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**BY E-MAIL** 

September 14, 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 responses to interrogatories filed by the Association of Major Power Consumers in Ontario, Ontario Power Generation Inc. and the Power Workers' Union related to evidence filed by Board staff. Please provide a copy of these responses to Ontario Power Generation Inc. and all other registered parties to this proceeding.

Yours truly,

Original signed by

Violet Binette Project Advisor, Applications & Regulatory Audit

EB-2010-0008 Exhibit M Tab 1.2 Schedule 1

# Board Staff Response to AMPCO Interrogatory #1

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

#### Interrogatory

Please provide the cost to the Board to engage Power Advisory to prepare this report.

#### Response

The cost to the Board to engage Power Advisory to prepare this report was \$28,200.

## Board Staff Response to AMPCO Interrogatory #2

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

#### **Interrogatory**

- Please provide Power Advisory's opinion as to the appropriateness of OPG's methodology for measuring the effectiveness of the hydro-electric incentive mechanism ordered by the Board in its Decision with Reasons in the EB-2007-0905 proceeding.
- b) How should OPG's response to hydro-electric incentives be best monitored?

#### <u>Response</u>

- a) Such a review is well beyond the scope of Power Advisory's agreement with the Board, and Power Advisory has not reviewed OPG's methodology for measuring the effectiveness of the hydro-electric incentive mechanism ordered by the Board in its Decision with Reasons in the EB-2007-0905 proceeding.
- b) Such analysis is well beyond the scope of Power Advisory's agreement with the Board, and Power Advisory has not considered this issue.

EB-2010-0008 Exhibit M Tab 1.2 Schedule 3

## Board Staff Response to AMPCO Interrogatory #3

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

### Interrogatory

In the proceeding EB-2007-0905, AMPCO filed evidence (Exhibit M Tab 2), that discussed in some detail previous performance incentive schemes applied to OPG, particularly the Market Power Mitigation Agreement (MPMA) and Regulation 53/05. AMPCO's evidence discussed the results of these measures.

Please provide Power Advisory's view of overall effectiveness and lessons learned from these previous incentive regimes applied to OPG.

## <u>Response</u>

Power Advisory briefly reviewed AMPCO's filed evidence in EB-2007-0905. However, this review didn't provide a sufficient basis for assessing the overall effectiveness of these "performance schemes" and Power Advisory was not retained to perform an assessment of lessons learned from previous incentive regimes.

## **Board Staff Response to AMPCO Interrogatory #4**

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

#### Interrogatory

Please comment on whether and how the Board might encourage OPG to schedule nuclear production to as closely as possible match the production pattern to the demand pattern.

#### Response

Although this matter is not within the scope of the Power Advisory update of the London Economics May 2006 report, Power Advisory provides the following response.

Power Advisory does not recommend that the Board encourage OPG to schedule nuclear production to closely match the production pattern to the demand pattern. The costs of nuclear facilities are largely fixed. Therefore, nuclear units should be incented to operate whenever available and to increase their overall availability. However, the Board may wish to incent OPG to schedule its outages during periods when demand is lowest. Such outages must be scheduled in coordination with the IESO. Therefore, the effectiveness of any incentives may be limited by IESO criteria and objectives that it uses to coordinate outage schedules.

## Board Staff Response to AMPCO Interrogatory #5

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

#### **Interrogatory**

Regarding Table 4 on page 27, please comment on why Power Advisory relied upon non-fuel operating costs as a benchmark for comparing OPG performance with that of international peers instead of the combined fuel and non-fuel operating cost measure recommended by ScottMadden, OPG Nuclear 2009 Benchmarking report.

#### **Response**

Power Advisory was not directed to review the ScottMadden report before selecting the operating cost metric to be presented in the report. Power Advisory believed that the 3-Year Non-Fuel Operating Costs per MWh was a comprehensive and representative measure of the controllable operating costs for nuclear units, particularly given that CANDU units do not require enriched uranium and as a result generally have lower fuel costs than other nuclear technologies.

## Board Staff Response to AMPCO Interrogatory #6

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts, August 30, 2010, Power Advisory LLC.

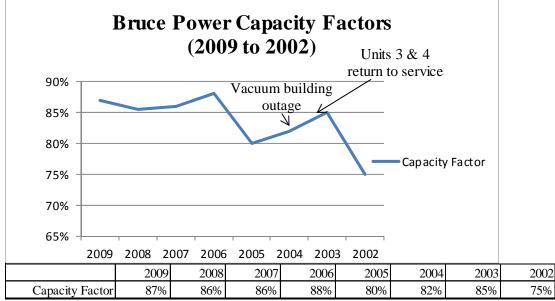
#### Interrogatory

On page 29, the Power Advisory report indicates "Nuclear industry capacity factors have increased over the past two decades due in part to deregulation and improved asset management practices as firms had a strong financial incentive to increase production."

- a) Please identify the jurisdiction or jurisdictions whose experience is noted in this statement.
- b) Please indicate whether any Candu operations show indications of improving capacity factors over time.

