26 November 2007

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street 27<sup>th</sup> Floor Toronto, ON M4P 1E4

Dear Ms Walli:

### Re: EB-2007-0707 – GEC, Pembina, OSEA submission on OPA's Draft Issues List

Attached is our submission on this matter.

Sincerely,

David Poch

### EB-2007-0707

### GEC, Pembina and OSEA joint submission on OPA's draft Issues List

This submission is made on behalf of the Green Energy Coalition (GEC), The Pembina Institute (Pembina), and The Ontario Sustainable Energy Association (OSEA). GEC is comprised of the David Suzuki Foundation, Eneract (Energy Action Council of Toronto), Greenpeace Canada, Sierra Club of Canada and WWF-Canada (World Wildlife Fund).

#### General Comments on OPA's proposed issues list:

In response to the Board's request for a draft issues list OPA has provided a slight rewording of the Directives and legislation and added a tabular summary of its plan for consideration under the issue of prudence and cost effectiveness. We are concerned that the list as drafted will not assist the Board in understanding the main issues that are in contention.

Further, we are concerned that OPA's interpretation of the language in the legislation, regulations, and directives, is such that without further guidance from the Board at the outset we will face a constant effort by OPA to constrain the Board's review and the parties' presentations of evidence. For example, in its pre-filed 'evidence' at Ex. A/2/2, OPA urges the Board to interpret the test 'economic prudence' as being met so long as it has not been demonstrated that OPA has been "fraudulent, unwise, or extravagant". Similarly, in our submission, OPA appears to apply the test of cost effectiveness in a narrow (though inconsistent) manner, often ignoring key economic costs such as investment risk costs. In contrast, under the heading 'Economic Prudence and Cost Effectiveness of the IPSP', the Board in its December 27<sup>th</sup> Report on Filing Guidelines at page 8 noted:

In assessing the IPSP as a whole, the Board will examine the economic prudence and cost effectiveness of the IPSP's main components, particularly those aimed at achieving the goals set out in the Supply Mix Directive. The Board will expect the OPA to demonstrate that it has evaluated alternative ways of achieving those goals, and to satisfy the Board that the selected solutions are individually and collectively economically prudent and cost effective. For example, in order for the OPA to demonstrate that the replacement plan for the

coal-fired facilities is economically prudent and cost effective, the IPSP would need to include an assessment of alternative plans. For each alternative, the timing of the replacement for each facility and the associated costs and air emissions would need to be provided.

In the narrowest sense, the cost effective alternative achieves its goals at the lowest overall plan cost as measured on a \$/kW or \$/kWh basis.

However, the OPA will be required to make trade-offs in preparing the IPSP and to consider or address non-quantitative, non-financial or non-economic factors (such as some of the factors outlined in the IPSP Regulation) in choosing among alternative means of achieving the goals set out in the Supply Mix Directive. The Board accepts, in each case, the alternative chosen may be cost-effective and economically prudent even if it is not the "least cost" solution. Nonetheless, to the extent that the OPA proposes something other than the "least cost" solution, the onus will be on the OPA to satisfy the Board that this is justified based on relevant considerations other than those of cost or price.

In the same discussion, the Board adds:

The Board will also require an understanding of the financial and other risks associated with IPSP initiatives.

#### And further:

The Board is particularly concerned that environmental costs, such as those associated with air emissions, be considered in the development of the IPSP as such costs are not reflected fully in the cost of electricity. The Board will wish to understand how the OPA took environmental externalities into account in considering alternatives ways of achieving the goals set out in the Supply Mix Directive.

Thus it is clear that the panel issuing the earlier Report viewed the phrase "Economic Prudence and Cost Effectiveness" in a manner more reflective of the colloquial use of the words. The OPA's formulation, at least of the word 'prudent', would appear to impose both a far narrower interpretation of the language and to reverse the onus.

Given the OPA's admonition to the Board to show great deference to the OPA (see Ex. A/2/2) and to limit itself to a strict adherence to a narrow interpretation of its jurisdiction, we fear that OPA will repeatedly try to use the list as a basis for unduly limiting meaningful review – a repetition that will be tiresome and wasteful. Of course, satisfying the legislative requirements is a matter that the Board will ultimately need to judge and the list should include that issue. However, the list should then be augmented by more focussed statements of issues.

