David I. Poch Barrister tel. (613) 264-0055 fax (613) 264-2878

02 December 2016

Ontario Energy Board
2300 Yonge St., 27th Floor
Toronto, ON
M4P 1E4

Attn: Ms Kirsten Walli
Board Secretary

By electronic filing and e-mail

Dear Ms Walli:

Re: EB-2016-0152 – GEC Notice of Motion and Record

Attached please find GEC's Notice of Motion and Motion Record in this matter.

Sincerely,

David Poch

Cc: all Parties

1649 Old Brooke Road, Maberly, Ontario K0H 2B0 e-mail: dpoch@eelaw.ca

EB-2013-0321

ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, S. O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF an application by Ontario Power Generation Inc. pursuant to section 78.1 of the Ontario Energy Board Act, 1998 for an order or orders determining payment amounts for the output of certain of its generating facilities.

NOTICE OF MOTION AND MOTION RECORD

The Green Energy Coalition (GEC) will make a motion to the Ontario Energy Board (“the Board”) on December 16th, 2016 at the offices of the Board, 2300 Yonge Street, 25th Floor, Toronto, Ontario.

PROPOSED METHOD OF HEARING: This motion is to be heard in oral hearing.

THE MOTION IS FOR:

1. An order that Ontario Power Generation (“OPG”) provide a full and adequate response to the following interrogatories:

    a. L-3.1, Schedule 8, GEC-001

    b. L-4.3, Schedule 8, GEC-002

    c. L-1.3, Schedule 8, GEC-064

2. Such further and other relief as counsel may request.

THE GROUNDS FOR THE MOTION ARE:

3. Under Rule 27, an applicant is required to provide a "full and adequate response" to each interrogatory unless the interrogatory is irrelevant or cannot be answered for another valid reason. GEC submits that OPG has failed to comply with this Rule with respect to the above-listed interrogatories. GEC therefore seeks an order for full and adequate responses.

Rate Impact of the Darlington Refurbishment Project (DRP) and Pickering Life Extension (PLE) given the impacts on the equity ratio. (L-3.1-S.8 GEC-001)

4. In L-3.1-S.8 GEC-001 GEC sought the following:

Ref. C1-1-1 att.1 Concentric Report - Concentric notes that the DRP and Pickering life extension as well as the growth in nuclear versus hydraulic assets increases OPG's risk profile which leads to a recommended increase in the equity ratio from 45 to 49%.

a) Please confirm that any increase in capital costs due to the size and risk of the DRP will apply to the entire rate base, not just the DRP and Pickering portion.

b) Please estimate how much of the suggested shift in equity ratio is attributable to the DRP and how much is attributable to the Pickering life extension.

c) Please quantify the net present value in total over the life of the Darlington facilities for the increase in the cost of capital for the non-DRP portion of the rate base due to the portion of this shift in risk attributable to the DRP.

d) Please indicate whether the value provided in answer to part c, above, has been included in the $12.8B DRP cost estimate and if so, provide that analysis.

e) Please quantify the net present value in total over the life of the Pickering facilities for the increase in the cost of capital for the non-Pickering portion of the rate base due to the portion of this shift in structure attributable to the Pickering life extension.

f) Please indicate whether the value provided in answer to part e, above, has been included in the cost estimate and in the cost effectiveness studies of the Pickering life extension and provide that analysis.

5. In response Concentric confirmed that the two projects "are key elements of Concentric's risk assessment" and that the resulting equity ratio will apply to the entire rate base, but declined to undertake the analysis requested stating that "it is not possible to isolate the effects of these projects…"

6. GEC submits that the response is evasive and inaccurate on its face. Had OPG decided not to proceed with these projects it is not credible to suggest that Concentric could not estimate an equity ratio. GEC simply seeks the difference between the scenarios.