## <u>Response</u>

- a) This excerpt refers to the experience in the United States as nuclear power plant capacity factors have increased from approximately 66% in 1990 to approximately 90% today as cited in the following webpage: <u>http://www.world-nuclear.org/info/inf01.html</u>
- b) Bruce Power appears to have improved the capacity factors of the CANDU units that it operates as shown by the graph below and the overall capacity factors for all Bruce Power units shown in the table below. However, such an analysis is complicated by a number of factors that would affect the output of these units. For example, there was a vacuum building outage in 2004 at Bruce B for about one month that required the shutdown of these four units. In addition, Bruce Power returned to service Unit 4 in October 2003 and Unit 3 in January 2004 from a layup of the units. Returning these older units to service is likely to reduce Bruce Power's overall capacity factors, absent offsetting performance improvements. Finally, the data presented for 2009 is the availability factor which is likely to be a more appropriate performance measure for 2009 given the amount of time when there was Surplus Baseload Generation (SBG) in Ontario. During some of these periods of SBG Bruce Power was requested to reduce the output of its units. Power Advisory didn't have ready access to availability factors for this full period (1992 to 2009). Therefore, it is difficult to draw definitive conclusions from these data based on the high level analysis we have performed.



Source: Bruce Power Annual Reports and TransCanada Corporation, 2009 Annual Report (which presents availability factor)

## Board Staff Response to OPG Interrogatory #1

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts. August 30, 2010. Power Advisory LLC.

Pursuant to its reasons set out in the Procedural Order No. 3, the Board eliminated certain proposed issues and restricted the issues to: (1) when it would be appropriate to establish incentive regulation, or other form of alternative rate regulation, for setting payment amounts (issue 12.1); and (2) what processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period (issue 12.2)?

### Interrogatory

Set out a list, by reference to page and paragraph, of those parts of the Power Advisory Report that are in response to Issue 12.1 and Issue 12.2 described above.

## **Response**

The Power Advisory report updates the London Economics report (May 19, 2006) and as such, issues 12.1 and 12.2 are not its prime focus. Staff felt that it would serve as a useful resource to frame the issues and to present a range of options that might be considered in a future proceeding. A discussion of "next steps" could to some extent be informed by an understanding of the range of possible endpoints.

Those parts of the Power Advisory Report that are in response to issue 12.1 include:

- Page 28, paragraph starting with sentence, "In its November 2006 Report …"
- Page 28, paragraph starting with sentence, "There are a number of considerations ..."
- Page 28, paragraph starting with sentence, "A second consideration is ..."

Those parts of the Power Advisory Report that are in response to issue 12.2 include:

- Page 24, Section 4
- Page 24-25, Section 4.1 in general

EB-2010-0008 Exhibit M Tab 1.15 Schedule 2

## Board Staff Response to OPG Interrogatory #2

Ref: Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts. August 30, 2010. Power Advisory LLC.

Pursuant to its reasons set out in the Procedural Order No. 3, the Board eliminated certain proposed issues and restricted the issues to: (1) when it would be appropriate to establish incentive regulation, or other form of alternative rate regulation, for setting payment amounts (issue 12.1); and (2) what processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period (issue 12.2)?

#### Interrogatory

Based on the Power Advisory Report, or upon other evidence filed in this proceeding, what are the OEB staff's detailed answers with respect to each of issues 12.1 and 12.2? Please provide specific references to all of the evidence on which OEB staff relies upon in support of its answers.

#### <u>Response</u>

This question essentially asks Board staff to provide its final argument with respect to issues 12.1 and 12.2. Presumably like all parties, Board staff will consider its position on these issues (and indeed on all issues) once the evidentiary portion of the proceeding is complete. To the extent that Board staff has concrete recommendations with respect to issues 12.1 and 12.2, these will be presented with final argument.

## Board Staff Response to PWU Interrogatory #1

## Issue 12.2 What processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period?

Ref (a): August 30, 2010. Update to Report on Methodologies for Setting Ontario Power Generation Payment Amounts. Prepared for Ontario Energy Board. Power Advisory LLC.

### Interrogatory

The above report makes reference to EB-2006-0064, Board Report: A regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc., November 30, 2006 [Board Report: Setting Payment Amounts for Prescribed Generation Assets]. On page 7, paragraph 5 of that report, the Board states:

Although an incentive regulation methodology was the central recommendation, staff acknowledged that a number of proceedings would be required to determine some of the components of a complete incentive regulation formulation. In particular, Board staff recommended that the Board commission studies to determine cost inflation and productivity factors and investigate the need for "Z" factors and "off ramps" to account for unforeseen circumstances. Board staff acknowledged that these studies would also have to consider the appropriate methodologies to examine OPG's data and the availability of credible information and comparators to establish these factors.

The report filed by Board staff in this proceeding, referenced above, does not comment on the issue of what processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period.

Please describe the process that Board staff believes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, for OPG that would take into account the above excerpt from the Board Report: Setting Payment Amounts for Prescribed Generation Assets.

Response Please see the response to OPG interrogatory #2 at ExhM/Tab1.15/Sch2.