This approach will have two benefits:

First, it will serve as a preliminary indication by the parties of the areas of primary concern which will assist the Board and the parties in organizing the case.

Second, this approach will allow the parties to have some certainty in regard to the Board's view of the relevance of some issues and thereby reduce the amount of time revisiting the question of scope.

We have struggled with the level of detail that is appropriate at this time. In discussing the rationale for each proposed issue below, we have offered examples which in many cases could be re-phrased as more detailed sub-issues. We have not done so as we have yet to obtain the advice of experts and therefore, in our submission, an overly detailed delineation of the issues would be premature at this point. However, if the Board determines that a more detailed list is required at this time, we would ask that the Board start by including the examples we offer as issues.

OPA has identified "areas of discretion" in Exhibit B/3/1 at page 30 where OPA indicates what it views as its areas of discretion in the context of the legislation and directives. We have built our list around this elaboration as we find it to be a more useful statement of the matters in contention then the draft issues list the OPA has provided.

### Issues proposed by GEC, Pembina and OSEA:

Note: For ease of review we have provided rationale for selected issues following the complete list. Topics in italics are those listed in OPA ex. B/3/1 at p. 30

- 1. Load forecast:
  - 1.1. Has OPA forecast economic growth and electricity intensity of the economy appropriately?
  - 1.2. Has OPA accounted for natural conservation appropriately?
  - 1.3. Has OPA determined the required reserve margins appropriately?

#### 2. CDM:

- 2.1. Is OPA's assessment of CDM, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?
- 2.2. Does the CDM component of the plan meet the minimum level in the directive?
- 2.3. What mix of Conservation types and program types should be used to meet the 2010 and 2025 goals?
- 2.4. Should the IPSP seek to exceed the 2010 and 2025 goals; and if so, how?
- 2.5. Does OPA's near term emphasis on peak reduction and resource acquisition adequately support the achievement of long-term efficiency objectives?
- 2.6. Has OPA adequately considered rate level and design as a CDM tool?
- 2.7. What is the implementation schedule for Conservation initiatives?

#### 3. Renewable Supply including Imports

- 3.1. Is OPA's assessment of Ontario and imported renewable supply, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?
- 3.2. Does the renewable component of the plan meet the minimums required by the directive?
- 3.3. What mix of renewable resources should be used to make up the 2010 and 2025 targets?
- 3.4. Should the IPSP seek to exceed the 2010 and 2025 targets; and if so, how?
- 3.5. What is the schedule for implementing renewable resources in light of lead times for supply and transmission?

#### 4. Nuclear

- 4.1. Is OPA's assessment of nuclear supply, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?
- 4.2. What is the baseload requirement after the contribution of existing and committed projects and planned Conservation and renewable power?
- 4.3. How should the remaining baseload requirement be met?
- 4.4. Should new nuclear supply be refurbished or new build?<sup>1</sup>
- 4.5. What is the schedule for implementing baseload resources in light of lead times for supply and transmission?

#### 5. Replacement for Coal Fired Generation

- 5.1. Has OPA appropriately considered the costs and impacts of coal-fired generation?
- 5.2. How do existing, committed and planned Conservation initiatives, renewable resources and nuclear power contribute to meeting the contribution that coal-fired generation currently provides to meeting Ontario's electricity needs with respect to capacity (6,434 MW), energy production (24.7 TWh) and reliability (flexibility, dispatchability, and the ability to respond to unforeseen supply availability).
- 5.3. What are the remaining requirements in all of these areas and what combination of gas and transmission resources can be installed in the earliest practical time frame to meet remaining requirements?
- 5.4. Are there better strategies to assure reduced reliance and the phase out of the coal plants at the earliest practicable time?

<sup>&</sup>lt;sup>1</sup> It is not clear that this is a matter that the Board need address at this time – it is included here as it was part of OPA's statement of discretionary matters.

#### 6. Natural Gas

- 6.1. Is OPA's assessment of gas generation, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?
- 6.2. Is OPA's selection of gas generator size, location and technology (simple cycle, combined cycle, CHP, centralized, distributed) appropriate?
- 6.3. How can gas be used for peaking, high value and high efficiency purposes?
- 6.4. How should gas-fired generation contribute to meeting transmission capacity constraints?