7. Concentric also cited the Board's rejection of a separate cost of capital for the nuclear and hydroelectric divisions in EB-2010-0008. This response mistakenly assumes that the purpose of the interrogatory is to support a request for two costs of capital. In fact the purpose of the interrogatory is to inform the Board's consideration of OPG's requests for capital and operating budgets in the rate period. In GEC's submission, the Board must obtain an appreciation of the full cost and rate impact of the projects to determine whether the expenditures are reasonable and prudent.

8. Based on Concentric's response OPG declined to calculate answers in response to parts (c) through (f) of the interrogatory.

10. Reg. 53/05 s. 6.(2), 4.(ii) requires the Board to be satisfied that DRP capital and non-capital costs "were prudently incurred" and that firm financial commitments in respect of the DRP "were prudently made".

11. While the regulation deems the need for the project, it explicitly charges the Board with determining prudence. OPG through its counsel has confirmed that it seeks to rely on Reg. 53/05 s. 6.(2),4.(ii) in regard to the DRP. (TC-1, p. 94)

12. GEC submits that total cost and rate impact is a fundamental aspect of any reasonableness or prudence determination both in the ordinary course (which applies to the PLE project) and within the specific regulatory framework established under Reg. 53/05, (which applies to the DRP project).

Avoidable costs if DRP off-ramp is exercised or cancellation otherwise occurs. (L-4.3, Schedule 8, GEC-002)

13. GEC asked:

> Please provide illustrative examples for the portion of each part of the DRP budget that is avoidable if the project is cancelled or curtailed at various stages. Please break this out to indicate the portion avoidable that falls within the amounts included in the current application. Please ensure that one scenario provided indicates what financial commitments would be avoidable if the project was cancelled today and what proportion of those avoidable commitments are included in the approvals sought in this case.

14. At the technical conference OPG confirmed that it has detailed contract milestones and payment schedules (TC-1, p. 79). Nevertheless, OPG declined to respond, asserting that any attempt to do so would be speculative.

15. The Government has explicitly directed OPG to include off-ramps in its contracting approach and to un-lap its DRP unit refurbishment. OPG seeks the Board's approval of its contracting strategy in that context. To determine whether the strategy adequately insulates customers and taxpayers from cost risk should an off-ramp be exercised or a cancellation occur it is necessary for the Board and intervenors to understand what costs have been made avoidable and what costs would be borne in rates or taxes in the scenario that the Government has insisted OPG maintain as a possibility.

Impact on Payments and Rates with and without rate smoothing in the event of a DRP off-ramp. (L-1.3, Schedule 8, GEC-064)

16. GEC sought:

> Please estimate the impact on payments and customer rates in each year of the 20 year deferral and recovery period, with and without the smoothing proposal, should the government require the exercise of an off-ramp in regard to the DRP at the completion of Unit 2 refurbishment.

17. OPG declined to respond citing relevance.

18. GEC submits that the Government has explicitly directed OPG to include off-ramps in its contracting approach and to un-lap its DRP unit refurbishments. Accordingly, GEC submits that to properly evaluate the rate smoothing proposal the Board and intervenors must be able to test it under such circumstances.

THE FOLLOWING DOCUMENTARY EVIDENCE will be used at the hearing of the motion:

a. Evidence on the record in this proceeding; and

b. Any further evidence as counsel may advise and the Board may permit.

Date: December2, 2016

David Poch, Barrister
Tel: (613) 264-0055
Counsel for GEC

TO: The Applicant and Parties

GEC Interrogatory #1

Issue Number: 3.1
Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference:
C1-1-1 att.1 Concentric Report
Concentric notes that the DRP and Pickering life extension as well as the growth in nuclear versus hydraulic assets increases OPG's risk profile which leads to a recommended increase in the equity ratio from 45 to 49%

a) Please confirm that any increase in capital costs due to the size and risk of the DRP will apply to the entire rate base, not just the DRP and Pickering portion.

b) Please estimate how much of the suggested shift in equity ratio is attributable to the DRP and how much is attributable to the Pickering life extension.

c) Please quantify the net present value in total over the life of the Darlington facilities for the increase in the cost of capital for the non-DRP portion of the rate base due to the portion of this shift in risk attributable to the DRP.

d) Please indicate whether the value provided in answer to part c, above, has been included in the $12.8B DRP cost estimate and if so, provide that analysis.

e) Please quantify the net present value in total over the life of the Pickering facilities for the increase in the cost of capital for the non-Pickering portion of the rate base due to the portion of this shift in structure attributable to the Pickering life extension.

f) Please indicate whether the value provided in answer to part e, above, has been included in the cost estimate and in the cost effectiveness studies of the Pickering life extension and provide that analysis.

