

Ontario Energy
Board

Commission de l'énergie
de l'Ontario



EB-2007-0707

IN THE MATTER OF AN APPLICATION BY THE
ONTARIO POWER AUTHORITY

INTEGRATED POWER SYSTEM PLAN ISSUES

BEFORE: Pamela Nowina
Vice Chair, Presiding Member

Ken Quesnelle
Member

David Balsille
Member

DECISION WITH REASONS

March 26, 2008

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ISSUES DECISION WITH REASONS

INTRODUCTION

The Ontario Power Authority (the “OPA”) filed an application with the Ontario Energy Board dated August 29, 2007 under the Electricity Act, 1998, S.O. 1998, c. 15, Schedule A (“the Electricity Act”). The applicant is seeking an order of the Board approving the Integrated Power System Plan (the “IPSP” or “the Plan”) and certain procurement processes. The Board has assigned file number EB-2007-0707 to this application.

The IPSP is a 20 year plan for the management of Ontario’s electricity system. It identifies the electricity conservation, generation and transmission investments that the OPA proposes for the adequacy and reliability of electricity supply and demand management in Ontario. The procurement processes are designed to manage electricity supply, capacity and demand in accordance with the IPSP. The IPSP affects the supply of electricity to all Ontario consumers.

On October 22, 2007 the Board directed the OPA to post and publish a Notice of Application with respect to this proceeding. In this Notice, the Board stated that the proceeding would be carried out in two phases. The first phase involved the development of an issues list and the Phase 1 Notice drew attention to a draft Issues List provided by the OPA. The Phase 1 Notice also sought submissions on the OPA’s draft Issues List from intervenors and written comments from the general public as to the issues that should form the basis for the review of the application. The Board received and considered over 40 written submissions and 29 comments.

On January 9, 2008, the OPA put forward its Revised Issues List, which is attached as Appendix B to this decision.

A hearing was convened between January 14 and January 18, 2008 to hear oral submissions on the issues to be addressed in Phase 2, the review of the application. At the Phase 1 proceeding oral submissions were made by the following parties in the order listed below:

- The OPA, represented by George Vegh and Glen Zacher (submissions in chief);
- National Chief's Office on behalf of the Assembly of First Nations ("National Chief's Office"), represented by John Kim Bell and Paul Manning;
- First Nations Energy Alliance ("FNEA"), represented by Jeff Rosekat;
- Saugeen Ojibway Nations, represented by Arthur Pape;
- Métis Nation of Ontario ("Metis Nation"), represented by Jason Madden;
- Lake Ontario Waterkeeper ("Waterkeeper"), represented by Peter Faye;
- Association of Major Power Consumers of Ontario ("AMPCO"), represented by Mark Rodger;
- Green Energy Coalition, the Ontario Sustainable Energy Association and the Pembina Institute, ("GEC"), represented by David Poch;
- Pollution Probe, represented by Murray Klippenstein and Jack Gibbons;
- Independent Electrical System Operator ("IESO"), represented by John Rattray;
- Hydro One Networks Inc. ("Hydro One"), represented by Michael Engelberg;
- School Energy Coalition ("SEC"), represented by Jay Shepherd;
- Vulnerable Energy Consumers Coalition ("VECC"), represented by Michael Buonaguro;
- Ontario Federation of Agriculture ("OFA"), represented by Ted Cowan;
- Power Workers Union ("PWU"), represented by Richard Stephenson;
- Consumers Council of Canada ("CCC"), represented by Robert Warren;
- Provincial Council of Women of Ontario ("PCWO"), represented by Gracia Janes and Sarah Dover;
- City of Toronto, represented by Lynn Mitchell and Ahab Abdel-Aziz;
- Toronto Board of Trade, represented by Lauri Gregg;
- Northwatch, represented by Jennifer Agnolin;
- Northwestern Ontario Municipal Association ("NOMA"), represented by Rod Bosch, Dennis Brown, Anne Krassilowsky and John Cyr;

- Council of Canadians (“COC”), represented by Steven Shrybman;
- Ontario Waterpower Association (“OWA”), represented by Paul Norris and Andrew Taylor;
- Ontario Power Generation (“OPG”), represented by Fred Cass;
- Association of Power Producers of Ontario (“APPPrO”), represented by Tom Brett;
- Brookfield Energy Marketing Inc. (“Brookfield”), represented by Charles Keizer;
- Bullfrog Power Inc. (“Bullfrog Power”), represented by Juli Abouchar;
- Canadian Solar Industries Association (“CanSIA”), represented by Tim Murphy;
- Energy Probe Research Foundation (“Energy Probe”), represented by David McIntosh and Norman Rubin; and
- The OPA in reply

Transcripts of the issues proceeding are part of the public record and are available at the OEB Information Resource Centre at the Board’s offices in Toronto or at the Board’s website at <http://www.oeb.gov.on.ca/documents/cases/EB-2007-0707/transcripts/>.

The Board has created an approved Issues List, which is attached as Appendix A to this Decision. The Board recently explained the purpose of an issues list in an issues decision in the Bruce to Milton leave to construct application (EB-2007-0050). That issues decision included the following remarks which describe the purposes and limitations of an issues list:

The Board reminds parties that the Issues List has two purposes: 1) it defines the scope of the proceeding; and 2) it articulates the questions which the Board must address in reaching a decision on the application. The Board does not believe it is appropriate to define the Issues List in complete detail. For many of the issues, the Board expects that sub-issues will arise during the course of the proceeding which will need to be addressed in argument and in the final decision. It is not possible to identify all of those detailed issues now so early in the process.

The Board has listed the issues it has approved in the various sections of the Decision. The numbering for the issues in the text of the Decision corresponds to the numbers in the approved Issues List (Appendix A), rather than to their order of appearance in the Decision.

Structure of this Decision

The General Matters section provides a review of the legislation that gives the Board its jurisdiction in this matter. In particular, the Board provides its findings on the application of the objectives in section 1 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B, in relation to the exercise of the Board's mandate under sections 25.30(4) and 25.31(4) of the Electricity Act.

The General Matters section also provides comment on several of the principles that are contained in the report issued by the Board on December 27th, 2006 entitled "Report of the Board on the Review of, and Filing Guidelines Applicable to, the Ontario Power Authority's Integrated Power System Plan and Procurement Processes" ("the Board's Report").

The Integrated Power System Plan: General Issues section provides the Board's views and findings on some overall issues that are relevant to the discussion of the IPSP as a whole. They are:

- Forecasting
- Regional Issues and non-Aboriginal People Consultation
- Implementation and Barriers to Implementation

The next seven sections also relate to the IPSP. These sections are:

- Conservation
- Renewable Supply
- Nuclear for Base-load
- Natural Gas
- Replacement of Coal-Fired Generation
- Transmission
- Environment

These sections review the submissions of the parties and provide the Board's findings on the particular issues. The specific issues that will be included on the issues list appear at the end of each of these sections.

The next main section of this decision is Procurement Processes. The section provides a review of the submissions of the parties and the Board's findings in relation to the Board's mandate to review and approve the procurement processes proposed by the OPA.

Aboriginal Peoples Consultation is the following section of the decision. The section provides overviews of the individual submissions made by the five Aboriginal organizations that made written and/or oral presentations to the Board as well as the OPA's responses and the Board's findings.

The next section deals with the comments the Board received on the IPSP. The Board provides its findings on any issues raised in the comments that were not covered by the preceding sections.

The closing section pertains to cost awards and is followed by Appendix A, the Board-approved Issues List and Appendix B, the January 9, 2008 OPA Revised Issues List.

GENERAL MATTERS

Legislative Framework

The Board's jurisdiction to review and approve the IPSP and the procurement processes proposed by the OPA is found in sections 25.30 and 25.31 of the Electricity Act. Subsection 4 of section 25.30 reads:

(4) The Board shall review each integrated power system plan submitted by the OPA to ensure it complies with any directions issued by the Minister and is economically prudent and cost effective.

