ONTARIO POWER GENERATION

Pankaj Sardana, MA (Econ), CFA
Vice President

Regulatory Affairs

700 University Avenue, Toronto, Ontario M5G 1X6

Tel: 416-592-4584 Fax: 416-592-8519
pankaj.sardana@opg.com

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VIA RESS AND COURIER

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

Dear Ms. Walli:

Re: Board File No. EB-2012-0340 - Consultation regarding Incentive Rate Making Options for Ontario Power Generation's Prescribed Generation Assets

The OEB issued a letter dated September 19, 2012 to all parties participating in EB-2010-0008 and other interested parties inviting them to submit a second round of written comments in response to the first round of submissions from interested parties. In this regard, OPG is pleased to provide the following comments. These comments, along with OPG's presentation at the stakeholder session on August 28, 2012 and OPG's letter of October 1, 2012, represent OPG's views to date on Incentive Rate Making ("IRM") options being explored for OPG.

On October 10, 2012 the OEB posted submissions received from the Canadian Manufacturers and Exporters ("CME"), the Consumers Council of Canada ("CCC"), Energy Probe Research Foundation ("EP"), the Green Energy Coalition ("GEC"), London Property Management Association ("LPMA"), the Power Workers Union ("PWU"), the Retail Council of Canada ("RCC"), the School Energy Coalition ("SEC") and the Society of Energy Professionals ("SEP").

OPG's initial submission observed that there appeared to be a substantial level of agreement between Power Advisory LLC ("PA"), London Economics International LLC ("LEI") and OPG as to the possible forms of incentive regulation applicable to OPG. The submission highlighted these areas of substantial agreement. The initial submissions of interested parties also appear to reinforce the view that a substantial level of agreement exists in many areas.

OPG's submission lists the areas of agreement discussed in its initial submission and includes:

1) A list of specific parties that appear to support the area of general agreement, often with specific quotes from their submissions which OPG considered to indicate support in the areas OPG, the experts and other parties supported; and/or
2) A list of specific parties that did not appear to support the area of general agreement, again often with specific quotes from their submissions which OPG

considered to not indicate support in the areas OPG, the experts and other parties supported; and/or

3) An indication that parties did not appear to address the issue in their submission; and
4) A suggested path forward.

In summary there were four main themes that emerged from the presentations and submissions to date.

1) **Can IRM be established on a technology specific basis?** There was no disagreement that IRM can be established on a technology specific basis, with most parties indicating that not only was it possible, but that it was a reasonable and appropriate path forwards.
2) **Is IRM appropriate for nuclear?** There was no support for adopting IRM at this time, with a number of submissions stating that IRM may never be an appropriate form of regulation for nuclear.
3) **Is IRM appropriate for hydroelectric?** Most interested parties supported an IRM approach.
4) **What are the next steps?** A recurring theme was that further consultation is necessary as the Board moves from a high level consideration of various IRM models to the detail underpinning those models.

These overall conclusions are discussed in more detail in Areas of Substantial of Agreement which follows.

1. AREAS OF SUBSTANTIAL AGREEMENT

1.1 General

- **OPG's current form of regulation already contains significant incentives:** No parties disagreed that OPG's current form of regulation already contains significant incentives. However, RCC sought to add additional incentives to encourage nuclear productivity gains which, in its view, may be best achieved through IRM if another approach is not found. EP also made a general comment that IRM is preferable to Cost-of-Service as Cost-of-Service ("COS") regulation does "*not provide sufficient incentives for least-cost operation and innovation by regulated utilities*" and that COS relies more heavily on cost allocation which EP views as "*arbitrary and susceptible to manipulation".*

  OPG believes that the top-down business planning approach is a reasonable approach to incorporate efficiency targets for nuclear operations using the current COS rate-setting methodology; therefore it is not necessary to implement IRM for nuclear at this time. The current form of regulation contains significant incentives and can incorporate more incentives if deemed appropriate.