Response

Parts a and b of this response were prepared by Concentric Energy Advisors

a) Confirmed. The proposed change in capital structure will apply to the entire rate base, which includes capital costs of assets in service. It is a standard ratemaking practice to apply one weighted average cost of capital to the utility's rate base that reflects the rate of return (inclusive of capital structure) that would be required for investment in companies of comparable risk. As such, the weighted average cost of capital reflects the entirety of the risk profile of the enterprise. Consistent with that practice, and as described in Concentric's report, Concentric performed a risk analysis of the entirety of OPG's regulated operations, and based the recommendations on that analysis, in conjunction with a comparative analysis of proxy companies to provide context for where, within a reasonable range, OPG's equity ratio should be set by the OEB.

b) As summarized in Concentric's report, the recommended capital structure and associated increase in the equity ratio are based on a number of factors:
   - The change in the nuclear to hydroelectric asset mix;
   - The increase in OPG's business risk driven by the DRP;
   - Plans to pursue extended Pickering operations beyond 2020 and the aging of the Pickering plant;
   - The move to IR for hydroelectric rate-setting and to long-term rate-setting periods for nuclear operations;
   - The recovery risks associated with pension and OPEB costs and revenue deferred under rate smoothing; and
   - OPG's higher risk relative to comparable firms that have a median equity ratio of almost 50% (Ex. C1-1-1, Att. 1, p 5.).

   The DRP and Pickering life extension projects are key elements of Concentric's risk assessment, but it is not possible to isolate the effects of these projects, together or individually, from the overall risk assessment of OPG. While one could calculate the increase in capital expenditures for the projects, the capital mix is just one aspect of Concentric's overall risk assessment.

   The question is effectively asking for a cost of capital for the DRP, the Pickering Life Extension project and, by default everything else (remaining nuclear operations plus hydro). This would represent an even finer breakdown than a nuclear and hydroelectric specific capital structure, an issue examined by the OEB in EB-2010-0008. In rejecting prior proposals for a technology-specific capital structure in EB-2010-0008, the Board found that: (1) there was a "paucity of comparator firms;" (2) use of technology-specific capital structures would introduce a "level of variability and complexity [that] would not be appropriate"; and (3) such an approach "may not lead to any significant ratepayer benefits in the long term."

c) to f) As discussed in response to part b) it is not possible to isolate the effects of these projects from the overall risk assessment of OPG.

GEC Interrogatory #2

Issue Number: 4.3
Issue: Are the proposed nuclear capital expenditures and/or financial commitments for the Darlington Refurbishment Program reasonable?

Interrogatory

Reference:

Please provide illustrative examples for the portion of each part of the DRP budget that is avoidable if the project is cancelled or curtailed at various stages. Please break this out to indicate the portion avoidable that falls within the amounts included in the current application. Please ensure that one scenario provided indicates what financial commitments would be avoidable if the project was cancelled today and what proportion of those avoidable commitments are included in the approvals sought in this case.

Response

OPG began refurbishment of Unit 2 on October 15, 2016 and has no plans to cancel or curtail the refurbishment at this stage or at future stages. OPG is unable to provide the requested illustrative examples. Any attempt to do so would be speculative, as it would be entirely dependent on assumptions that have no basis in fact. If OPG were to cancel or curtail DRP during the period covered by this application, OPG would inform the OEB and seek direction.

If the DRP were to be cancelled, the costs incurred to the date of cancellation, including accruals for work completed but not invoiced, would not be avoidable. Additionally, certain costs related to procurement commitments and demobilization costs, including costs to place the work in a safe state would not be avoidable.