The Minister issued the Supply Mix Directive on June 13, 2006 ("the Directive"), which directed the OPA to create the IPSP to meet certain government goals, and required that the Plan comply with Ontario Regulation 424/04 ("the Regulation"). In addition, the government passed Ontario Regulation 426/04 setting various requirements for the OPA in developing and implementing the procurement processes.

The OPA Revised Issues List (Appendix B of this Decision) did not contain overall or "summary" issues setting out the two tests in section 25.30(4) of the Electricity Act, but used the tests in creating headings for the Revised Issues List. The Board's organization of the approved Issues List has dispensed with these headings. It is evident that the Board must make findings in accordance with the evidence, assessing that evidence against the legislative tests. The tests from the legislation appear as a preamble in the Issues List.

All the issues in the review of the IPSP will be considered in the context of the tests in the legislation. In addition, the Board must use its expertise and judgment to determine whether the IPSP as a whole meets the overarching tests of the Act. It is possible that although an individual part of the Plan may not meet each part of the legislative test, the Plan, taken as a whole, remains economically prudent and cost effective.

Several parties submitted that the objectives in section 1 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B. ("the OEB Act") apply to the Board's exercise of its jurisdiction in this proceeding.

Section 1 reads:

1(1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:

1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

Several of the parties, including AMPCO and Brookfield, who argued for the relevance of Section 1, maintained that the section provides an overriding jurisdiction beyond that granted under sections 25.30(4) and 25.31(4) of the Electricity Act. In contrast, CCC argued that the specific power granted in section 25.30(4) of the Electricity Act overrides the general authority set out in section 1 of the OEB Act.

The Board finds that its mandate in relation to the review of the IPSP and procurement processes is found in sections 25.30(4) and 25.31(4) of the Electricity Act. The Board agrees that section 1 of the OEB Act informs the Board in the exercise of that mandate. However, section 1 is not, in the Board's view, a source of independent or incremental responsibility that can override the direction that has been provided by the legislature in relation to the Board's mandate as set out in sections 25.30(4) and 25.31(4) of the Electricity Act. This is confirmed by the wording of section 1 itself, which refers to the objectives as guiding the Board "in carrying out its responsibilities under" the OEB Act or any other Act. This indicates that the responsibilities of the Board are to be found outside section 1, and not within that section itself.

The Board's Report

On December 27th, 2006 the Board issued its "Report of the Board on the Review of, and Filing Guidelines Applicable to, the Ontario Power Authority's Integrated Power System Plan and Procurement Processes". The purpose of this Report, as stated in the document, is to "provide guidance in relation to the approach being used by the Board in reviewing the IPSP and the OPA's procurement processes, as well as in relation to the Board's expectations regarding the OPA's filings."

Part One of the document has two major sections: 1) Principles Guiding Review and Implementation of the IPSP and 2) IPSP Filing Guidelines. Part Two of the document has one major section: Principles Guiding Review of Procurement Processes. The principles stated in the Board's Report remain important guidance in the review of this application. However, the Board views the examples that are included in the Principles sections not as principles themselves, but rather possible examples that a panel might consider. The Board views the Filing Guidelines as direction to the OPA to assist in the filing of its application. In the end, it is the responsibility of the OPA to present its application in a manner that, in its view, best supports its case.

The Board wishes to provide clarification on several aspects of the principles contained in Part 1 of the Board's Report.

First, the Board's Report states that:

“Economic prudence requires that the IPSP be sufficiently resilient to ensure that the plan's goals, ...can be achieved in the face of circumstances that turn out differently than assumed in the plan. An economically prudent plan will be able to adapt to different contingencies without causing major changes in overall costs.”

This principle has been important to the panel in making our decisions on the issues. Several times within this Decision the panel has concluded that a subject matter is a matter for consideration in this proceeding only to the extent that it pertains to the flexibility (and therefore, prudence) of the Plan, and therefore is included under the general assessment of the economic prudence and cost-effectiveness of the Plan.

Second, the Board's Report reflects a consideration of the objectives set out in section 1 of the OEB Act in relation to the application of the test set out in section 25.30(4) of the Electricity Act. The Report, at pages 8 and 9 discusses the review of economic prudence and cost effectiveness of the IPSP. On page 9, the Board stated:

“In making these assessments, the Board will require an understanding of the economic and financial cost implications of the IPSP, including the short- and long-term financial impact of IPSP initiatives on electricity system costs and how these might affect provincial electricity prices and rates.”

In this proceeding, the Board will review in detail the OPA evidence relating to the costs of the various initiatives in the Plan, as part of its review of economic prudence and cost effectiveness. However, the Board will not require the OPA to provide detailed evidence on the potential effect of IPSP initiatives on electricity prices and rates. Prices

and rates are set in many different ways, such as Board rate hearings for distribution and transmission, the Global Adjustment Charge, the Regulated Price Plan, and the retail and wholesale commodity electricity market. The Board does not believe that the OPA is able to assess, nor the Board to review, the price and rate impacts of the Plan in any level of detail. However, it is important to understand the probable directional impact of the Plan on prices and rates. In this way the Board's review of the economic prudence and cost effectiveness of the IPSP will be informed by the objective of protecting consumers with respect to prices in a manner that is appropriate to the test set out in section 25.30(4) of the Electricity Act.

Third, on page 12 of the Report, the Board discusses regulatory streamlining. The Board's principle states that the Board will seek streamlining opportunities. The Report states:

“...issues that are adequately addressed in the context of the IPSP will not be subject to re-examination by the Board at a later date.”

The Board continues to be committed to streamlining regulatory review whenever possible. This panel interprets the principle above to mean that a future Board panel, for example in a rates case or a leave to construct hearing, will consider the extent of examination of a matter in the IPSP and, if satisfied with that examination, will adjust its examination of the matter in that panel's case, thus leading to a more efficient future proceeding.

INTEGRATED POWER SYSTEM PLAN

General Issues

Forecasting

Several parties in the issues proceeding suggested that the Board should include one or more issues on the list related to the forecast the OPA used to determine demand and reserve requirements. For example, Energy Probe in its oral submissions outlined several areas where the forecast might be inaccurate and submitted that the Board should examine the forecast in order to “be satisfied that these plans, programs and procurements in the IPSP continue to be needed at the levels proposed therein”.

SEC in its written submissions identifies a number of areas related to forecasts, including a review of forecasting methodologies, that SEC believes should be examined in the proceeding.

VECC, in its written submission, states “The Board will need to consider the adequacy of the load forecast developed by the OPA. In VECC’s view this does not mean that [the] Board must approve the load forecast. However, if the Board is to make a determination regarding the “economic prudence” of the IPSP, it must be satisfied the load forecast submitted by the OPA and the uncertainty attributed to it present a reasonable range of future outcomes for planning purposes. Therefore the reasonableness of the load forecast as the basis for planning and developing the IPSP should be an issue for phase two of the proceeding.”

During the oral proceeding, VECC indicated that it no longer believed that a separate issue was required because it understood that the OPA accepted that the issue of the forecast would be included in other issues. The OFA in its oral submission also relied on the OPA’s statements that the forecast would be examined in the proceeding.

The OPA in its oral submissions agreed that the forecast is an important matter saying, “...it’s an important part of the case, because it finds its way into many decisions made by the OPA, the demand forecast and the reserve requirement. It is relied on throughout...To the extent that the OPA is putting forward a plan that relies upon the forecast and the reserve requirements, those can be tested”. However, the OPA further submitted that the forecast should not be examined in isolation and as a separate issue,

but be considered in the context of its impact on the IPSP. The OPA said “So reviewing the forecast in some context of materiality of its impact on the plan is a useful, relevant exercise...”

