Ontario Energy Board P.O. Box 2319 27th Floor 2300 Yonge Street Toronto ON M4P 1E4 Telephone: 416- 481-1967 Facsimile: 416- 440-7656 Toll free: 1-888-632-6273 Commission de l'énergie de l'Ontario C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416-481-1967 Télécopieur: 416- 440-7656 Numéro sans frais: 1-888-632-6273



**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 the Green Energy Coalition. Please provide a copy of these interrogatories to the Green Energy Coalition, 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 the Green Energy Coalition Filed in the Matter of Ontario Power Generation Inc. EB-2010-0008

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?

1. <u>Ref: Prefiled evidence of Mr. Paul Chernick, page 31</u> In the pre-filed evidence, Mr. Chernick states:

> As Venkataraman & Cortright (2010, p. 3–4, notes to Table 1), observed in using a base 15% equity return for a nuclear plant, compared to 10% for a gas combined-cycle plant, "Nuclear is a higher-risk investment that requires correspondingly higher returns."[footnote 14 omitted] The same report notes (p. 4) "no company would likely finance a nuclear plant today without a loan guarantee." Neither statement is true of hydro-electric plants.

- a) Please provide a copy of the article referenced in footnote 14: Venkataraman, Swami, and Richard Cortright, Jr. 2010 "The Economics of U.S. Nuclear Power: Natural Gas Prices and Loan Guarantees Are Key to Viability" Standard & Poor's Global Credit Portal Ratings Direct (August 16 2010).
- b) Please provide support for Mr. Chernick's statement that the statements quoted from the Venkataraman & Cortright article do not apply to hydro-electric generation plants.
- <u>Ref: Prefiled evidence of Mr. Paul Chrenick, Exhibit PLC-2, page 13</u> Exhibit PLC-2 is a copy of the prefiled evidence of Mr. Paul Chernick in the first OPG payment amounts proceeding, considered under Board File No. EB-2007-0905. On page 13, Mr. Chernick states:

There are at least two benefits of separate costs of capital for OPG's two lines of business. First, if the OEB establishes separate costs of capital and the mix of OPG's investment changes, due to nuclear retrofits or refurbishment or new nuclear or hydro capacity, OPG's average allowed return would automatically shift in the direction of the investment mix. The return would only need to be updated for changes in market rates or the underlying risk in either OPG business segment. In the Board's Decision with Reasons in EB-2007-0905, the Board established a deemed capital structure of 47% equity and 53% debt, after allowance for the unfunded nuclear liability was taken into account. The Board affirmed this guideline treatment for OPG's cost of capital in the Report of the Board on Cost of Capital for Ontario's Regulated Utilities (the "Cost of Capital Report"), issued December 11, 2009. OPG has stated that its proposed cost of capital in this current application is consistent with the Board's Decision in EB-2007-0905 and with the Cost of Capital Report.

- a) Please provide Mr. Chernick's views of whether the 47:53 deemed capital structure does appropriately factor, the return commensurate for any differential business risk for each of nuclear and regulated hydroelectric, weighted to reflect the proportionate rate base.
- b) Please identify whether, in Mr. Chernick's opinion, there has been any change in the business risk for each of OPG's nuclear and regulated hydroelectric since the Board's decision in EB-2007-0905. If there have been changes in risk, please explain fully.
- c) In this proceeding and in the previous case considered under Board File No. EB-2007-0905, OPG has filed a Cost of Service application, in which the cost of capital for determining the revenue requirement to be recovered in the payment amounts is set in a traditional manner, with the Cost of Capital Report serving as general guidelines for determining the appropriate cost of capital. If the cost of capital is set in a traditional manner through review of a full Cost of Service proceeding, and where the appropriate weighting of nuclear and regulated hydroelectric generation can be considered as well as changes in the economy and market rates and in the relative risk of OPG's regulated business segments, what advantages, beyond differential costs of capital for making better informed business investment decisions in each segment, are there to establishing a separate cost of capital for each of nuclear and regulated hydroelectric?
- d) If the Board were subsequently to establish an incentive regulation form for setting the payment amounts for OPG's regulated facilities, please explain how rate-setting under an IRM plan, such as a price cap, would automatically reflect a shift in the direction of the investment mix between nuclear and regulated hydroelectric.
- 3. <u>Ref: ExhC3/Tab1/Sch1</u>

<u>Ref: Prefiled evidence of Mr. Paul Chrenick, Exhibit PLC-2, page 13</u> In ExhC3/Tab1/Sch1, OPG has filed a report by Ms. McShane, commissioned by OPG in accordance with the Board's Decision with Reasons EB-2007-0905, entitled Technology-Specific Capital Structures: An Assessment. In her report, Ms. McShane states:

The qualitative assessment of the relative business risks of the hydroelectric and nuclear operations supports the conclusion that

the nuclear operations face materially higher business risks than the hydroelectric operations. However, given the constraints of the available market data and the lack of proxy companies that are comparable to each of the two technologies, none of the analyses conducted were able to provide any quantitative insight into reasonable differential capital structures for the two operations. Any specification of technology-specific capital structures would be largely a judgmental exercise and lack any degree of precision. Given the degree of judgment that would be required and the absence of robust parameters upon which to base that judgment, there is no compelling basis for the Board to adopt technologyspecific capital structures.<sup>1</sup>

- a) Please provide Mr. Chernick's views as to whether he agrees with Ms. McShane's conclusions on a paucity of data for setting robust technology-specific costs of capital for each of nuclear and hydroelectric.
- b) If Mr. Chernick concurs with Ms. McShane's conclusions, how would the Board establish differential costs of capital that are robust enough for rate-setting in this proceeding?
- c) If Mr. Chernick's disagrees with Ms. McShane's conclusion, please explain. In addition, please explain how the Board may set differential costs of capital for nuclear and regulated hydroelectric based on the record of this proceeding.

<sup>&</sup>lt;sup>1</sup> Prefiled Evidence of Ms. Kathleen C. McShane, Foster Associates, Inc., Report to Ontario Power Generation: Technology-Specific Capital Structures: An Assessment, page 9.