  With respect to EP's general comment on cost allocation, OPG noted in the consultation that the majority of capital and OM&A costs are incurred at the technology specific level. OPG notes that EP's EB-2007-0905 or EB-2010-0008 submissions did not reflect any concerns with OPG's cost allocation methodology.

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- **An IRM can be established on a technology specific basis:** EP, GEC, LPMA, RCC, and PWU all agreed that nuclear and hydroelectric operations should be regulated separately. CCC commented that "*attempting to apply a comprehensive IRM model to OPG's entire operations, would be very difficult.*"

  OPG is of the opinion that further consultation on the form of IRM should presume IRM can be established on a technology specific basis.

- **IRM should be introduced in a staged fashion:** LEI and OPG's proposed path forward of applying IRM to hydroelectric operations and later applying lessons learned to a nuclear IRM was supported by LPMA specifically and generally by most other interested parties.

  OPG agrees with the view that the current two-year test period COS regulatory approach should be maintained for nuclear at least until the Darlington Refurbishment Project enters into service (as discussed later in this submission). OPG is of the view that an IRM approach could be workable for hydroelectric operations, and there is value in a "learn by doing" approach whereby lessons learned through application of a hydroelectric IRM can inform how (or whether) to apply IRM to nuclear in the future.

- **A Price Cap approach is recommended:** Some parties endorsed the building-blocks approach (N2 or H7, which are both price cap approaches), or commented that they wanted to see more analysis of the two price cap alternatives for hydroelectric (H5 and H7). SEP, LPMA, and CCC agreed with OPG's three year hydroelectric IRM proposal. The PWU also supported a price cap approach, albeit with a five year IRM horizon. SEC also proposed a five year rate setting horizon, although it proposed a COS methodology for both hydroelectric and nuclear.

  OPG's initial submission (Section 2, IRM Term) addressed the issue of IRM term and provided a suggested path forward. OPG is of the view that the current planning horizon is appropriate for nuclear, given that OPG and interested parties agree that OPG's nuclear operations are in a state of transition[1]. A longer planning horizon for hydroelectric can be examined in consultations to develop further the rate making approach for hydroelectric operations.

- **A Cost-of-Service approach should be used to establish the base year price in an IRM:** EP stated that "*one of the many issues that arise is the starting point for introducing IRM and in this regard Energy Probe supports the Power Advisory Report's recommendation that initial prices would be based on a traditional cost-of-service analysis."* The PWU agreed noting that *"the implementation of an IRM relies on information gathering, auditing and accounting requirements that are typically associated with traditional COS regulation".* SEC also supported using COS to

[1] LEI's presentation noted that "OPG's environment is about to undergo another significant change (some of OPG's nuclear fleet is nearing the end of their useful life and refurbishment of the Darlington nuclear station will require substantial capex)".

establish the base year price, noting that "*both cases (revenue and price cap) typically start with a full CoS review, or rebasing, so that a solid baseline is created on which to apply the formula*". No interested parties disagreed with this approach.

OPG encourages the OEB to endorse this as the preferred approach guiding the future development of an IRM for OPG.

- **The Business Plan is an appropriate starting point for a building blocks form of price cap (PA's "N2" and LEI's proposal for an "H7"):** Few interested parties addressed this issue; however the PWU stated that, "*should the Board persist with its desire to regulate OPG using IR despite the unsuitability of doing so, the least risky approach would be to base the IR framework on OPG's business plan which would incorporate all essential consideration of reliability and safety and avoid the inadvertent outcome of flawed IR expectations".* The PWU agreed "*with PA that the Board's review should test whether the targets in the business plan provide enough of a challenge or whether higher targets should be set."* SEP argued that the Scott Madden approach to benchmarking that OPG used to develop targets and initiatives to achieve targeted performance improvements that are incorporated into the business plan is flawed, and that "*Informed averages, based on a 'significant robust database' (which in all likelihood does not exist for Darlington or Pickering), or model-based 'most likely performance' estimators are better statistical measurement methods."* LPMA indicated that further study is required.