Consistent with its submissions that the forecast should not be reviewed in isolation, the OPA stated that a stand alone issue for forecasts is not required. The OPA envisions that the demand forecasts will be examined with each of the witness panels on resource types.

The Board finds that VECC’s articulation of the appropriate scope of the review of forecasts is most helpful. The Board agrees that its responsibility in this proceeding does not extend to approving the demand forecast and reserve requirement. However, it is important, in the context of examining how the planners developing the IPSP used the forecast, to query the main assumptions in the forecast and how the Plan will change or adapt in response to variations from that forecast.

A review of the forecast of demand and reserve requirements is fundamental to understanding the IPSP. However, forecasts by their nature are imprecise. They could not be otherwise. It would not be of benefit to examine possible inaccuracies in the forecast unless the inaccuracies were material enough to affect the Plan. Any examination of forecasts must be tied to materiality and the ability of the Plan to accommodate the variances from the forecast that will inevitably occur.

Within this context, the Board finds that most of the questions raised by SEC are valid areas for discovery. However, a review of forecasting methodologies as alternatives to the CIMS methodology, as suggested by SEC, would not be a useful exercise in this proceeding.

The Board finds that a separate issue in the issues list regarding forecasts will clarify the nature of the forecast issue and help to identify the matters the Board has to consider in reviewing the IPSP. The Board will add the following issue to the list:

33. Do the forecasts relied upon by the OPA in developing the IPSP, and the uncertainties attributed to them, present a reasonable range of future outcomes for planning purposes?

However, the fact that the Board has created a separate issue related to forecasts does not remove the requirement for intervenors to contextualize their questions, nor does it create any obligation on the OPA to present a separate witness panel on forecasts as part of the IPSP proceeding.

Regional Issues and Consultation with non-Aboriginal Interests

As part of the requirements in the Regulation, the OPA, in developing the IPSP, must consult with groups and persons that have an interest in the electricity industry. The consultation issue appears as issue 7(i) in the OPA Revised Issues List, and the Board agrees that this issue should remain on the list:

27. Has the OPA, in developing the IPSP, consulted with consumers, distributors, generators, transmitters and other persons who have an interest in the electricity industry in order to ensure that their priorities and views are considered in the development of the Plan?

Several parties argued that certain regions of the province should be given special consideration in the IPSP. Their concerns related to both the generation and transmission components of the Plan.

NOMA submitted that the northwestern Ontario region should be considered a separate entity within the Ontario power supply grid for the purposes of analysis. NOMA outlined the unique electricity system challenges of this vast area. It pointed to the reliability issues in the region and the delicate interplay between generation plants, transmission and reliability. NOMA indicated that the IPSP, as filed, did not adequately address these issues and that the organization's first alternative was for the Board to return the IPSP to the OPA for reconsideration of NOMA's expressed concerns in the context of the Minister's Directive. As a second alternative, NOMA suggested that the following issue be added to the issues list: "Does the Integrated Power System Plan, plan for replacement generation, adequate generating capacity, strengthening of the transmission system, system efficiency, and system reliability in the substantively different circumstances of northwestern Ontario?"

Also on the subject of regional uniqueness, the City of Toronto and the Toronto Board of Trade requested that specific consideration be given to Toronto in the IPSP. The City of Toronto stated in its oral submission that the proposed IPSP is deficient in that it has not developed a transmission plan to address the security of supply concerns faced by the downtown core and has not fully consulted on such a plan. In its written submissions the City of Toronto also proposed various additional issues relating to the planning approach that it asserts are necessary to meet its unique needs. Toronto Board of Trade stated in its oral submission that the security of supply situation for the downtown core is of sufficient importance that it should be considered a separate issue unto itself.

The OPA stated in its response to NOMA that NOMA's issue is captured by the OPA's Revised Issues List, and it would be inappropriate to single out northwestern Ontario because the OPA has an obligation to deliver a plan that will provide overall system reliability needs as well as meet local area reliability requirements. The OPA gave a similar response to the request from the City of Toronto and the Toronto Board of Trade, submitting that the subject matter of the questions was appropriate, but that a particular region of the province should not be singled out.

Although the Board agrees with the OPA that regional issues could be included under the more general issues proposed by the OPA, the Board finds that greatest clarity will be achieved by establishing a specific issue to address the concerns of these parties. Therefore the Board will include the following issue on the issues list:

34. Does the IPSP meet its obligation to provide adequate electricity system reliability in all regions of Ontario?

Implementation and Barriers to Implementation

Several parties raised issues regarding barriers to the successful implementation of the IPSP.

COC raised concerns regarding international trade laws and their impact on the IPSP. COC requested that the Board make clear whether or not an exploration of the implications of international trade law would be helpful to the Board. COC stated that trade issues could be characterized as questions of implementation and barriers to implementation. However, it felt that they were planning issues, not implementation issues because they identify economic risks which go to the prudence of the plan. COC described specific concerns regarding the North American Free Trade Agreement. The COC's written submission discusses other international law issues which may affect the successful implementation of the IPSP. The COC suggested a number of issues to deal with international law concerns.

The OPA, in response to COC's submissions, stated "To the extent that Mr. Shrybman's client wants to put in evidence to suggest that there are trade laws or other regimes that fatally jeopardize the robustness and feasibility of the plan, we don't object to that".

The Board believes that the OPA has correctly characterized the appropriate treatment of COC's concerns. It is not the mandate of this proceeding to explore Ontario's compliance with international law. If, however, matters of international law threaten the implementation of the IPSP, the Board must assess if the plan remains economically

prudent in the face of these challenges. The Board finds that these issues can be appropriately explored within the Board's consideration of whether the IPSP, as a whole, is economically prudent and cost-effective.

The OFA, in its written and oral submissions, asked that the following issue be added to the issues list: "Are key institutions engaged and ready?" The OFA discussed the need for municipalities and other organizations such as Hydro One and the IESO to be ready to do their part in implementing the plan and the requirement for this review to evaluate that readiness.

APPrO in its written submissions stated that the OPA should take all reasonable steps, including making recommendations to the Government of Ontario and the Board, to bring about the legislative, regulatory and administrative changes necessary to facilitate the implementation of the IPSP, once approved. In its oral submissions APPrO reiterated these statements.

The review of the Plan must ensure that the IPSP is sufficiently flexible and robust, and that it remains economically prudent and cost-effective in the event of some risk materializing. Facilitation of the plan by several parties will reduce risks, and these parties do need to be ready to undertake this work. Therefore, the Board believes that some discussion of the Plan's ability to accommodate delays or problems created by entities other than the OPA is within the scope of assessing Plan robustness. However, evaluating or enforcing that facilitation is not within scope of this proceeding.

In its written submission, the Society of Energy Professionals identified a lack of human resources and a human resources plan as a barrier to the implementation of the IPSP. The Board finds that these questions could also be pursued as part of the assessment of Plan robustness and prudence.

AMPCO, in its written submissions, suggested that the following issues be added to the issues list.

- Has the OPA articulated plans to monitor and report on the effectiveness of its implementation of the IPSP?
- Has the OPA adequately identified and accounted for schedule risks in the near- and mid-term?
- Has the OPA identified possible contingencies and ranges of contingencies for implementation of the IPSP in the near-term and during the planning horizon?

- Has the OPA adequately considered the costs and implications of contingencies in the IPSP?

The PWU suggested similar issues in its written submission.

The Board believes that AMPCO and PWU have identified issues that are relevant to the review of the IPSP. A fundamental element of planning is assessing risks and identifying and developing contingencies. Developing a method of monitoring the success of the Plan is also key to planning. The planner must ensure that the Plan can be assessed and adjusted as necessary in the future to determine if it remains economically prudent and cost effective. The Board finds that AMPCO's issues above will be considered in the Board's review of the economic prudence and cost effectiveness of the IPSP as a whole.

