Ontario Energy Board

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BY E-MAIL

September 7, 2010

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street, Suite 2700 Toronto ON M4P 1E4

Dear Ms. Walli:

Re: Ontario Power Generation Inc.

2011-2012 Payment Amounts for Prescribed Generation Facilities Board File Number EB-2010-0008

In accordance with Procedural Order No. 4, please find enclosed Board Staff's interrogatories related to evidence filed by Pollution Probe. Please provide a copy of these interrogatories to Pollution Probe, Ontario Power Generation Inc. and all other registered parties to this proceeding.

Yours truly,

Original signed by

Violet Binette Project Advisor, Applications & Regulatory Audit

## Board Staff Interrogatories on Evidence of Pollution Probe Filed in the Matter of Ontario Power Generation Inc. EB-2010-0008

## Issue 3.1 What is the appropriate capital structure and rate of return on equity?

1. Ref: Pollution Probe's Intervenor Evidence/page 8, section 1.3.4 In section 1.3.4, with respect to capital structure recommendations for OPG's prescribed hydroelectric generation, Drs. Kryzanowski and Roberts state:

We assess the business risk faced by OPG Hydro as low to moderate – higher than that of a distribution utility and somewhat above the business risk of an integrated electric utility. This suggests that a fair common equity ratio for OPG Hydro should be at 40%, which is just below the middle of the range of common equity ratios that we find for our comparisons. We set the recommended equity ratio at this level to account for our benchmark of allowed equity ratios being generous.

In the Report of the Board on Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors<sup>1</sup>, the Board adopted a deemed capital structure of 56% long-term debt, 4% short-term debt and 40% equity for rate-setting purposes, with electricity distributors migrating to that deemed capital structure from their then current deemed capital structure, which depended on the size of their rate base. The Report of the Board on Cost of Capital for Ontario's Regulated Utilities<sup>2</sup> affirms the deemed 40% equity thickness of electricity distribution rate-setting. If Drs. Kryzanowski and Roberts conclude that the business risk for OPG's prescribed hydroelectric generation is "higher than that of a distribution utility", then should not the equity thickness be higher than 40%, assuming that the ROE formula is the same for both electricity distributors and for OPG's prescribed assets? Please explain your response.

<sup>&</sup>lt;sup>1</sup> Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors, December 20, 2006, <a href="http://www.oeb.gov.on.ca/documents/cases/EB-2006-0088/report\_of\_the\_board\_201206.pdf">http://www.oeb.gov.on.ca/documents/cases/EB-2006-0088/report\_of\_the\_board\_201206.pdf</a>

<sup>&</sup>lt;sup>2</sup> EB-2009-0084 Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, December 11, 2009, <a href="http://www.oeb.gov.on.ca/OEB/\_Documents/EB-2009-0084/CostofCapital\_Report\_20091211.pdf">http://www.oeb.gov.on.ca/OEB/\_Documents/EB-2009-0084/CostofCapital\_Report\_20091211.pdf</a>

## Issue 3.3

Should the same capital structure and cost of capital be used for both OPG's regulated hydroelectric and nuclear businesses? If not, what capital structure and/or cost of capital parameters are appropriate for each business?

- 2. Ref: Pollution Probe's Intervenor Evidence/page 15, section 3.3.1 Drs. Kryzanowski and Roberts state that:"The major advantage of using divisional costs of capital when divisional risks differ is to ensure that the scarce resource of capital is allocated efficiently (referred to as "allocational efficiency")."
  - a) Does cost of service rate-setting, including review of capital projects, by a regulatory tribunal like the Ontario Energy Board act, as a proxy to guard against allocational inefficiencies?
  - b) Please identify instances or projects where Drs. Kryzanowski and Roberts believe there has been allocational inefficiency:
    - i) By OPG; or
    - ii) By other utilities examined in Pollution Probe's evidence.
- 3. Ref: Pollution Probe's Intervenor Evidence/page 21, section 3.3.2.2.2
  - a) Please provide a copy of the article referenced in Footnote 14: Dr. Lawrence Kryzanowski and Ms. Ying Lu, "In government we trust: Rise and Fall of Canadian business income trust conversions", *Managerial Finance* 35:9 (September 2009), pages 784-802.
  - b) How many of the income trusts examined in the article were for electricity generation or natural gas or electricity utility operations?
- 4. Ref: Pollution Probe's Intervenor Evidence/pages 84-86/Schedule 5.1 Schedule 5.1 provides Drs. Kryzanowski's and Roberts' assessment of business risk for a separate transmission company, separate distribution company, OPG's hydroelectric and nuclear divisions and a typical integrated (generation, transmission and distribution) utility based on Emera. The overall business risk is a simple arithmetic average of qualitative ratings of market, operational and regulatory risk, with two factors under market risk, five under operational risk and two under regulatory risk.

Drs. Kryzanowski and Roberts rate a prototypical transmission utility as "1" (low risk) for all factors.

a) With five factors listed under operational risk, compared to two each for market and regulatory risk, does operational risk have the greatest weight in determining the overall risk? Do Drs. Kryzanowski and Roberts believe that operational risk, as opposed to market risk or regulatory risk, is the most important factor considered by the financial community in assessing a firm's overall risk and hence creditworthiness?

- b) Both transmission and distribution utilities are assessed a rating of "1" (Low) for "Technology", "Capacity" and "Asset retirement/construction", while OPG hydroelectric is rated as "2" for "Technology", "3" for "Capacity" and 2 for "Asset retirement/construction".
  - i) Do Drs. Kryzanowski and Roberts consider that deployment of technologies such as smart meters (for distribution) and smart grid, and interconnection of new renewable generation or distributed generation are emerging considerations affecting the technologies and costs for distribution and transmission utilities in Ontario?
  - ii) Do these same factors affect OPG's regulated hydroelectric and nuclear generation?
  - iii) In light of technological and investment considerations affecting transmitters and distributors in Ontario, please provide further explanation for assessing transmitters' and distributors' operational risk for "Technology", "Capacity" and "Asset retirement/construction" as "1" (Low), in contrast to ratings of "2" or "3" for OPG.
  - iv) If the risk for transmitters and distributors for "Technology", "Capacity" and "Asset retirement/construction" were rated higher than "1" on account of operating risks emerging due to, for example, the *Green Energy and Green Economy Act*, how would the business risks and proposed equity thicknesses for OPG's hydroelectric and nuclear divisions change relative to that of transmission and distribution utilities?