The project spend to August 2016 was $2.6B (L-4.3-6 EP-18, Attachment 1, p. 2). In addition, as of September 30, 2016, accruals and commitments related to DRP were estimated at $478M (see L-4.3-13 PWU-8).

GEC Interrogatory #64

Issue Number: 1.3
Issue: Is the overall increase in nuclear payment amounts including rate riders reasonable given the overall bill impact on customers?

Interrogatory

Reference:

Please estimate the impact on payments and customer rates in each year of the 20 year deferral and recovery period, with and without the smoothing proposal, should the government require the exercise of an off-ramp in regard to the DRP at the completion of Unit 2 refurbishment.

Response

OPG is unable to provide the requested estimate and doesn't believe it is relevant to any issue on the approved Issues List. The costs that would be incurred if an off-ramp were to be exercised would depend on the timing of the decision and the specific direction from the Government regarding the future operation of Darlington. Any attempt to calculate 20 years of payment amounts without this information would be speculative, as it would be entirely dependent on assumptions that have no basis in fact. In the event the Government exercises an off-ramp during the period covered by this application, OPG would inform the OEB and seek direction.

Ontario Energy Board Act, 1998
Loi de 1998 sur la Commission de l'énergie de l'Ontario

ONTARIO REGULATION 53/05

PAYMENTS UNDER SECTION 78.1 OF THE ACT

Consolidation Period: From January 1, 2016 to the e-Laws currency date.

Last amendment: O. Reg. 353/15.

Rules governing determination of payment amounts by Board

6. (1) Subject to subsection (2), the Board may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts for the purpose of section 78.1 of the Act. O. Reg. 53/05, s. 6 (1).

(2) The following rules apply to the making of an order by the Board that determines payment amounts for the purpose of section 78.1 of the Act:

1. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the variance account established under subsection 5 (1) over a period not to exceed three years, to the extent that the Board is satisfied that,
   i. the revenues recorded in the account were earned or foregone and the costs were prudently incurred, and
   ii. the revenues and costs are accurately recorded in the account.
2. In setting payment amounts for the assets prescribed under section 2, the Board shall not adopt any methodologies, assumptions or calculations that are based upon the contracting for all or any portion of the output of those assets.
3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the deferral account established under subsection 5 (4). The Board shall authorize recovery of the balance on a straight line basis over a period not to exceed 15 years.
4. The Board shall ensure that Ontario Power Generation Inc. recovers capital and non-capital costs and firm financial commitments incurred in respect of the Darlington Refurbishment Project or incurred to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2, including, but not limited to, assessment costs and pre-engineering costs and commitments,
   i. if the costs and financial commitments were within the project budgets approved for that purpose by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., or
   ii. if the costs and financial commitments were not approved by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made.

4.1 The Board shall ensure that Ontario Power Generation Inc. recovers the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, to the extent the Board is satisfied that,
   i. the costs were prudently incurred, and
   ii. the financial commitments were prudently made.

But when we look at CCC 22 which I’ve been referred to, that's Tab 4.55, schedule CCC 22, attachment 1, at page 4, there is a table, there is a figure 1, and you have shown there a comparison for the LUEC for procurement from Quebec or Newfoundland.

Now there is has just been announced that Ontario has made an arrangement with Quebec, and I am wondering if we could just get an update on that, if you have an update on what the LUEC of the resources being brought into Ontario under that arrangement are.

MR. REINER: That isn't something that we have. That's not an OPG transaction; it's not something that we have available to us.

MR. POCH: Okay, and I will just ask your counsel. If your Pickering panel has -- if your panel tomorrow, which is where the Pickering costs are carried, has any information on that, we would appreciate it.

Moving on then to GEC 6, tab 4.5, I asked you to confirm that you're seeking -- in effect, you are seeking a prudency ruling in advance on the 4.8 billion, and you have given me -- you have reproduced what you're requesting of the Board, and I just want to make sure we are on the same page here.