Conservation

There are five proposed issues in the OPA Revised Issues List which deal with conservation. In the approved Issues List, the Board has brought together the conservation issues regarding compliance with the Supply Mix Directive and the issues listed under economic prudence and cost-effectiveness. The approved conservation issues are listed at the end of this section.

A number of parties raised the issue of conservation in both their written and oral submissions. The OPA Revised Issues List included, in the second section of the list under the heading "Conservation", many of the suggestions made in the written submissions. The OPA, in its oral submissions, confirmed that it agreed with intervenors such as GEC and Pollution Probe that the issues regarding conservation included questions about exceeding the targets in the Directive and early implementation of the programs. The Board finds that concerns regarding lost opportunities, whether the OPA has proposed sufficient conservation in the Plan, the need to take account of naturally occurring conservation, the mix of programs and the delivery and schedule for those programs are included in the issues proposed by the OPA.

CCC submitted that the proposed issues with respect to conservation are too broad and that the Board does not need to address issues 2 and 3 under the heading "Conservation" in the OPA Revised Issues List. The Board does not agree with CCC that the issues proposed by the OPA are too broad. The Board believes the issues in the OPA Revised Issues List dealing with conservation represent the mandate which the OPA has in developing the IPSP in compliance with the Directive (including the requirement to consider environmental matters in developing the Plan) and being economically prudent and cost effective.

With respect to the wording of those issues, CanSIA questioned why the OPA had not dealt with solar energy when it considered conservation (and renewables). Waterkeeper asked the same question with respect to geothermal heating and cooling, load reduction initiatives and fuel switching. The OPA indicated that it did not intend to deliberately exclude any particular form of energy. The Board accepts these submissions, and has explicitly scoped the issue of conservation accordingly. The issue heading will read as follows:

“Conservation (including conservation vehicles and load reduction initiatives as listed in the Supply Mix Directive)”.

VECC was concerned about the OPA’s use of the screening measures, Levelized Unit Energy Cost (“LUEC”) and Total Resource Cost (“TRC”), to assess the cost of conservation programs and to determine the least cost alternative. Northwatch also questioned the OPA’s use of the TRC test for conservation initiatives.

LUEC and TRC are widely used screening measures for the cost effectiveness of CDM programs. The Board does not believe that it would be useful to reconsider the use of these screening measures in this hearing. Similarly, the Board finds that reconsideration of mechanisms to decouple consumption from profits, such as LRAM and SSM, as suggested by Waterkeeper, is beyond the scope of this hearing.

Also beyond the Board’s mandate in this proceeding are issues related to rates and pricing regimes. Although parties such as GEC and Pollution Probe may be correct in asserting that pricing is a powerful tool in achieving conservation, it is not within the mandate given to the OPA to propose a new pricing regime as part of the IPSP. However, it would be within the scope of the proceeding to test the IPSP’s resilience in the face of changes in price or consumer behaviour. Similarly, Waterkeeper’s concern about the effects of technological innovation and consequent market transformation are in scope to the extent that they relate to the ability of the IPSP to accommodate such changes.

The suggestion from the COC that the Plan should consider restructuring the OPA or recommending the creation of a new institution to better achieve the conservation mandate is outside the OPA’s mandate and the scope of this proceeding.

Several parties, such as GEC, Ontario Energy Association and PWU, raised the issue of evaluation, measurement and verification of the CDM programs. Ontario Energy Association suggested that the conservation targets could be considered ambitious, and the achievement of these targets should be assessed. PWU and GEC recommended that the OPA should be required to evaluate the conservation programs and adjust the Plan to recognize the actual results of the programs.

The Board agrees that it is important that the OPA evaluate the success of the initiatives in the IPSP, and use this information to adjust the Plan in the future to better achieve its goals. This is not an issue restricted to conservation programs. Earlier in this decision, the Board has indicated that the assessment of the overall economic prudence and cost

effectiveness of the Plan will involve some consideration of the strategy for monitoring results and adjusting the Plan to meet new information.

The Board therefore finds that the issues for review of the IPSP in relation to conservation are:

Conservation (including conservation vehicles and load reduction initiatives as listed in the Supply Mix Directive)

1. Does the IPSP define programs and actions which aim to reduce projected peak demand by 1,350 MW by 2010, and by an additional 3,600 MW by 2025?
2. Has the OPA, in developing the IPSP, identified and developed innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures?
3. Is the mix of conservation types and program types included in the Plan to meet the 2010 and 2025 goals economically prudent and cost effective?
4. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 goals?
5. Is the implementation schedule for conservation initiatives economically prudent and cost effective?

Renewable Supply

There are four proposed issues in the OPA Revised Issues List which deal with renewable supply. As with other issues on the list, in its approved Issues List, the Board has brought together the issues regarding compliance with the Supply Mix Directive and the issues listed under economic prudence and cost effectiveness. The approved renewable supply issues are listed at the end of this section.

Renewable supply was discussed by a number of parties. As with conservation, the OPA Revised Issues List included, as specific issues, many of the suggestions made in the written submissions. The Board finds that issues suggested by parties such as the Canadian Wind Energy Association (“CanWEA”), OWA, Northwatch, OFA, Pollution Probe, GEC, and PWU regarding the potential for additional renewable generation (including biomass, imports and the role of storage), the mix of resources and the implementation schedule for renewable resources are included in the issues proposed by the OPA.

CCC took a similar position with respect to renewable supply as it did concerning conservation; i.e., that the proposed issues with respect to renewable supply are too broad. CanSIA also reiterated its conservation submission with respect to renewable supply: that the OPA had failed to list solar energy specifically in the issues list. The Board makes the same findings as in conservation: that the issues proposed by the OPA in the Revised Issues List are not too broad, and that the title to the renewables section of the approved Issues List will refer to sources of renewable energy as listed in the Supply Mix Directive.

COC raised the issue of climate change and its expected effect on the hydrologic cycle. COC suggested that it is important that Ontario’s water resources be protected as a public trust in the context of protecting renewable energy supply. COC suggested two additional issues be added to deal with these concerns.

The Board finds that, like other factors that may potentially affect the IPSP, it is within the scope of the general assessment of the economic prudence and cost effectiveness of the Plan to ask how the IPSP would flex or be adjusted to take account of changes in water supply. However, the question of whether the plan for renewable resources and the procurement processes is consistent with the management of water as a public trust exceeds the scope of this proceeding.

Waterkeeper and PCWO related renewable supply to environmental sustainability. Both groups suggest that the Ministry of Energy is bound by its Statement of Environmental Values which states that the Ministry's mandate is to, "ensure that Ontarians have access to safe, reliable and environmentally sustainable energy supplies". The OPA replied that the only tests for the IPSP in relation to renewable supply are compliance with the Directive and economic prudence and cost effectiveness and that there is no requirement that the Plan be sustainable.

The Board agrees with the OPA that the mandate for the Board in reviewing the IPSP is set out in section 25.30 of the Electricity Act and the IPSP regulation. The Board is not required to determine whether the IPSP meets the Statement of Environmental Values. Regulation 424/04 does not require that the IPSP be sustainable, but that environmental sustainability is considered by the OPA in developing the Plan. The Board will not add an issue to the issues list regarding the Statement of Environmental Values.

Bullfrog Power made distinctive submissions with respect to renewable supply and procurement. The issue was summarized by counsel for Bullfrog Power as "...whether that goal, the renewable target, essentially requires that environmental attributes that are purchased to meet the target be retired...if the OPA were to sell the environmental attributes associated with renewable electricity it procures, it would no longer be able to claim that power as renewable and count the power towards the Directive's targets." The OPA replied to this submission that the issue proposed by Bullfrog Power added language to the Directive that does not exist, but did say "that is not to say that it is not a legal argument that Bullfrog Power can't advance if they want to advance it, but it is not a factual issue that ought to be added to the list."