  OPG is of the view that future consultation on the form of IRM should reflect the use of OPG's Business Plan as the appropriate starting point for a building blocks form of price cap. OPG remains open to suggestions to improve benchmarking.

- **An Earnings Sharing Mechanism ("ESM") can be appropriate:** The PWU agreed that an ESM is "*another essential component of an IR framework*". The only other party to address this issue was SEC, who is opposed to ESM as it generally weakens incentives. SEC proposed "*a benchmarking approach that would tie ROE each year to performance on scorecard metrics that are not otherwise captured in the IRM model: availability and safety."*

  While OPG does not disagree with SEC's general observation about ESM, OPG believes that, at a minimum, OPG's initial IRM should include an ESM, especially given the lack of IRM experience in a generation context. OPG believes that future consultation should presume an ESM will be implemented, the design of which will be the subject of the consultation.

- **Total Factor Productivity ("TFP") studies are significantly more difficult to perform for generation:** Interested parties did not challenge the views of PA and LEI regarding the technical issues which are exacerbated in the context of a generation TFP study. In the August 28, 2012 consultation session, OPG highlighted issues of data availability (given the unregulated nature and private ownership of comparable generation assets) and questioned the relevance of such a study/data gathering exercise in a situation where the future operating environment will be substantially different from the past operating environment.

OPG, LEI and PA all suggested different options. No interested parties advocated a TFP study be undertaken. OPG is of the view that future consultation on this issue should examine options for establishing a price cap that do not require TFP analysis.

- **An Incremental Capital Module ("ICM") is recommended:** In comparison to distribution and transmission utilities, generation capital investments are even more "lumpy" and the impact on output can be even more variable. These challenges are exacerbated given the size of the Darlington refurbishment project.

  RCC proposed that "a*n IRM based on OPG's pre-approved cost forecasts could be used not only for the DRP [Darlington Refurbishment project], but also for other multi-year capital projects and could become a prerequisite for any approvals under an incremental capital module for OPG"* to *"encourage accurate ex-ante cost estimates and cost control during construction".* GEC cautioned that regulation must avoid "*any mechanisms that would lessen visibility and accountability, especially in the early stages of a project".*

  OPG is of the view that an ICM should be considered in future consultations on the form of IRM for OPG.

- **"Y" and "Z" - factors should be permitted:** As noted in its initial submission, OPG is of the view that, as most of the deferral and variance accounts approved by the OEB are required by O. Reg. 53/05 or are necessary to facilitate findings in OEB decisions (e.g., the Tax Loss Variance Account, the Pension and OPEB Cost Variance Account, the Hydroelectric Incentive Mechanism Variance Account, etc.). OEB-approved deferral and variance accounts are a reasonable starting point for establishing "Y" or "Z" factors.

  The PWU noted that "*there is no doubt that any IR plan contemplated for OPG must take into account the structure and disposition of the variance accounts*". RCC expressed its view that the current deferral/variance accounts should be reviewed, with a view to subsuming some accounts to encourage efficiency, while SEC listed many of OPG's current deferral and variance accounts and commented on whether they should continue in its proposed five year COS approach. No parties submitted that "Y" and "Z" – factors should not be permitted.

  OPG is of the view that "Y" and "Z" factors should apply to IRM for OPG, and that future consultation should examine the OEB's approved variance and deferral accounts to consider whether they remain appropriate in an IRM approach.

- **Off-ramps should be considered:** OPG believes that off-ramps offer a level of protection if the initial regulatory mechanism requires adjustment or if there are significant changes in OPG's circumstances during the IRM term. PA, LEI and SEC all supported the use of off-ramps.

- **Incentives should be aligned with the incentives of those making decisions:** PA highlighted this foundational requirement. OPG agreed, noting that if the OEB's approved IRM reflected the performance metrics in OPG's corporate scorecard, then the performance incentives would be aligned with those of decision makers at OPG.