You have given me a long version. Am I correct in reading that as you are seeking this Board's finding of prudence at this time for the 4.8? It's probably a question for your counsel more than you.

MR. KEIZER: We are seeking the inclusion of 4.8

billion in the rate base.

MR. POCH: And to do so, are you seeking a finding of prudence?

MR. KEIZER: Well we are seeking a finding, as the Board would normally do, which is on the basis of it’s a reasonable expenditure for purposes of going into rate base.

The question of prudence is a bit of a jurisdictional issue that people are -- not jurisdictional, but a jurisprudence issue that people discuss as to whether or not it is a reasonable issue, or a prudence issue on a forward test year basis.

But we are seeking it on the same basis as any capital expenditure that's being put into rate base at the time that it is going into service.

MR. POCH: You have been very clear that you have said if there is an overage beyond 4.8, it would be in a variance account and you would seek a prudence ruling subsequently on any overage. You have been clear about that, and I understand that.

The regulation speaks about the OEB putting things in rate base if it finds it prudent. Are you asking the Board to make that determination in this proceeding? I think it's the most basic of questions for this Board and this proceeding.

MR. KEIZER: Based upon the evidence before the Board, and based upon the information that OPG has provided and will provide, we are asking the Board to approve the project for purposes going into rate base and, to the extent it can on the information that's before it, to find that that's prudent and that OPG has and will be undertaking this project on an execution basis in a manner which is reasonable and prudent.

MR. POCH: So you are asking for the Board to act under the regulation, section 6, subsection 4, subsection 2, just to be clear. I think it's -- we need to understand what exactly you are asking for, and that's the applicable section of the regulation and you are asking for the Board's decision-making under that section?

MR. KEIZER: I don't have the regulation in front of me, so I am not going to -- all I am saying is fundamentally, yes. We’re asking, regardless of -- subject to check on the regulation and what section you just quoted me, effectively we are saying, like any other capital expenditure whether it's a major transmission line or whether it's a pipeline that's going to be constructed and put into service during the period of a forward test year, that is the basis upon which this is also being applied, recognizing that the regulation has accepted and endorsed the need of the project making it non-discretionary.

MR. POCH: I guess maybe I am over complicating. section 4 talks about the Board ensuring you recover your capital and non-capital costs for the DRP and there is two categories. Either under subsection 1, if it was approved by the OPG board before the OEB stepped in, or part 2, if it wasn't approved before the first order under 78.1 if it was prudently incurred or commitments were prudently made.

And I just want to make sure that's -- you are asking this Board to make that determination?

MR. KEIZER: The latter?

MR. POCH: The latter, okay.

MR. KEIZER: Yes, recognizing that need has been accepted by the previous regulation.

MR. POCH: I understand. Okay, thank you. I think actually that's it for this panel. Thank you very much.

MR. MILLAR: Thank you, Mr. Poch. I think that takes us nicely to our lunch break. We will come back with Mr. Elson in one hour, so at twenty to 2:00. Thank you, everyone.

--- Luncheon recess taken at 12:41 p.m.

--- On resuming at 1:40 p.m.

MR. MILLAR: Welcome back everyone. We will just be one more moment.

Okay, we are back and we now have Mr. Elson.

MR. KEIZER: If I could, Mr. Millar, just to clarify a couple things from this morning so people will have this.

The first was we took away to consider the RCRB recommendations and our responses to those, and so we will provide OPG's responses to the RCRB recommendations. I think it was asked by Mr. Rubenstein.

MR. MILLAR: Yes, so should we mark that as an undertaking?

MR. KEIZER: Sure, yes.

MR. MILLAR: So it will be JT1.15.

And I just wondered if you could talk about what -- why are some of the materials delayed? What has been the challenge there?

MR. REINER: This is specifically related to the retube and feeder replacement materials, and a challenge that we encountered. The feeder pipes are made of a specific type of metal, a certain number of the feeders have parts welded to them for instrumentation lines.

Those -- the metal that is used for to connect those instrumentation lines is a different alloy than the feeder pipe itself. There are very few companies in the world that can actually do the weld that is needed to make that connection. So that caused a delay in delivery of feeder pipes.