The Board is of the view that the issue raised by Bullfrog Power with respect to the achievement of the renewable target in the Directive is within the scope of the proceeding. There is no need to add a new issue to the list, as the issue regarding the assistance the IPSP provides in meeting government renewable targets would include the question raised by Bullfrog Power.

The Board therefore finds that the issues for review of the IPSP in relation to renewable supply are:

Renewable Supply (including sources of renewable energy as listed in the Supply Mix Directive)

6. Does the IPSP assist the government in meeting its target for 2010 of increasing the installed capacity of new renewable energy sources by

2,700 MW from the 2003 base, and increase the total capacity of renewable energy sources used in Ontario to 15,700 MW by 2025?

7. Is the mix of renewable resources included in the Plan to meet the 2010 and 2025 targets economically prudent and cost effective?
8. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 targets?
9. Is the implementation schedule for the renewable resources in light of lead times for supply and transmission economically prudent and cost effective?

Nuclear for Base-load

The Board accepts the general structure of the issues relating to nuclear for base-load, as set out in the OPA Revised Issues List and explained by counsel for the OPA, with one exception. As with the other issues in the approved Issues List, the Board has gathered the issues relating to nuclear for base-load under a single heading for both compliance with the Directive and the test of economic prudence and cost effectiveness. The approved issues for this topic are set out at the end of this section.

OPG and CCC submitted that the third issue under the title "Nuclear for Base-load" in the OPA Revised Issues List be removed from the list. The disputed issue reads: "Is it more economically prudent and cost effective to build new plants or refurbish existing plants to supply new nuclear power?" CCC and OPG submitted that an evaluation of the relative merits of refurbishment or new build for nuclear plants was outside the scope of the Board's mandate for this hearing.

OPG pointed out that the OPA itself has not evaluated these options and will not do so. That is the role of the government and nuclear plant operators. GEC, in its written submission, agreed that the OPA did not need, and indeed was not seeking, guidance on refurbishment versus new build for nuclear.

Although they did not comment specifically on the inclusion or exclusion of this issue, Energy Probe and SEC urged the Board to undertake a broad and detailed evaluation of the nuclear aspects of the IPSP. Their submissions support the retention of the issue on the list. The Board notes that the Board's Guidelines at page 6 refer to the examination of nuclear refurbishment versus new build. However, this reference was used only as an example of a possible component to be considered in evaluating the economic prudence and cost effectiveness of the nuclear portion of the IPSP.

The OPA, responding to parties' submissions, submitted that the issue could remain on the list, as it is an area of discretion left open by the Directive, but a general review of the merits of nuclear refurbishment versus new build should not be undertaken by the Board. Counsel for the OPA pointed out that the evidence in the Plan on the question of refurbishment versus new build is superficial in the absence of a business case from nuclear plant operators. He submitted that it would not be a useful exercise to spend a lot of time debating the advantages of one approach over the other, and that the IPSP has been designed to be robust enough to meet either scenario.

The Board agrees with the submissions of OPG and CCC that this issue is too broad to remain on the list in its current form. Neither the OPA nor the Board will be making the decision as to whether the proposals for nuclear power in the Plan, if approved, will be achieved by refurbishment of existing nuclear plants or the construction of new facilities. However, the Board is concerned with the flexibility of the IPSP to accommodate either alternative. OPG, as an alternative to complete removal of the issue, suggested a replacement issue that emphasized the inquiry into flexibility of the Plan. That issue is: “In the context of the determination of issue 2 above, is the IPSP sufficiently flexible, such that it allows for building new nuclear plants or refurbishing existing plants or both, at such time as those decisions are capable of being made?” While the Board notes that this issue could be considered to be already included in the general evaluation of economic prudence and cost effectiveness, the Board finds that there is merit in listing this issue separately, given the alternative scenarios and the evidence in the IPSP.

The Board will remove the third issue under “Nuclear for Base-load” from the OPA’s Revised Issues List and substitute the following issue:

In the context of the determination of economic prudence and cost effectiveness, is the IPSP sufficiently flexible to accommodate building new nuclear plants or refurbishing existing plants or both?

As noted above, several parties, particularly Energy Probe and SEC, urged the Board to take a very broad view of its scope for the review of nuclear issues. They also urged the Board to ensure that the taxpayers of Ontario are protected from the risks of nuclear development. In its written submission SEC stated a general concern that history in Ontario has demonstrated that nuclear investments are very risky and therefore the Board’s review of the nuclear component must be very thorough. Energy Probe and Pollution Probe echoed these concerns.

The Board recognizes the enormity of the implications of the nuclear decisions that face the province. However, many of the most significant decisions regarding nuclear power have been made, or will be made, outside this proceeding. The government of the province directed the OPA to “plan for nuclear capacity to meet base-load electricity requirements” and set a limit on the installed in-service capacity over the life of the Plan. It is not within the Board’s mandate in this proceeding to review general provincial policy regarding nuclear power. What this proceeding can thoroughly examine are the base-load requirements that drive the need for nuclear development and the flexibility of the Plan to react to situations that alter the assumptions regarding the need for and

execution of nuclear projects. The Board has considered certain specific issues suggested by parties in this context.

The issues proposed by Energy Probe in Exhibit 16 filed at the issues hearing are within scope where they relate to the determination of base-load requirements and the flexibility of the Plan. However, questions such as whether reliance on high-capacity performance from nuclear stations will be acceptable to Canada's nuclear safety regulator are out of scope.

Some of the ten issues suggested by SEC at pages 10 to 11 of its written submissions pertain to the economic prudence, cost effectiveness and flexibility of the IPSP, and are included in the OPA's proposed issues list. However, SEC's issue 57 c) regarding the assessment of a variety of nuclear technologies is an example of a topic that is out of scope. The Board is of the view that the nature of the assessment sought in that proposed issue would lead to a more detailed examination of the issue than is required for the exercise of the system planning required by the legislation.

Issues 5 and 7 proposed by the PWU at pages 17 to 18 of its written submission are generally in scope, as they also predominantly relate to determination of base-load, economic prudence and cost effectiveness. However, the Board agrees with CCC that PWU issue 6 at page 17, relating to assessment of feasibility, risks and environmental effects arising from government directives to OPG, are not within the scope of this proceeding.

Most of the concerns of the PCWO are dealt with elsewhere in this decision. However two PCWO issues pertain specifically to this section of the decision. One is the life cycle cost of nuclear projects and the other is the cost of nuclear waste management. To the extent that matters covered under these issues are relevant to the flexibility, economic prudence and cost effectiveness of the Plan; they are included in the issues proposed by the OPA. However, the Board would not find useful a general discussion of these issues outside the context of the specific mandate of the Board for the review of the IPSP.

The concerns raised by the Canadian Nuclear Association in its written submission and by GEC in its written submission regarding the need for clarification of timelines and procurement plans for nuclear power can be explored within the issues proposed by the OPA. Questions similar to GEC's proposed issue: "Is OPA's assessment of nuclear supply, including availability, lead times, costs, performance, impacts and risks, a

reasonable basis for planning” will form part of the assessment of the economic prudence and flexibility of the Plan.

Pollution Probe, in its oral submissions, identified three additional issues relating to nuclear for base-load in the IPSP: “Are the avoided cost estimates [for nuclear power] reasonable?”, “Is the [OPA’s] ‘Directive priority’ consistent with the government’s Directives to the OPA?”, and “Is the OPA’s definition of base load consistent with the government’s Directive to the OPA?”. The OPA in its reply submissions stated these issues were in scope, as long as they are qualified by the requirement of economic prudence and cost-effectiveness. The Board agrees with the OPA, and finds that Pollution Probe’s issues are included in the OPA Revised Issues List and do not need to be specifically added.