#### 7. Transmission

- 7.1. Is OPA's assessment transmission options, including existing capacity, need for new transmission, lead times, costs, performance, impacts and risks, a reasonable basis for planning?
- 7.2. Does OPA's approach to transmission planning and access support the achievement of plan objectives?
- 7.3. Has OPA appropriately considered and assigned transmission costs in comparing supply and demand options?

#### 8. Planning Methodology

- 8.1. Do the OPA's priorities as set out at Ex. B-1-1 p. 2 respect the Ministerial Directives and the legislation?
- 8.2. Are there preferable priorities that would respect the Ministerial Directives and the legislation?
- 8.3. Has OPA's planning approach adequately weighed and evaluated environmental impacts and risks and considered sustainability appropriately and applied these in its plan development?
- 8.4. Has OPA adequately recognized and accounted for economic externalities in its planning and its analysis of sustainability?

- 8.5. Has OPA appropriately considered risk and uncertainties in the plan and the planning environment and valued risk reduction and flexibility accordingly?
- 8.6. Does the IPSP appropriately facilitate the development of new technologies?
- 8.7. Is OPA's modelling methodology appropriate?
- 8.8. Does OPA's preferred plan conform to the directives and legislation and to its stated priorities?
- 8.9. Is there a preferable plan that would conform to the legislation, directives and the OPA's or preferable priorities?

#### 9. Procurement Plan

- 9.1. Is OPA's procurement plan detailed enough to guide actions in the coming years and if not, what particular features should be incorporated?
- 9.2. Should OPA be required to pursue preferred options such as CDM, renewable generation and high efficiency gas generation in advance of any procurement of large centralized non-renewable supply such as nuclear?
- 9.3. Does OPA's IPSP and procurement plan adequately ensure that the full potential for prudent investment in smaller, decentralized and community based renewable power generation will be achieved?

### **Rationale for added issues**

#### Issues identified by OPA as within their discretion (denoted above by italics):

These issues are OPA's statement of what it considers to be within its discretion and are thus areas where OPA has exercised judgement that should be considered in light of the overall goals of the legislation, regulation, directives, and in particular the considerations of cost-effectiveness, prudence and sustainability.

#### Issues 1.1, 1.2, 1.3: Has OPA appropriately forecast need?

Rationale: Forecasts of rate levels, economic growth, natural conservation and electricity demand as well as reserve margins are important underlying determinants of the plan and should be reviewed. It should be noted here and elsewhere that many issues are interrelated. For example, reserve margins can be affected by technology choice and uncertainty in the planning environment and load growth can be affected by rate levels and rate design (see CDM, below).

# Issues 2.1, 3.1, 4.1, 5.1, 6.1: Are OPA's short and long term assessments of CDM and supply, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?

Rationale: In its near term and long term planning OPA has constrained the contribution of renewable generation, CDM, imports, and high efficiency gas generation, often at the minimum levels required by the Directives. OPA has specifically abandoned pursuit of renewable generation beyond required minimums by reason of its conclusion that other options are more cost effective, even while noting that the differences are in some cases slight<sup>2</sup>. OPA's assessment of achievable CDM is based on its assessment of cost effective CDM which is based on its avoided supply costs. OPA then proposes near term actions such as transmission development premised on its long term view of the cost and location of resources. OPA's mid and long term plans have also led it to determine that it need not pursue certain alternative resources in the near term. For example, it has not negotiated a purchase option with Manitoba at this time and as a result Manitoba may commit further capacity to U.S. export markets. OPA's assumptions about the role of nuclear generation lead it to schedule certain southern Ontario transmission upgrades ahead of certain northern upgrades which may preclude timely acquisition of northern alternatives to nuclear power. Accordingly, both by act and omission, OPA's current views for the long term may become self-fulfilling prophesies. Thus its cost and performance assumptions reverberate throughout the plan.

