



1 December 2006

Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 26th Floor
Toronto ON M4P 1E4

Sent by email: boardsec@oeb.gov.on.ca

Re: Draft Report of the Board on the Ontario Power Authority's Integrated Power system Plan and Procurement Processes (EB-2006-0207)

Dear Ms Walli:

Further to the Board's November 16, 2006 correspondence and Draft Report, I am writing to provide comments on the Board's draft report and to offer specific views on how environmental externalities should be treated by the Board in its pending review of the Ontario Power Authority's Integrated Power System Plan and Procurement Processes ("IPSP").

We are pleased that the report proposes the OEB will bring needed rigour to its review of the IPSP. We submit, however, that the Board Report would seem to presume a more absolute standard of its powers than we would interpret based on our reading of the governing law and regulations.

Board's powers re implementation

While the legislation provides that the Board "shall facilitate the implementation of all integrated power system plans approved", it falls short of empowering the Board to enforce the implementation of an approved IPSP. The directive to the OPA is also couched in terms that fall short of an absolute requirement to implement an IPSP. The OPA rather is given the authority to enter into procurement contracts as it sees fit and the Board is charged with reviewing, approving and facilitating those processes. Section II G of the Board Report states that the OEB has the authority to monitor implementation of the IPSP and to take unspecified corrective actions if the IPSP is not meeting its objectives. In our view, this posture presumes a mandate in law and a degree of prescription in the directive that is not apparent to us and therefore overstates the Board's authority.

In reference to streamlining in aid of implementation of the IPSP, the Board report suggests that the OPA may produce transmission system investment plans in sufficient detail to obviate further review in a rates proceeding or an application for leave to construct. While we support streamlining the approvals process in terms of establishing the business case for new facilities in the IPSP approval process, our view is that it will be difficult for the OPA to produce such a detailed application at this point without specific knowledge or commitments to routing, rights-of-way and station sites such as would normally be expected to be



developed by transmission owners and operators and subject to detailed engineering and design. If the IPSP and the Board's review of it cannot achieve sufficient detail, then any review that goes beyond establishing the purpose of and rationale for a project may turn out to be duplicative of future necessary efforts by transmission proponents.

Generation Resources

With respect to its evaluation of generation resources, we suggest that the Board require an estimate of the specific capacity characteristics of a resource, including information regarding how capacity factor can change over time and what factors might cause it to change. Recent information that has become available regarding the performance to-date of wind generation, for example, suggests that capacity can be highly variable from hour-to-hour and from season-to-season. These characteristics should be presented in order to properly evaluate the fit of new generation resources with existing supply and network assets.

Transmission Resources

With respect to transmission resources, we suggest that the Board require an estimate of costs that may be imposed on transmission-connected customers to modify their equipment to adapt to increase fault current levels or other changes in the characteristics of their supply.

The last two paragraphs state that the OPA will be held to a test of "greatest net benefit" on transmission projects designed to meet the supply mix directive and reliability standard. The language as written gives us some cause for concern in the hypothetical scenario that it could be used to justify projects that may produce some incremental benefit over an alternative, but at a significantly higher overall cost. We would suggest that this language be changed to be consistent with the lowest NPV test proposed for the overall plan.

Definition and scope of environmental review

The definition of "environment" in law and regulation is well-established in Ontario. Ontario's Environmental Assessment Act, for example, says:

- "Environment" means,
- (a) Air, land or water,
 - (b) Plant and animal life, including human life,
 - (c) The social, economic and cultural conditions that influence the life of humans or a community,
 - (d) Any building, structure, machine or other device or thing made by humans,
 - (e) Any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from human activities, or
 - (f) Any part or combination of the foregoing and the interrelationships between any two or more of them, in or of Ontario;

Regulation 424/04, however, circumscribes the OPA's consideration and the Board's review of the environment so that it is limited to "air, land, water, plant life and animal life, including human life".

In our submission, the difference between the scope of issues to be considered by the OPA and the Board and those which are the substance of reviews under the Environmental



Assessment Act has the potential to create considerable uncertainty about the completeness of the IPSP and any authority that the Board's review and approval might carry outside the specific parameters of the Electricity Act and the Ontario Energy Board Act. Regulation 424/04 states clearly that the OPA must consider environmental protection and environmental sustainability. The Board report proposes that the OPA should be guided by a definition of environmental protection that encompasses "compliance with all applicable Ontario and federal laws and regulations related to environmental protection". Necessarily then, the OPA's analysis must encompass a scope and consider broader definitions of environment such as exists in the Environmental Assessment Act.

The Board's proposed definition of environmental sustainability—development that ensures the needs of the present are met without compromising the ability of future generations to meet their own needs—similarly requires a scope that extends beyond physical and biological parameters to encompass consideration of the economic well-being of Ontarians and the welfare of the communities in which we live and work. The Board's paraphrasing of the 1992 Brundtland Commission definition of sustainable development rests on an internationally recognized conceptualization of sustainable development that explicitly requires the simultaneous and interconnected objectives of continuously improving environmental quality and ecosystems, increasing economic wealth and enhancing human communities and societies. Sustainable development as a concept makes no sense if the scope of analysis is restricted to bio-physical considerations.