The Board therefore finds that the issues for review of the IPSP in relation to nuclear for base-load are:

10. Does the IPSP plan for nuclear capacity to meet base-load requirements and limit the installed in-service capacity of nuclear power over the life of the Plan to 14,000 MW?
11. What is the base-load requirement after the contribution of existing and committed projects and planned conservation and renewable supply?
12. Is the IPSP’s plan to use nuclear power to meet the remaining base-load requirements economically prudent and cost effective?
13. In the context of the determination of economic prudence and cost effectiveness, is the IPSP sufficiently flexible to accommodate building new nuclear plants or refurbishing existing plants or both?
14. Is the schedule for implementing base-load resources in light of lead times for supply and transmission economically prudent and cost effective?

Natural Gas

The Board accepts the general structure of the issues relating to natural gas, as set out in the OPA Revised Issues List and explained by counsel for the OPA. As with the other issues in the approved Issues List, the Board has gathered the issues relating to natural gas under a single heading for both compliance with the Directive and the test of economic prudence and cost effectiveness.

CCC suggested that issues 1 and 2 under the natural gas heading in the OPA Revised Issues List (“How can gas be used for peaking, high value and high efficiency purposes?” and “How can gas-fired generation contribute to meeting transmission capacity constraints?”) are included in the economic prudence and cost effectiveness test in issue 3 and therefore should be removed from the issues list. Although the Board agrees that issues 1 and 2 could be considered to be included in issue 3, it finds that for greatest clarity they will remain explicit as the OPA has proposed.

Many of the submissions on natural gas issues were either comments on the matters which would be discussed under the OPA proposed issues or identification of issues which the Board believes are included under the OPA’s Revised Issues List. The Board finds that it is not necessary to add any issues to the five proposed by the OPA in their Revised Issues List. These five natural gas issues are listed at the end of this section. Specific comments on some proposed issues follow.

SEC, in its written submissions, provided a discussion of what should be examined under the natural gas issues, rather than proposing changes to the list. In general, the topics in SEC’s submission are included in the five issues proposed by the OPA. However, the Board does not agree that the impact of climate change obligations and domestic carbon trading should be reviewed in any depth as part of the plan for natural gas as a resource. The flexibility of the IPSP to accommodate changes in legislation, policy and technology can be tested, and these more general topics are relevant to that exploration of the robustness of the Plan.

The PWU, in its written submissions, proposed three additional issues for the natural gas heading. The first two deal with identification of high value and high efficiency applications and the economic prudence and cost effectiveness of natural gas applications. These are included in the issues in the OPA Revised Issues List. PWU’s third natural gas issue deals with natural gas price risk volatility. The Board believes

that the issue of the effect of natural gas price fluctuations on the IPSP is included in the natural gas issue related to economic prudence and cost effectiveness.

COC, in its written submission, raised a similar concern and proposed additional issues which address a risk to the plan due to natural gas supply. Proposed issue 3, “To what extent is the IPSP based on a realistic assessment of future natural gas supplies to Ontario?”, would constitute part of the testing of the economic prudence and flexibility of the Plan. However, issue 4 as proposed by the COC is out of scope. It is not part of the review of the IPSP to require that the Plan “identify measures or initiatives that may need to be taken to address these risks and enhance the security of natural gas supply to the province”.

GEC, in its written submission, proposed two additional issues relating to natural gas: “Is OPA’s assessment of gas generation, including availability, lead times, costs, performance, impacts and risks, a reasonable basis for planning?” and “Is OPA’s selection of gas generator size, location and technology...appropriate?”. The Board finds these issues are included in the issues proposed by the OPA and do not need to be separately listed.

Pollution Probe, in its oral submissions, refined the issues proposed in its written submission and proposed the following issue: “Are there lower cost options that can completely or partially reduce the need for 1,350 megawatts of simple-cycle gas generation?” The Board agrees with the OPA that this issue is included in the natural gas issues in the OPA Revised Issues List.

The Board therefore finds that the issues for review of the IPSP in relation to natural gas are:

15. Does the IPSP 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?
16. Has the OPA, in developing the IPSP, identified opportunities to use natural gas in high efficiency and high value applications in electricity generation?
17. How can gas be used for peaking, high value and high efficiency purposes?
18. How can gas-fired generation contribute to meeting transmission capacity constraints?

19. Is the IPSP's plan for additional gas resources for peaking, high value and high efficiency purposes and for contributing to transmission capacity constraints economically prudent and cost effective?

Replacement for Coal-Fired Generation

The Board accepts the general structure of the issues relating to replacement for coal-fired generation, as set out in the OPA Revised Issues List and explained by counsel for the OPA. As with the other issues in the approved Issues List, the Board has gathered the issues relating to replacement for coal-fired generation under a single heading for both compliance with the Directive and the test of economic prudence and cost effectiveness.

A key concern in the issues hearing was the breadth of the proposed issues relating to coal replacement, including the meaning of the word “replace”. PWU took the position that the IPSP coal-fired replacement plan should adequately address factors of operation, supply chain issues, staffing and community impacts arising from the shut down of coal plants. The PWU posited that the “earliest practical time frame” wording in the directive gives rise to the need to examine the practical barriers to the shutting down of coal-fired generation.

The OPA, while acknowledging the importance of shut-down issues, responded that the Directive requires the OPA to develop a coal replacement plan, as opposed to a coal plant shutdown or coal plant operation plan. The OPA argued that issues related to operation and shut down were outside the mandate of the OPA, and the scope of this hearing.

The Board agrees with the OPA that its mandate to replace coal fired generation with cleaner resources in the earliest practical time frame does not include a responsibility to plan for the operational consequences of the winding down of the existing coal fired plants. The wording of the Directive suggests the type of practical concerns that the OPA must consider: “...the earliest practical time frame that ensures adequate generating capacity and electricity system reliability in Ontario” (emphasis added). Although other practical considerations may exist, the OPA has not been required to plan for operational difficulties, and the Board will not add an issue as proposed by PWU.

Two parties, GEC and Pollution Probe, argued that issues should be added to the list related to banning non-emergency coal-fired exports and changing the dispatch rules for coal plants. Pollution Probe submitted that the direction to replace coal-fired generation as soon as practically possible should include a consideration of how phase-out can be hastened through a change in dispatch rules.

The OPA, supported by the IESO, submitted that although the Minister could have required the OPA to develop a plan to phase out coal-fired energy, the Minister did not do that in the Directive. The OPA pointed out that the Directive requires replacement of coal-fired generation. The OPA further submitted that it is not the role of the OPA, as a system planner, to create or implement dispatch policy, and neither the legislation nor the Directive assigns this role to the OPA. The IESO's position was that the Directive is clear as to what the OPA should produce and that the Directive does not include the operation of coal-fired generation plants, environmental regulation or any restructuring of the existing market and market rules.

The Board agrees with the OPA and the IESO that the scope of the issues around coal replacement is delineated in the Directive, and does not include a consideration of dispatch rules relating to coal-fired generation. Matters pertaining to market rules and restrictions on exports are beyond the system planning mandate contemplated in the legislation and the Directive. No additional issue will be added on this topic. However, it would be an appropriate question to ask whether the Plan can accommodate changes in dispatch rules that are mandated by the responsible agencies.

Similarly, the risks identified by COC regarding possible constraints on coal replacement created by international trade rules are relevant to the flexibility of the IPSP to adjust to new developments. The Plan's flexibility will be considered in relation to its economic prudence, and no specific issue regarding trade is needed.

SEC submitted that due to the fact that coal will likely be the cheapest option for generation, using economic considerations, the OPA's plan to replace coal by 2012 requires an exercise of judgment as to what is the appropriate balancing of cost and environmental damage. SEC proposes issues that would examine the economic and environmental costs and benefits of keeping coal as a reserve beyond 2012 and even beyond 2014 if no material environmental damage is likely.