That's the primary component that was delayed. It has not put at risk the execution of that work in our planning. We had a general assumption, and this was a risk-mitigation measure to have materials on-site at least six months prior to when it needed to be installed in the field. In the case of these feeder pipes, we have eroded some of that margin and we will have the feeders here about three months prior to when they are needed for installation.

MS. GRICE: Okay, thank you. Those are my questions.

MR. MILLAR: Thank you Ms. Grice. Mr. Poch, are you ready to go?

QUESTIONS BY MR. POCH:

MR. POCH: Good morning, panel. Just a few questions for you, starting with GEC number 2, tab 4.8. We asked for example -- illustrative examples if DRP was cancelled and what's avoidable and --

[Technical interruption]

MR. POCH: You’ve said you can't provide, and I am trying to understand the rational for that. Is it not the case you’ve got -- for your entire project and for every contract, you have a detailed schedule and you have payment milestones for each contractor, for each project.

That’s a question. Yes?

MR. ROSE: Yes, we do. We have detailed schedules and payment milestones for each contract, yes.

MR. POCH: That being so, I am trying to understand what's the difficulty with, you know, picking a date and saying well here's what you’re on the hook for and what you're not.

MR. KEIZER: Well, I think question – it indicated it depends on the circumstances that arise at that particular time, because it is a dynamic circumstance that we are dealing with in terms of timing of the project, when it happens, what contractors are on-site, what has been done and what hasn't been done, all of those aspects.

MR. POCH: That is exactly why -- all I am asking was -– obviously, it can only be illustrative. In reality, if a project is cancelled, it could occur at any stage. But I assume you could pick some points in time to give us an illustration.

MR. REINER: Could we maybe try and explain the kinds of costs that we would incur if there were a cancellation, and it would apply to cancellation at any point in time. It does not matter when you cancel. It is then just a mathematical exercise to figure out how far through the project you are in execution.

But maybe we can try to just explain what cancellation looks like in terms of costs.

MR. POCH: Sure. Any information would be helpful. I guess -- just to clarify, I mean the obvious point is if the government takes the offramp after when they see where unit 2 comes in at, you know what's avoidable, what's not?

MR. KEIZER: Sorry. You are saying unit 2 is in service at that point?

MR. POCH: You tell me when the government is likely the make a decision on the offramp.

MR. KEIZER: I am --

MR. POCH: I am trying to be as flexible as I can here, to make it as easy for you to answer the question as I can.

MR. KEIZER: I guess I am trying – it’s hard to understand what this has to do with the application that's currently before the Board, and what OPG is seeking in this application relative to -- we are not seeking cancellation costs. We are not seeking anything to do with that.

If an offramp is chosen, I think for whatever circumstances, however it happens or however it arises. cost will rise and that would be a point at which OPG would be seeking costs and then that would be before the Board.

That's not what we are before the Board today on, so I am not sure I understand the relevance of the question.

MR. POCH: I am trying to understand what is at risk. The government has explicitly asked you to honour its requirement of, for example, of staging and of offramp opportunities. This Board, you are asking this Board to in effect find prudence at this point for unit 2 and for all the common costs that you have indicated are necessary to execute unit 2.

I am trying to place it all in context for -- I don't want to get into a long argument here about it.

MR. KEIZER: No, I don't either. But I think we have tried to already explain what the mechanisms are under the contract with respect to termination or whether for convenience or default or otherwise, and we have also offered to indicate the areas of costs that could be impacted. The problem I am having is just picking a scenario which may or may not happen, could be, you know, something that's entirely out -- saying, here's the consequences in this circumstance. It seems to me that's just -- that's just entirely speculative. I don't see what the relevance is.

We have demonstrated the prudency within the contract in my view about what we intend to do and the flexibilities that are in there and the opportunities or options that OPG and the contractors have, and we have also identified the nature of costs.

So picking an example of something that may or may not happen, I just can't see the relevance of it, particularly