  It appears that SEC agrees with OPG regarding the use of OPG's scorecard to reflect important operating targets such as safety, project management and perhaps availability in an IRM. OPG is of the view that future consultation as to the form of IRM should reflect the application of OPG's corporate scorecard. On the issue of safety specifically, several interested parties (PWU, EP, SEP, LPMA, GEC) stated that it should be a formal consideration in determining not just the form of IRM, but whether IRM should be implemented at all. As cautioned by LEI, such incentives will need to be carefully considered on a holistic basis with other aspects of the IRM so unintended consequences do not arise.

  OPG is of the view that future consultation on the form of incentives should presume that incentives are aligned with the incentives of those making decisions.

1.2 Hydroelectric Operations

- **Maintain the current Hydroelectric Incentive Mechanism ("HIM"):** A better alternative to the current HIM was not identified by either PA or LEI. Both PA and LEI support the continuation of the current HIM. CCC agreed.

  SEC disagreed, taking the position that the HIM and the Surplus Baseload Generation ("SBG") accounts should be discontinued, arguing that a number of exogenous factors creating volatility in any given year are still fairly predictable over longer periods. RCC requested *"a more in-depth policy review of the HIM as it relates to the broader electricity market to determine if additional opportunities to create efficiencies for consumers and deal with Ontario's SBG can be found."*

  OPG was directed to perform an analysis of SBG in the OEB's EB-2010-0008 Decision, which OPG intends to file in its upcoming hydroelectric main payment amounts application. The next hydroelectric payment amounts application is expected to establish the cast off rates for incentive regulation; therefore changes to the HIM and/or SBG accounts as a result of the analysis directed by the Board in EB-2010-0008 will be reflected in OPG's 1st generation incentive regulation methodology. OPG is of the view that this issue should not be considered in any future consultation; rather it should be addressed in OPG's next COS application.

- **Do not conduct a TFP analysis:** In lieu of a TFP analysis, which could be cumbersome, ineffective or inconclusive, the PA Report recommended setting a "modest" X factor, while LEI recommended applying the building blocks approach the PA Report had recommended for nuclear operations. OPG suggested either using the building blocks approach or a percentage of the escalation approach (e.g., GDP-IPI-FDD) as used by the OEB for Enbridge Gas Distribution Inc.

No interested parties advocated a TFP study be undertaken. OPG is of the view that future consultation on this issue should examine options for establishing a price cap that do not require TFP analysis.

1.3 Nuclear Operations

- **An IRM only works if the operating environment is sufficiently stable:** CCC, EP, LPMA, SEC and PWU all agreed and supported the continuation of a COS approach to nuclear regulation at least until the Darlington Refurbishment Project is completed. SEC stated that "*simply put, there is good reason to believe that the future in each case will not be similar to the past*."

  Some interested parties went further, questioning whether IRM will ever be appropriate for nuclear**.** LPMA stated that it was **"***not convinced that an IRM approach to regulating the nuclear assets is appropriate or preferable from the cost of service methodology."* LPMA cited a lack of diversity in these assets as inconsistent with an IRM approach. The PWU was also skeptical that IRM would work for nuclear, stating that *"given the improbability that these challenges will be overcome and the potential risk to safety performance it would be imprudent to compel OPG to embark on a broad IR plan in 2015, if ever."* SEP *"strongly opposes the implementation of an IRM mechanism for OPG's nuclear operations"* opining that IRM *"will likely never be an appropriate or responsible approach to rate setting"* for nuclear.

- **The building blocks approach (N2) should be adopted:** PA, LEI and OPG agreed that the building blocks approach (N2) was the most reasonable option once Darlington refurbishment is completed. The PWU supported this approach, noting that the alternative N1 (traditional price cap) alternative is problematic as "*addressing the challenges and obstacles precludes the implementation of an IR TFP approach for OPG and would require a complex IR framework*".