In response, the OPA contended that the SEC proposed issues question the government policy laid down in the Directive, and that the proceeding reviewing the IPSP is not the place to seek to change that government policy.

An examination of whether the proposed coal replacement plan in the IPSP complies with the Directive and achieves that replacement in the earliest practical time frame that ensures adequate generating capacity and electricity system reliability is clearly appropriate. However, the Board finds that the SEC issues are beyond the scope of this proceeding where they venture into questioning the government policy behind the

Directive. The Board does not expect that the OPA would provide evidence on the economics of providing coal fired generation beyond the time lines that have been established by government policy.

In its discussion of the coal replacement issues, OFA submitted that the review of the Plan should allow for the provision of evidence on the economics of switching to bio-fuels at Nanticoke. The Board considers OFA's concern to relate to the issues dealing with the cost effectiveness of renewable supply.

NOMA made submissions that expressed concern related to the coal replacement issues. Their concerns are addressed in the section of the decision dealing with regional issues.

The Board therefore finds that the issues for review of the IPSP in relation to the replacement for coal-fired generation are:

20. Does the IPSP plan for coal-fired generation in Ontario to be replaced by cleaner sources in the earliest practical time frame that ensures adequate generating capacity and electricity system reliability in Ontario?
21. 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)?
22. What are the remaining requirements in all of these areas?
23. Will the IPSP's combination of gas and transmission resources meet these remaining requirements in the earliest practical timeframe and in a manner that is economically prudent and cost effective?

Transmission

In the OPA Revised Issues List, issues relating to transmission appear as number 6 under the first section, Compliance with the Directive. However, under the Economic Prudence and Cost Effectiveness section of the list, there is no separate section for transmission issues.

Counsel for the OPA stated that transmission is integral to and embedded in all the resource sections except for conservation, and that transmission should be considered in conjunction with the resource it is enabling. For this reason, the OPA did not include a separate section for transmission in the Revised Issues List. The OPA stated that while it did not think a separate transmission issue was necessary, it was not opposed to the creation of a separate issue pertaining to transmission. Hydro One and PWU supported the idea of a separate transmission section or issue.

The Board is of the view that there may be elements of the transmission plan that are not necessarily integral to any specific resource and therefore a separate issue dealing with the economic prudence and cost effectiveness of the transmission components of the IPSP would be of value. The Board will add the following issue to the list:

Is the IPSP strategy for transmission economically prudent and cost effective?

The concept of “enabler lines” was introduced in the IPSP. The OPA has stated in its pre-filed evidence that these are transmission lines that are necessary to enable the development of clusters of potential renewable resources. The OPA further stated in its evidence that “enabler lines” is an unknown concept in Ontario, and under the present regulatory framework, the costing regime for these lines may inhibit the development of the lines and the associated renewable resources.

The Board has now initiated a transmission consultation, *Review of Cost Responsibility Policies for Connection to Electricity Transmission Systems* (EB-2008-0003) that will deal with some aspects of the enabler line issue, including cost responsibility. The consideration of transmission in the IPSP proceeding would be informed by the outcomes of that other process. Several parties argued that a distinct issue be established that would hold a place for the results of the consultation to be brought into the IPSP proceeding. For example, Hydro One stated that once a cost responsibility policy is developed there will be a need to apply it to the IPSP to make certain that issues regarding the identification and costing of enabler lines are properly integrated

into the IPSP. The National Chief's Office agreed, and indicated enabler lines were of the utmost importance for remote generation projects and that the outcomes of any separate process dealing with this matter should find their way into the IPSP proceeding.

Although the OPA agreed that the results of the consultation should be imported into the IPSP, counsel for the OPA submitted that a "placeholder" issue is not required for enabler lines.

The Board is of the view that there is value in providing a specific issue to identify the need to import the outcomes of the policy work on enabler lines into the IPSP proceeding. While the Board considers the inclusion of this issue to be beneficial, it does not intend to hamper the independent schedules of either proceeding. The Board will add the following issue to the list:

What is the effect, if any, on the IPSP, of the results of the OEB consultation
*Review of Cost Responsibility Policies for Connection to Electricity Transmission
Systems?*

Hydro One in their submissions pointed out that the IPSP identifies a significant level of development work that transmitters may be asked to undertake. Hydro One asked for assurance that the costs of development work undertaken for projects contemplated in the IPSP (if the Plan is approved) would be recoverable from transmission ratepayers. Hydro One contended that the need for the projects would have been approved by the Board in the IPSP proceeding, and should not have to be re-justified at a later date in a transmission rates proceeding.

The IPSP panel cannot bind a future panel of the Board sitting on a leave to construct or rates application. The Board reaffirms that regulatory streamlining, including the avoidance of duplication of proof of need for a project, is desirable. A panel in a future proceeding would likely place significant reliance upon and be informed by any decisions arising from the IPSP proceeding, but the Board cannot at this time provide the certainty that Hydro One is seeking regarding future approvals. Much will depend on the nature and quality of the evidence in the IPSP proceeding. The Board will not add an issue to the list regarding Hydro One's streamlining proposal.

SEC submitted in its written submission that it would be useful if the assumptions that were utilized by the OPA in preparing the IPSP, such as approval times, completion schedules and costs could be examined in more detail. SEC questioned whether the OPA's process was sufficiently robust to accommodate transmission project delays and

unexpected problems. CanWEA and the Canadian Nuclear Association had similar concerns regarding the timeliness of transmission projects. It is the Board's view that these concerns are included within the issues list; either under transmission economic prudence and cost effectiveness or testing the overall Plan for flexibility and robustness.

Northwatch proposed two issues: first, a clarification of the approvals sought in regard to transmission, and secondly the general direction that the OPA should follow for near-term projects, including allowing for design flexibility. The Board considers the matter of transmission design flexibility to be included within the third transmission issue appearing in issue 6 in the OPA Revised Issues List and in the new cost effectiveness issue created by the Board earlier in this section. The Board will not add an issue to the list regarding clarification of the approvals sought, but it would be of benefit to have the OPA provide this clarification early in the process.

GEC proposed three transmission-related issues in its written submissions. The Board is of the view that these issues are included in the transmission issues included in the OPA Revised Issues List and in the new general issue added earlier in this section.

The Board wishes to give examples of two proposed issues which, in the Board's view, are out of scope for this proceeding. Energy Probe proposed in its written submission that the question of whether the true social costs of the lands and facilities that will be acquired for new transmission facilities have been reflected in the IPSP, be added as an issue. OFA submitted that the IPSP should include a consideration of the relocation of loads to optimize infrastructure usage. The Board agrees with counsel for the OPA that these issues are beyond the scope of the IPSP proceeding.

NOMA, City of Toronto and the Toronto Board of Trade raised issues related to the transmission components of the plan. The Board addresses the issues they raised pertaining to transmission in the section of this decision dealing with Regional Issues.

The Board finds the following transmission related issues should be included on the issues list for the IPSP proceeding. As with the other sections of the list, the Board has gathered the issues relating to transmission under a single heading for both compliance with the Directive and the test of economic prudence and cost effectiveness.

24. Does the IPSP plan to strengthen the transmission system to:
 - (a) Enable the achievement of the supply mix goals set out in the Supply Mix Directive?

- (b) Facilitate the development and use of renewable energy resources such as wind power, hydroelectric power and biomass in parts of the province where the most significant development opportunities exist?
 - (c) Promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the need to cost effectively maintain system reliability?
25. What is the effect, if any, on the IPSP of the results of the OEB consultation *Review of Cost Responsibility Policies for Connection to Electricity Transmission Systems*?
26. Is the IPSP strategy for transmission economically prudent and cost effective?