<sup>&</sup>lt;sup>2</sup> At Ex. D-5-1p.41 OPA notes: "...on the basis of LUEC analysis, adding wind resources beyond that needed to meet the 2025 target would not be cost effective. The differences, however, are relatively small, and the conclusion should be subject to further analysis in future Plans." Further, at D5.1 page 8 OPA claims "there are no other Ontario renewable resources that can be procured in time to be in-service by 2010" (beyond the 1450 MW already committed) yet at D/1/34 OPA shows 2787 MW of RESOP applications received.

Of particular concern is the large amount of nuclear baseload generation in OPA's plan which is predicated on assumptions about costs, performance, and risk that are viewed by many as unrealistic. As discussed above, these assessments then serve to limit the amount of renewable generation, CDM, imports and gas generation in the plan. Further, in our submission OPA has been asymmetrically optimistic in regard to technological development, performance and costs. It assumes that nuclear plants will perform far better and cost less than experience dictates while placing no reliance on the trend of falling costs and technological enhancement for resources such as wind, solar, storage and high efficiency distributed generation. Indeed, OPA largely eliminates *consideration* of all options to meet base load except natural gas and nuclear and then relies solely upon nuclear in its preferred plan.

#### Issue 2.4: Should the IPSP seek to exceed the 2010 and 2025 goals; and if so, how?

Rationale: The relevance of this issue is more apparent if it is phrased: Is limiting CDM in the IPSP to the 2010 and 2025 goals economically prudent and cost effective?

# Issues 2.5, 2.6: Does OPA's near term approach to energy efficiency support or impair the achievement of long-term efficiency objectives?

Rationale: According to an OPA commissioned ICF report, OPA's near term CDM portfolio (up to 2010) targets just 29% of what the OPA has identified as 'achievable' conservation potential and 72% of what the OPA has identified as 'achievable' energy efficiency<sup>3</sup>. ICF has also suggested that the economic potential studies that the OPA relies upon to derive achievable potential estimates may understate actual potential<sup>4</sup>. Interestingly, OPA's demand response near-term target is set at 160% of its achievable potential estimate suggesting that OPA fully appreciates that its analyses may be inadequate<sup>5</sup>. In its pre-file, OPA confirms that it will plan to acquire only 65% of identified achievable cost effective resources<sup>6</sup>, notwithstanding OPA's own sensitivity analysis which demonstrated that higher CDM potential "could displace some natural gas, defer nuclear build, and accelerate coal phase out."<sup>7</sup> As rationale for this approach,

<sup>&</sup>lt;sup>3</sup> ICF International, Opportunity Analysis for CDM Programs in Ontario 2008-2010, June 20, 2007, p.14

<sup>&</sup>lt;sup>4</sup> Ibid at p.10

<sup>&</sup>lt;sup>5</sup> Ibid at p.14

<sup>&</sup>lt;sup>6</sup> At Exhibit D-4.1 p41

<sup>&</sup>lt;sup>7</sup> Exhibit G-1.1 p 14

OPA states that it will consider CDM goals beyond the minimums required by Directives only after it has gained experience in the initial IPSP period<sup>8</sup>. However, the CDM programs mandated by Directive have been largely focussed on peak load reduction. Accordingly, not only is OPA creating 'lost opportunities', it is also gaining little experience in reducing baseload generation needs. OPA also admits that in order to meet the directives in the 2007-2010 CDM portfolio, it will focus on a "resource acquisition" approach, downplaying the other important pillars of CDM - capacity building<sup>9</sup> and transformation of energy using markets<sup>10</sup> - until 2010.

Similar questions arise about the adequacy of OPA's near-term pursuit of cooperative fuel switching programs with the gas utilities, and its role in the promotion of code enhancements.

As a result, in 2010, OPA, the Government and ultimately the Board will be placed in a position of having to determine the appropriateness of commitments to major supply such as nuclear generation or refurbishment without an adequate basis to consider cost-effective alternatives like CDM and with some alternatives foreclosed. If major, long lead time nuclear construction is committed to it will then further foreclose cost-effective alternatives. This approach is reminiscent of past planning errors where Ontario embarked upon high capital intensity and long lead time nuclear projects such as the Darlington facility and found the need to scale back CDM to avoid wasting sunk nuclear costs despite the fact that CDM options would have been more cost-effective if undertaken at the outset.