AMPCO submits therefore that, notwithstanding the partial definition of environment put forward in Regulation 424/04, the Board must, as a central consideration in its review and approval of the IPSP, require an assessment of the impacts of the IPSP on the economy of Ontario and the welfare of the communities and societies in which we live. If the IPSP cannot be expected to make us generally wealthier and to support and enhance our communities, then it will prove to be a poor investment.

If the Board's expectations with respect to streamlining are to be achieved, then its review will also need to be consistent with the requirements of applicable environmental law and regulation. Recent experience suggests that in respect of consultations with affected parties, all factors must be considered, communicated with stakeholders and their input must be elicited from the outset of a project. An IPSP that has been approved without any consideration of a range of issues prescribed in environmental law will offer little value in terms of streamlining subsequent approvals. In our view, if there's no efficiency to be gained in considering these issues now in the course of the Board's review of the IPSP, then we would be better off deferring consideration all of these issues for subsequent examination in a proper environmental review process.

Externalities

AMPCO agrees with the expectation described in the Draft Report that "environmental externalities will be addressed as part of the analysis required by paragraph 8 of section 2(1) of the IPSP Regulation" and that "externalities should be addressed consistently for each electricity project identified by the OPA as meeting the requirements of section 2(1) of the IPSP Regulation and for each alternative to that project identified by the OPA" (pages 27-28).



However, AMPCO submits that the Board must clarify and confirm that environmental externalities include consideration of the economic and social impacts and consequences associated with proposed electricity projects and their alternatives.

AMPCO recommends the following definition of externality for the Board's consideration:

A residual or side effect of an economic activity in which a benefit or cost is conferred upon a party who is not a party to the original transaction either as a producer, consumer or agent.¹

For example, AMPCO submits that the scope of externalities to be considered by the Board in the IPSP review must include the impact on jobs and investment in Ontario as a result of selecting certain generation projects where those projects will increase total costs or prices over alternatives. It appears to AMPCO that the Board is already supportive of a broad interpretation of externalities given its statement in the Board Report that "externalities include, but are not limited to, environmental externalities (costs or benefits that manifest themselves in environmental sustainability and protection)" (page 28).

Accordingly, an important area of review will be the impact of costs to the economy resulting from the IPSP options under consideration. For example, it appears to AMPCO that the OEB has authority to approve an OPA preferred IPSP that may not reflect the minimum cost case. The OEB Act's direction to the Board is that it must ensure that the IPSP must be "prudent and cost effective".

AMPCO submits that it is reasonable then to insist that any IPSP that departs from minimum financial costs must be based on an examination of economic externalities that demonstrates that the proposed IPSP is the least cost plan when externalities are considered. Without such an assurance, a plan which implies higher costs than necessary will increase electricity prices to customers beyond an efficient level and will therefore undermine the competitive position of domestic industry and create the potential for economic and social costs in the form of lost jobs and reduced investment and other damaging impacts to communities.

With respect to the methodologies to be employed in identifying and estimating the value of externalities, we submit that it is important to distinguish between public and private costs, that is, the costs that are borne generally by Ontarians as a whole and those costs that may be imposed differentially on specific persons or communities.

The Board report suggests an expectation that "externalities should be addressed in a consistent manner". This raises a number of issues. First, one should not expect that externalities will be manifested in ways which are easily systematized or made consistent. Second, different estimation methodologies are appropriate for different kinds and examples of external impacts, both positive and negative.

¹ *Environmental Costs of Electricity*, PACE University Centre for Environmental Legal Studies, Oceana Publications, 1990



External benefits and costs can be manifested differently geographically and over time. A generation project may have one-time or lasting impacts in relation to the siting and construction of the facility itself and then may have on-going or variable impacts, for example in relation to air emissions. The impact of Ontario's fossil fleet on air quality in Ontario, for instance, varies significantly depending on the level of emissions, temperature, humidity, and hours of sunlight as well as previously occurring precursor emissions upwind in the United States. In this example, it would be inappropriate and inefficient to assign a single non-variable factor to the impacts of fossil generation, either as a class or as applied to an individual unit. The impact of the Atikokan GS will be markedly different from that of the Nanticoke GS by virtue of its location in northwestern Ontario, regardless of prevailing ambient conditions.

With respect to appropriate methodologies, there is abundant literature and experience both in Canada and the United States dealing with the theory and practice of economic evaluation of non-monetary benefits and costs. A thorough review of this literature may provide a reasonable basis for considering externalities in the first iteration of the IPSP. We are also aware of extensive research that was undertaken by Ontario Hydro in the past and some more recent analysis by the Canadian Electricity Association that may be helpful.

The Board report suggests that "only externalities that are expected to have a significant impact should be measured and included". With respect, we submit that the word "significant" is ambiguous. In any case, it will be difficult to evaluate an impact's significance without at least expending some effort to measure it.

The Board report suggests that costs and benefits will be "assessed and internalized to the extent practical". With respect, we submit that this sets an ambiguous standard. We would prefer a term such as "make reasonable efforts" that has at least some meaning in law.

I trust these comments are useful to the Board. We would be happy to provide further information or to discuss our views more fully wherever that would be convenient.

Sincerely,

A handwritten signature in blue ink, appearing to read "Adam S. White", with a long horizontal flourish extending to the right.

Adam S. White
President