THE PROVINCIAL COUNCIL OF WOMEN OF ONTARIO
(Established 1923)

Ms. Kirsten Walli, Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2701
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(by Express Post and e mail)

November 29th, 2006

Re: Board file No: EB-2006-0207 Draft Report of the Ontario Energy Board on the Ontario Power Authority's Integrated Power System Plan and Procurement Processes

The following comments on selected portions of the OEB's Draft Report on the Ontario Power Authority's Integrated Power System Plan and Procurement, are made on behalf of the Provincial Council of Women of Ontario (PCWO) with particular emphasis on the Board's request for views regarding :

" i) How should environmental externalities be considered in reviewing the Plan as a whole and specific electricity projects within the Plan and,

ii) What changes should be made to the Report for that purpose? "

A General Consideration of Externalities

In the context of the IPSP as a whole, the consideration of externalities i.e. *" costs or benefits that manifest themselves in environmental sustainability and protection*", is extremely important In the "Plan Preparation", page 24, the Draft Report has more fully defined sustainability to better reflect the Bruntland Report definition .

This concept should be applied to the Board's review of the IPSP through the development of an overall framework , having a set of goals which are not just a repetition of the Bruntland "sustainability" definition, but rather encapsulate broad environmental standards/goals e.g. avoidance of harm (rather than mitigation) ; protection of environmentally sensitive lands ; protection of human health and safety; the use of the precautionary principle .

In the case of this latter standard, the use of the precautionary principle in planning for near, medium and long term outcomes, does not necessarily mean that a "prudent and cost effective" planning approach should not be taken, but rather reflects that a lack of precaution can lead to huge costs .

Such over-arching sustainability standards/goals for the evaluation "framework", would not conflict, but rather enhance broad Government goals e.g. Section 2.1 of the IPSP,

requires that *"safety environmental sustainability and environmental protection"* be "*considered*" in the Plan preparation.

From these goals, and within the overall framework, more finite, weighted, measurements should be developed that may be used consistently by the Board to choose between IPSP plans presented by the OPA, and for individual projects . These should reflect the maximum protections of law and policy, and the overall framework goals .

For instance, the Provincial Policy Statement under Natural Heritage 2.1.3 a) disallows development and site alteration of significant habitat of endangered species and threatened species and projects should not be considered there. As well, standards that protect public health and safety must be considered e.g. an appropriate distance from population centres and watercourses should be ranked highly on any measurement scale .

In determining a ranking measurement for costs of a particular project or method of electricity generation, a life-cycle approach should be used to include such factors as, e.g. start-up and operating costs; possible widespread break down of equipment; insurance against rare, but possibly catastrophic, accidents; impacts on competing industries e.g. forestry job losses; waste disposal; environmental clean-ups; plant decommissioning etc. Some of these costs could be estimated from past events for a particular form of electricity. As well, cumulative and incremental impact costs should be included.

The development of these comparative measurements will require judgement calls and considerable work, but the gains made, in the short to very long term, from consideration of such externalities, will be worth it. PCWO would advise the Board to work with experts in the field of environmental assessments to develop a sustainability benchmark chart that optimizes externalities and truly reflects the huge significance of OPA's electricity plan for Ontario's environmental future.

Other Externalities and Specific Projects (**as reflected in the balance of the Draft Paper)**

B. Supply mix Directives

Achievement of conservation targets

When measured against other components in the Plan, electricity conservation will bring the greatest externality gains, in the form of *"environmental sustainability and protection*." In response to initial participant comments, the Draft Plan enhances the emphasis on conservation through its recognition of conservation targets as being *"the minimum that must be achieved*", and also through its statement that *" an economically prudent and cost effective plan may, however, contain greater quantities of conservation*

than required by the Supply Mix Directive..."

Nevertheless , the additional caveat in the plan i.e. *"provided that those additional investments in conservation are shown to be prudent and cost effective against other resources*", is only acceptable if the "measurements" suggested above are adopted and clearly weight environmental factors ahead of the *'bottom line*' costs.

Achievement of renewable energy targets

Again, it is appreciated that the Draft plan has recognized that the renewable energy targets are a *"minimum*" and more may be provided . Renewables are not without some environmental impacts, but if protective environmental sustainability goals and measurements, along with a life -cycle analysis, are used, renewables will come out ahead of other much less sustainable, and potentially damaging energy sources

Use of nuclear energy for baseload

It is important that the nuclear component of the IPSP has a cap to it, but as per our earlier comments of September 29th , PCWO is most concerned that amongst other things, **"** *individual nuclear plants will be subject to weak federal environmental assessments under CNSC, in the absence of a comprehensive regulatory framework***"** It is also disturbing that under Section 2(1) page 8 it appears that , unlike other projects, nuclear projects do not need *"sound*" planning, and, elsewhere that a "*least cost*" plan could be accepted in the absence of alternative plans.

Regardless, in light of the overall requirement for sustainability , it is most important in judging economic prudence and cost effectiveness that the nuclear component of the IPSP be evaluated and compared using the same overall goals and measurements as other energy sources re environmental externalities, such as risk to the environment and human health and safety. Some nuclear life cycle factors that will weigh heavily against its cost effectiveness and prudence, are a threat of significant accident; high costs of plant refurbishments; insurance costs, should federal law be changed to more realistically cover actual costs catastrophic of accidents; nuclear waste management costs; potential for delay in plant construction due to stronger federal EA requirements etc.

Replacement of coal-fired generation

While recognizing the constraints of phasing out coal -fired generation quickly, as planned in 2003, the huge health , and environmental costs of keeping coal on-line as a significant energy source, lead PCWO to recommend that the IPSP aim for a complete phase-out in a very short time line. The adoption in the IPSP of environmental sustainability goals and measurements would lead to this same conclusion, while supporting much greater uptake and planning for conservation, energy efficiencies and renewable electricity generation.