In addition, apart from acknowledging the advent of smart meters, the OPA appears to have ignored analysis of rate level and design as tools to encourage efficiency. As the OPA has noted, the Board is charged with the task of regulating the sector in a manner that facilitates

<sup>&</sup>lt;sup>8</sup> At Ex. B-3-1 p. 5 OPA notes: As the province gains more experience with Conservation programs, the OPA believes that it can have greater certainty with respect to the contribution of different types of Conservation categories to meeting the needs. This should allow the OPA to determine both the most cost effective mix of Conservation categories to meet overall requirements and whether the Conservation goals of the Directive may be cost effectively and feasibly exceeded.

<sup>&</sup>lt;sup>9</sup> The IPSP makes passing reference to capacity building such as working with BOMA Toronto and using the Conservation Fund. Given that Ontario has lost much of its CDM service capability and CDM program experience over the past 10 years, the proposed capacity building appears inadequate to realize the full cost effective potential of CDM.

<sup>&</sup>lt;sup>10</sup> Full realization of cost effective CDM potential will require comprehensive planning to transform all energy using markets in Ontario. The IPSP does not appear to address this important issue in the near term which means many opportunities will be lost.

the implementation of any plan it approves. Accordingly, it is possible for the OPA to suggest rate design tools that the OEB can then implement.

#### Issue 4.4: Nuclear refurbish or new build?

This issue is included as it was listed as an area of discretion by OPA. However, while it is most timely for the Board to give direction on appropriate cost, risk and performance assumptions for nuclear options (as these affect the plan and the choice of initial actions) it is not clear that OPA in fact needs or seeks guidance on the choice between new and rebuild at this time. This is an area where OPA should clarify its planning timeline and procurement plan.

### Issue 5.4: Are there better strategies to assure reduced reliance and the phase out of the coal plants at the earliest practicable time?

Rationale: As is apparent from the experience with the current fleet of reactors and the recent refurbishment of two Pickering reactors, the reliability of these reactors cannot be assured. OPA proposes to keep coal plants on-line as insurance against this and other uncertainties in the plan. The uncertainty creates a corresponding risk of prolonged coal burning. Further, in a market regime that dispatches coal when less expensive then gas (regardless of externalities) and encourages exports of coal power so long as the plants remain open (regardless of urgency), even if the 'insurance' policy is not needed, there will inevitably be increased coal burning and emissions as a result of the prolonged availability of the plants. One aspect of this issue is the market rules context. As the OPA has noted, the OEB is charged with the task of regulating the sector in a manner that facilitates the implementation of any plan it approves. Therefore it is appropriate for the Board to consider matters such as the market rules that dispatch environmentally inferior generation, both because the current rules are the context for the plan and because the Board could encourage alternative rules as one means of affecting or implementing preferred plan outcomes. The short lead times of CDM and some renewable generation options as well as some gas applications make these technologies candidates for facilitating early coal retirement. It is important to note that the directive seeks what is 'practicable' not simply cost effective in the narrow sense of the term. Presumably this reflects the significant externalities associated with coal burning.

#### Issue 6.2: OPA's selection of gas technology, scale and location

OPA has focussed on low efficiency gas plants and appears to have de-emphasized combined heat and power for base load and intermediate needs as well as the combined application of gas and renewable technologies for these needs. As noted under issue 8, OPA appears to have placed a restrictive reading upon the directive to use gas for high efficiency purposes.

## Issue 7.2: Does OPA's approach to transmission planning and access support the achievement of plan objectives?

Rationale: OPA in cooperation with HONI has formally blocked access to transmission facilities for renewable generation in certain areas of the province, giving priority to nuclear options. This approach has crippled the emerging wind industry and appears to be at odds with a sustainable approach to system planning.

# Issue 7.3: Has OPA appropriately considered and assigned transmission costs in comparing supply and demand options?

Rationale: In its comparative analysis OPA assigns transmission costs to generation technologies and regions. The correctness of these assignments is an issue. For example, where both imports from Manitoba and increased northern wind generation are foreseen as possibilities, how should the costs of transmission incorporating both resources be allocated? Further, initiatives to increase capacity between Bruce and Toronto are currently underway but still avoidable. Have these costs been appropriately assigned?

