE Calculations

Reflect risk in regulated ROE by determining riskless rate and adding a premium (the ERP) that reflects the riskiness of the regulated business:

- Riskless rate is the smoothed average of zero-coupon bond yield curves; and
- CAPM to set ERP:
  - Two elements of CAPM: (1) the average market return; and (2) the beta ;
  - Three main factors to consider:
    - sample firms to estimate average market return?
    - sample firms to estimate the beta?
    - the relevant time frames for each?
- Updates to the cost of capital:
  - inputs updated annually to minimize uncertainty about changing formulae or parameters.

Cost of Capital Sensitivity Analysis of CAPM

To assist deliberations on these factors, staff developed four scenarios for the ERP:

	SHORT-TERM		LONG-TERM	
	Electric	**Rate Regulated**	**Electric**	**Rate Regulated**
Average market return period	60 months	60 months	120 months	120 months
β period	52 weeks	52 weeks	60 months	60 months
Riskless rate period	one year	one year	Avg of 5/10/15 years	Avg of 5/10/15 years
Resultant ROE (including 50 bps for floatation and x-action costs)	**6.61%**	**6.65%**	**7.50%**	**8.37%**

How Staff Discussion Paper Differs from Consultant Paper

- Capital Structure
  - Debt/Equity thickness
  - Stratification
  - Short term debt deemed at specific amount
  - Preferred shares
- ROE
  - Proxy group
  - Floatation and transaction costs premium
  - Investment premium
- Updating methodology

Responses to Guide for Presentations

Cost of capital methodology

- Should the Board move off its current cost of capital methodology for determining capital structure, ROE, and debt rates (i.e., the current method as detailed in the 2006 Handbook)? If so, what are the reasons for the Board to do so? If not, what may be the implications, if any, of the Board staying with the current approach?

- The Board committed to review ROE after 2006 EDR.
  - The current method is relatively well understood.
  - It is fairly easy to deal with in the regulatory context.
- Implications if no change
  - The ROE calculated by the methodology is lower than the LDCs feel they should receive.
  - The Board has not addressed each of the various components of the ROE formula.

Responses to Guide for Presentations

Cost of capital methodology

- Are there any elements in particular that you believe should change (i.e., capital structure, approach to updating ROE, debt rates, other)?

- Elements need to be:
  - Objective;
  - Transparent; and
  - Reflective of the market.

Responses to Guide for Presentations

Differentiation based on size

- The current approach provides for four different deemed capital structures based on the size of the distribution company. What are the advantages and disadvantages to maintaining differentiation?

- Advantages
  - ?
- Disadvantages
  - Unfair treatment
  - May impede consolidation

Responses to Guide for Presentations

Size as a proxy for business risk

- Many parties maintain that distributor size is the best proxy for business risk. Are the business risks for large and small distributors converging or diverging in recent years, and is any trend likely to continue in the future?

- Information does not support size as a proxy for business risk.

Incentives for new infrastructure investment

- Should the Board provide incentives for new infrastructure investment within the cost of capital methodology? If so, how might the Board do this?

- Yes.
- Board staff are interested in hearing proposals on how to motivate needed investment in distribution.

Responses to Guide for Presentations

Reliance of long-term debt financing

- What are the implications, if any, if distributors relied solely on long-term debt to finance their businesses?

- Rates would be less volatile.
- It would be a better match for the asset class.
- However, short-term debt needed for operational flexibility.

Responses to Guide for Presentations

Method for determine ROE

- Should the Board rely on one method for determining the ROE, or should it use a variety of statistical methods? Which method or methods are the most appropriate and why?

- CAPM is more objective and has fewer flaws than CE and DCF.
- Any method for weighting results of various methods requires judgment.

Responses to Guide for Presentations

Access to capital

- Is there any information from the Canadian financial community that there is a liquidity crisis and that major lenders such as the banks cannot loan money to electricity distributors for capital projects?

- It would assist the Board to get examples of where access to capital has been a problem.

Responses to Guide for Presentations

Capital attraction

- Should the Board impose dividend restrictions if higher ROEs are argued to be needed to attract capital financing? If there is a higher ROE, should the increased revenues be used to finance capital projects from internally generated funds and not be given to pay management bonuses and higher dividends?
- If a higher ROE is needed to attract capital, then it would not be inappropriate to expect that higher returns be devoted to new infrastructure.
- Would that necessitate a restriction on the use of that additional return?

Responses to Guide for Presentations

Timing for implementation of cost of capital changes

- What, if any, concerns would there be if implementation in Cost of Capital changes were delayed until 2008? This would relate specifically to the K-factor in the IRM price cap formula for 2007, which is intended to proxy the changes in the revenue requirement and rates that would result from adjusting the allowed ROE.

- Delay in implementation is possible (rates could be set based on IR formula without a K-factor), but it would be unfair to distributors and/or their ratepayers as impacts would not be implemented in a timely manner.