D. Economic Prudence and cost Effectiveness of the IPSP

Economic Prudence

As noted in its September 29th comments, PCWO appreciates the recognition of "incremental benefits" in any analysis, but is also cautions that some of these are better predicted and included for a long-term period. .

We would suggest also, that should the Board determine to develop a overall framework to judge the IPSP and individual projects , with "over-arching , broad environmental sustainability goals", along with short and long-term weighted, ranking measurements, this would take a great deal of guess work out of the exercise and ensure equitable balancing of economic and non economic factors, for the benefit of the broader public good. It would also allow the OPA to better satisfy the Board why a project, that is " *not the least cost solution*" is "*cost effective and economically prudent.*"

E Pre-IPSP Projects

PCWO would be interested in knowing why the words *"as a general rule*" were taken out of the original draft, when specifying that certain projects that were subject of governmental procurement or OPA procurement prescribed by Ministerial directive issued prior to the date of approval of the IPSP, would not be assessed for economic prudence or cost effectiveness, even if these projects are included in the IPSP.

Since the approved projects are a part of the IPSP, we presume in the overall Plan, that their environmental attributes i.e. measurement of sustainability be factored in , when measuring the economic prudence and cost effectiveness of the Plan.

IPSP Filing Guidelines

B General

3. Demand and Supply Forecasts and Adequacy Assessments

OPA forecasting to date has been less than adequate. As noted in previous comments, the contrast between statements made by the OPA re the *"robust economy led by the auto sector*" in its Load forecast paper and the financial predictions of the leading financial institutions, speaks to a lack of surety and the necessity for the OEB's many detailed requirements.

Forecasts are very difficult to make , particularly in the absence to date of Ontario specific documentation of trends e.g. OPA's discussion Paper #2 Load Forecasts,

where Michigan and New York 2003 profiles in projected "Peak Forecast Methodology" were used in the absence of Ontario data. In our comments of October 2nd to the OPA regarding this paper, PCWO questioned fuel price forecasts and the OPA's low estimate on the efficiency of future technologies , and noted that *"advances can often be moved along more rapidly with strong government regulations and satisfactory investments."*

PCWO agrees with the Board's many requirements and the addition in this draft of the inclusion of weather , extreme weather and the effects of commodity , fuel price and price elasticity and for more rather than fewer, *" scenarios*", but would add the need for forecasts to take into consideration risks and uncertainties and the need for worst and best case scenarios, e.g. legislation to enhance energy conservation and renewables results in their ability to fill the base load need, before the nuclear component for generation has been approved.

C. Resource Planning and Acquisition The Near- term Plan

1. **General**

The difficulty in defining the length of the "Near-term" has been expressed by many interveners. PCWO recommends that the "Near- term" should cover all actions taken before the IPSP is approved, and for the next several years, that impact on the overall Plan. For instance, plans for new nuclear generation are being made, but will not happen in the Near- term. We note that neither the Directive or the Legislation refer to the near- term, but rather a 20 year period, with updates every three years.

In the consideration of alternatives, (page 13) PCWO does not agree that the *"smallest number of alternative*" should be included, but rather the number consistent with allowing the Board to fully understand the possible outcomes.

3. **General Resources**

a) General

The addition of ix) dispatchability and x) life expectancy, is helpful, as would be the addition of a further factor i.e. xiii potential environmental damage prevention costs.

c) Nuclear generation resources

Rather than require that the OPA make the results of EA assessment processes available to the OEB *"to the extent that the results of these activities are known at the relevant time*." the OPA should present all planning data to the Board on an ongoing i.e. regular basis, so that the overall plan can be properly prepared and assessed, particularly with regard to the need for the allocation of various sources in the Plan and any opportunities for increases in the use of renewables and conservation programs.

D. Resource Planning and Acquisition: Beyond the Near-term Plan

As noted above, neither the Act nor the Directive break the Plan into time-lines. Since certain investments, such as nuclear, would involve decisions that are less flexible and may well preclude later investments in more environmentally sound generation and conservation options, it is crucial that planning and resource acquisition for the whole Plan be done as thoroughly as possible, under, as recommended earlier, a comprehensive framework with sustainability goals and measurements.

E. Evaluation of Preferred Plan

PCWO agrees with the VEEC that several alternatives should be developed and then narrowed down to a few, and that*" the Preferred IPSP should be evaluated against all the planning objectives, not just cost*." Again, these alternatives should be judged within a comparative framework, which is guided by over-arching sustainability goals/principles and then further through more finite measurements.

F. Satisfying the Requirements of the IPSP Regulation

3. <u>Environmental Issues</u>

PCWO's comments on this section of the report, particularly as it refers to externalities, are on page 1 of this document . In addition, it seems quite extraordinary that under Paragraph 8 of section 2(1) of the IPSP Regulation, *"Nuclear generation projects, as well as some others, are outside the scope of the requirement to have a* ***"sound rationale*** *, which includes an analysis of the impact of the project on the environment ; and (ii) an analysis of the impact on the environment of a reasonable range of alternatives for the project."*

Nevertheless, the inclusion of nuclear generation as part of the environmental comparisons with other forms of generation, and the requirement to consider environmental sustainability of each element and the whole IPSP, (particularly should a proper environmental sustainability framework, goals and measurements be adopted by the OEB) would seem to provide the opportunity for a *"sound rationale*" as part of the overall IPSP process.

Prepared for the Provincial Council of Women of Ontario,

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