## Issues 8.1, 8.2: Do the OPA's Priorities as set out at Ex. B-1-1 p. 2 respect the Ministerial Directives and the legislation and are there preferred priorities?

Rationale: OPA has taken the Directives and elaborated 'directive priorities' and 'implementation priorities' that shape its plan. The appropriateness of the translation of the directives, legislation and regulations into priorities and the selection from among priorities that meet the minimum standards is therefore a fundamental issue. For example, has the OPA correctly interpreted the directive to "Maintain the ability to use natural gas capacity at peak times and pursue applications that allow high efficiency and high value use of the fuel" when it largely limits gas to peak use and to intermediate use single cycle or combined cycle plants

located at transmission bottlenecks, or, would increased reliance on high efficiency cogeneration (especially where lower efficiency fuel use would be displaced) for intermediate and base load needs be preferable and a goal more in keeping with the directive?

# Issue 8.3: Has OPA's planning approach adequately weighed and evaluated environmental impacts and risks and considered sustainability appropriately and applied these in its plan development?

Rationale: The Board has already given guidance indicating that the phrasing of the legislation, regulation and directives calls for OPA to "weigh and evaluate" safety as well as economic and environmental sustainability in the IPSP. OPA, while indicating that it has utilized sustainability as a basis for its planning, appears to have ignored some significant risks and impacts entirely, apparently equating regulation with zero impact in some cases (but not in others). Further, while the electricity regulatory scheme limits detailed environmental assessment at this stage, the legislative and Board requirement of a weighing and evaluation cannot be discharged by an unreasonable weighing and evaluation or one made but not applied. The assessment required, while limited, must meet some standard of reasonableness and must form an input that cannot be ignored in the plan development. However, OPA appears to have given little or no weight to these factors in its actual plan, targeting the minimum CDM and renewable generation required by law and simply ignoring certain key impacts and risks. Nor has OPA offered alternative plan configurations designed for example, to significantly lower greenhouse gas emissions for slightly higher economic cost.

## Issue 8.4: Has OPA adequately recognized and accounted for economic externalities in its planning and its analysis of sustainability?

Rationale: Appropriate planning for a public body should account for all costs and cost risks whoever may ultimately bear them. Examples include the possible cost of carbon related liabilities (or the value of carbon reductions – a matter OPA notes in its business plan that it is investigating) as well as potential liabilities that are covered by government or OPA by contract or regulation (as has been the case for nuclear refurbishment contracts with Bruce Power).

# Issue 8.5: Has OPA appropriately considered risk and uncertainties in the plan and the planning environment and valued risk reduction and flexibility accordingly?

Rationale: A hallmark of electricity planning is the need to recognize the uncertainty in load projections and resource performance as well as other risk costs. The adequacy of OPA's approach to uncertainty is a central issue as is the manner in which it has valued flexibility of options. Some jurisdictions have placed a premium value on alternatives such as energy efficiency which automatically 'load follow' both as the economic environment changes and on a seasonal and diurnal basis once installed.

#### Issue 8.6: Does the IPSP appropriately facilitate the development of new technologies?

Rationale: OPA's role as the primary procurer of electricity resources in the coming years makes its actions (even its publication of tentative plans) an influential factor in the energy marketplace. Accordingly, OPA has a responsibility to treat options even-handedly and, given its sector dominance, to give emerging options a foothold, particularly where these options serve its stated goal of sustainability. This would suggest that OPA's plan should pay special attention to the development of novel approaches such as storage technology and smart grid control that could enable the incorporation of greater levels of wind power and other cleaner resources. Instead, it largely relegates these matters to the post 2010 plans while at the same time embracing novel nuclear designs as the presumed baseload provider.

#### Issue 8.7: Is the OPA's modelling methodology appropriate?

OPA's plan is a direct result of embedded methodological choices. For example, OPA's use and definition of the term baseload largely subsumes intermediate load and thereby attempts to extend the role for nuclear (within the directive's confines of 'nuclear for baseload'). OPA's modeling of renewable options appears to ignore synergies that can be obtained from a coordinated roll out of technologies. OPA appears to downgrade the role of imports. It is unclear whether OPA is adequately crediting distributed options with loss reduction. OPA appears to exclude most considerations of sustainability from its actual modelling of resource dispatch. OPA's choices for technology-specific cost of capital and for discount rate, changes the relative economics of various options.