  SEC proposed a five year COS approach which could then be followed by an IRM approach. OPG is of the view that the current planning horizon is appropriate for nuclear, given that OPG and interested parties agree that OPG's nuclear operations are in a state of transition as discussed in OPG's initial submission.[2]

  OPG is of the view that further discussion on the appropriate form of IRM for nuclear should reflect the lessons learned from implementing IRM for hydroelectric operations. Those discussions may best occur a few years prior to the forecast completion of the Darlington refurbishment project. At that time, the N2 option and

[2] The PA Report (page 37) stated that all IRM approaches implicitly assume that the future will not be radically different from the past, at least in a structural sense. Both LEI and OPG highlighted the fact that OPG's future for both Pickering (managed end-of-life going forward) and Darlington (substantial refurbishment to extend useful life***) will not be operating*** in an environment that is in any way similar to the past.

the option of using a longer COS planning horizon may be reasonable to explore further.

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- **Specific targeted incentives (N4) should be considered:** Additional work will be required in this area as the nature of the incremental targeted incentives was not resolved. OPG has recommended that any incremental incentives should reflect the performance metrics and targets contained in its corporate scorecard (e.g., safety, project management, etc.).

  EP, SEP, GEC, LPMA and PWU echoed the presentation of George Fitzpatrick, arguing that the Board must not pursue efficiency gains which compromise nuclear safety. OPG's proposal to measure performance based on a balanced scorecard would ensure that safety figures prominently in any assessment of OPG's performance, as would other non-financial imperatives such as environmental stewardship, project management and availability (the latter was endorsed by SEC in its proposed approach to rate setting).

  As noted earlier in this submission, OPG is of the view that future consultation as to the form of IRM should reflect the application of OPG's corporate scorecard. As cautioned by LEI, such incentives will need to be carefully considered on a holistic basis with other aspects of the IRM so unintended consequences do not arise.

- **Darlington refurbishment presents unique challenges best addressed outside the IRM:** Interested parties either didn't comment on Darlington specifically, or discussed it within the context of an ICM. OPG's comments on the ICM are discussed earlier in the submission; however OPG reiterates its initial submission that, in addition to an ICM, the likelihood of significant customer rate impacts due to both the cost of the project and the loss of production during Darlington refurbishment needs to be managed. Innovative approaches may be required to smooth the impact on both utility and customer beyond what occurs in a typical ICM. <u>These unique challenges exist regardless of whether regulation continues in its current form or changes to an IRM mechanism in the future</u>. The PWU observed that there was *"no evidence that projects of DRP magnitude have ever been accommodated in an IRM".*

  OPG, LEI, PA and interested parties are of the view that IRM for nuclear should be deferred until after Darlington Refurbishment Project is completed. Assuming this approach is adopted, this issue would not directly be part of a future consultation on IRM. As noted in its initial submission, OPG is of the view that the discussion of the options to address Darlington refurbishment is best considered in the context of a full COS application, as OPG-specific numbers are required to make intelligent trade-offs in terms of collection horizon and customer impacts.

2. NEXT STEPS

As part of the consultation, OPG was asked to indicate its path forward in terms of rate applications. At that time, OPG indicated that it was not filing a COS application for either nuclear or hydroelectric for 2013 and that it's next main rate application is expected to be a hydroelectric only application. CCC invited the OEB to "*to consider mandating a review to follow the proposed rebasing application for the hydroelectric operations. Regulatory oversight is critical, and in light of all of the proposed changes to its nuclear operations a review in the next few years would be in the best interests of Ontario ratepayers."* GEC also asked the OEB to consider calling in OPG for a review of its nuclear payments, to improve *"transparency and accountability".*

During the consultation, SEC asked whether OPG intended to "*keep the same payment amounts for two years for 2013 and 2014?"* OPG advised that, while that was the thinking at that time (August 28), "*as time travels on and unfolds,…we look at our nuclear side and if it does not make sense to stay out we will likely put an application together*". At the time of this submission OPG continues to assesses the timing of its next nuclear COS application.

Yours sincerely,

[Original signed by]

Randy Pugh for
Pankaj Sardana
Vice President, Regulatory Affairs
Ontario Power Generation