### Issue 8.8: Does OPA's methodology and its preferred plan conform to the directives and legislation and to its stated priorities or to preferred priorities?

Rationale: Sound planning requires the planning method and the plan to reflect the planning criteria. Further, a plan that fails to honour the criteria makes a mockery of consultation and transparency. An example is OPA's failure to incorporate all achievable and cost effective CDM that its own studies identify (see discussion under issue 2) despite its stated priority to do so. Similarly, OPA appears resistant to a consideration of alternatives to nuclear despite its priority to "maximize feasible cost-effective contribution from renewable sources." <sup>11</sup> As noted above, OPA also appears to misinterpret the word 'baseload' in a manner that encompasses intermediate load.

#### Issue 8.9: Is there a preferable plan?

Rationale: It is vital for the Board to step back and consider whether the plan as a whole is reasonably balanced in terms of, *inter alia:* fuel and technology diversity; risk; flexibility; and social, environmental and economic costs. Even if the OPA has treated individual options appropriately, the sum of the parts may be less then optimal. Planning is not simply a spreadsheet exercise and the Board needs to consider the plan in its entirety in a broad context. The legislature, by calling for a review by a public hearings board, has recognized that the appropriate review of a plan that encompasses the largest expenditure in Ontario's history requires far more than a formulaic checklist audit.

## Issue 9.1: Is OPA's procurement plan detailed enough to guide actions in the coming years and if not, what particular features should be incorporated?

Rationale: OPA's procurement plan is offered only at very high level. The realities of particular types of resource acquisition are not considered or constrained in the plan. For example, while recognizing that certain small scale resources may require a standard offer approach, no effort is made to specify where this will in fact be the approach utilized. In essence, OPA seeks a *carte blanche* approval. The Board and public will be able to take little or no comfort from a review of what amounts to a menu. We submit that the procurement plan should specify, at least in general terms, how procurements will be made for all resources and especially for certain

<sup>&</sup>lt;sup>11</sup> At Exhibit E, Tab 3, Schedule 6, Page 3 of 5 OPA implies that added renewable power is only a potential substitute for renewable power already in the plan and not for base load nuclear when it notes: "were negotiations to progress and were potential purchases to become more feasible and economic, then renewable energy from Labrador or Québec and the associated transmission reinforcements could become reasonable alternatives to some other renewable resources (and associated transmission reinforcements) in the Plan."

difficult to obtain resource categories such as decentralized small scale renewable, community projects, agricultural projects and storage projects. We also submit that minimum requirements may be applicable in some categories, particularly large centralized resources, where OPA may have failed to adequately protect the public interest to date (for example, by allowing nuclear contractors to pass along capital cost over runs and other risks). In addition, the procurement rules should incorporate non-internalized costs where applicable.

# Issue 9.2: Should OPA be required to pursue preferred options such as CDM, renewable generation and high efficiency gas generation in advance of any procurement of large centralized non-renewable supply such as nuclear?

Rationale: OPA acknowledges uncertainty in the availability or attainability of CDM and renewable options. To prevent premature commitments to large, less desirable projects that would displace these preferable options, procurement rules should give them priority.

# Issue 9.3: Does OPA's IPSP and procurement plan adequately ensure that the full potential for prudent investment in smaller, decentralized and community based renewable power generation will be achieved?

Rationale: It has been said of conservation that it is an exercise similar to eating a lobster – if you don't get all the small bits in the crevasses you will leave most of the meat behind. The same may be true of renewable power. Potential may be unduly limited if smaller, decentralized, community based projects are not facilitated. These projects offer many benefits to the electricity system and the economy. OPA's IPSP and its procurement plan should recognize these benefits and make specific commitments on this front. Related to this issue is the need to facilitate emerging technologies and approaches to meeting Ontario's electricity needs sustainably.

### All of which is respectfully submitted this 26th day of November, 2007

clamb F

David Poch Counsel to GEC, Pembina & OSEA