Environment

The Revised Issues List presented by the OPA contained two issues specifically relating to the environment. The wording of the issues was taken directly from the Regulation, and the issues read as follows:

7. Does the IPSP comply with Ontario Regulation 424/04; specifically, in developing the integrated power system plan, has the OPA done the following:
 - vii. Ensured that safety, environmental protection and environmental sustainability are considered in developing the plan?
 - viii. Ensured that for each electricity project recommended in the Plan that meets the criteria set out in subsection 8(2) of Regulation 424/04, the Plan contains a sound rationale including:
 - (a) an analysis of the impact on the environment of the electricity projects: and
 - (b) an analysis of the impact on the environment of a reasonable range of alternatives to the electricity project?

One error in issue 7(viii) was noted by several parties: the reference to the subsection of the Regulation should be 2(2), not 8(2). The Board will make this change.

In addition, with regard to section 7(viii), PCWO and the City of Toronto asked that an issue be added to determine the extent to which future proceedings in other forums (such as environmental assessments) may be abbreviated as a result of the review of the enumerated projects in the IPSP proceeding. The Board agrees with the submissions of the OPA on this point. The Board in this review does not have the authority to determine what exemptions or other procedural effects will exist in other forums as a result of the IPSP review. In addition, it will be up to the decision makers in those future proceedings to determine how much weight can be given by project proponents to the evidence filed and the approval given in the IPSP proceeding. The Board supports in general the concept of reducing regulatory burden through effective streamlining of proceedings. However, this panel cannot and should not determine how the review of the IPSP may be regarded by future decision makers.

GEC, PWU and Waterkeeper submitted that environmental costs are part of the assessment of the economic prudence of the Plan, and that a Plan which imposes significant environmental costs would be economically imprudent. Northwatch and PCWO raised the issues of intra-generational equity and intergenerational equity respectively. Certain parties suggested that some environmental costs, such as those associated with air emissions be considered in the development of the IPSP.

PCWO suggested a list of issues to structure the Board's investigation of environmental and safety matters. The PCWO's written submission states "The protection of human health, safety and the environment must be a focus of the IPSP and its review as a whole...".

The majority of the submissions on the subject of the environment focused on section 7(vii) of the OPA Revised Issues List and the interpretation of the word "consider". Such parties as GEC, PWU, PWCO, Energy Probe and OFA argued that the Board should not be satisfied with simply determining whether the OPA has considered these matters, but that the Board is entitled to assess the adequacy of the consideration by the OPA in determining whether the OPA complied with the Regulation. These parties argued that the Board cannot merely "rubber stamp" the OPA's efforts at consideration, but must assess the reasonableness of those efforts. As a measure of this reasonableness, GEC and others submitted that the Board should determine whether and how the Plan had been modified to take into account the information arising from consideration of environmental and safety matters.

The OPA, supported by CCC, argued that the role of the Board is not to evaluate the adequacy of the OPA's consideration of environmental matters. The test in the legislation does not create evaluative criteria for the Board, but asks the Board to determine whether the OPA considered the enumerated matters. The test is not whether the IPSP is environmentally sustainable, but whether the OPA considered environmental sustainability in creating the Plan.

The Board's Report interpreted the term "considered" to mean "weighed and evaluated". The OPA in its oral submissions indicated it treated the word "consider" to mean "weigh and evaluate" and that the difference between those two terms was not key for the OPA. In fact, the evidence in the Plan tends to use the two terms interchangeably. The OPA focused their submissions on the difference between the Board looking at whether the OPA considered certain factors, and the Board entering into an evaluation of the adequacy of the consideration and correctness of the results arising from it.

The Board finds that a review of the OPA's consideration of sustainability could include a review of the OPA's consideration of environmental costs and intra-generational and intergenerational equity. Although the PCWO raises valid concerns regarding health, safety and the environment, the Board is of the view that their proposed issues are outside the scope of the Board's mandate in reviewing the Plan as described below.

The Board will not add to or change the issues proposed by the OPA in this area (with the exception of the minor correction referred to above). However, the Board believes that some guidance might be useful to the parties in understanding the scope of the Board's review of environmental issues.

The Board agrees that its mandate under section 25.30(4) of the Electricity Act and section 2(1)7 of the Regulation is not merely a rubber stamp of whatever the OPA has done in considering safety, environmental protection and environmental sustainability. However, the Board also agrees with the OPA that the Board's review should not be an evaluative exercise which determines whether the OPA succeeded in creating an environmentally sustainable Plan.

The Board finds that the words "weigh and evaluate" are still a good description of the requirement on the OPA to consider the factors in section 2(1)7 of the Regulation. The Board will not add any modifiers to that description, such as "adequately" or "reasonably". That said, to satisfy the Regulation, the OPA must demonstrate that the consideration they applied to the factors in section 2(1)7 was a meaningful exercise.

The Board therefore finds that the issues for review of the IPSP in relation to environmental matters are:

31. Has the OPA, in developing the IPSP, ensured that safety, environmental protection and environmental sustainability are considered?
32. Has the OPA, in developing the IPSP, ensured that for each electricity project recommended in the plan that meets the criteria set out in subsection 2(2) of Regulation 424/04, the plan contains a sound rationale including:
 - (a) an analysis of the impact on the environment of the electricity project; and
 - (b) an analysis of the impact on the environment of a reasonable range of alternatives to the electricity project?

PROCUREMENT PROCESSES

Issues relating to procurement occur in two parts of the OPA Revised Issues List. In Part 1, compliance with Ministerial directions, issues 7 (iv), (v), and (vi) deal with requirements for the IPSP arising from the IPSP Regulation. Part II of the OPA Revised Issues List contains a single issue related to the approval of the procurement processes proposed by the OPA, which reads as follows:

“Are the OPA’s proposed procurement processes appropriate to manage electricity supply, capacity and demand in accordance with the IPSP?”

No party objected to the inclusion of the OPA’s proposed issues on procurement. The Board accepts and has included all of these issues on the approved Issues List with one revision explained below. The issues relating to compliance with the Directive and the issues relating to approval of the procurement processes are separated in the Board’s approved issues list. The approved issues for these topics are set out at the end of this section.

Submissions focused on defining what should be included within the OPA’s proposed issues and the need to add further issues on the topic of procurement. The majority of the submissions on the procurement processes were focused on two questions:

- Which subsections of section 25.31 of the Electricity Act, and sections of Ontario Regulation 426/04, should be examined in the proceeding?
- Should the Board consider the objectives in section 1 of the OEB Act regarding consumer protection and economic efficiency and cost effectiveness in reviewing the procurement processes?

There were more specific concerns raised as well.

It is useful to quote some sections of the legislation relating to procurement processes in order to establish the basis for the findings that follow.

Section 25.31 of the Electricity Act

Section 25.31 of the Electricity Act, subsections 1 and 2, set out the requirement for the OPA to develop procurement processes. Those subsections read as follows:

25.31(1) The OPA shall develop appropriate procurement processes for managing electricity supply, capacity and demand in accordance with its approved integrated power system plans.

(2) The OPA's procurement processes must provide for simpler procurement processes for electricity supply or capacity to be generated using alternative energy sources or renewable energy sources, or both, where the supply or capacity or the generation facility or unit satisfies the prescribed conditions.

The Board's power to review and approve the procurement processes appears in subsection 4 of the same section:

(4) The Board shall review the OPA's proposed procurement processes and any proposed amendments and may approve the procurement processes or refer all or part of them back with comments to the OPA for further consideration and resubmission to the Board.

The OPA included an issue based on subsection 25.31(1) in its Revised Issues List but did not include an issue based on subsection 25.31(2). OWA and SEC recommended that the requirement in subsection 25.31(2) be included in the issues list. Neither the OPA nor any other party objected to the inclusion of this issue. The Board accepts this as an issue in the hearing.

Regulation 426/04

Regulation 426/04 under the Electricity Act applies to the procurement processes. As the regulation was the subject of considerable debate at the issues hearing, the relevant text is quoted in full below:

Assessment of capability of IESO-administered markets

1. The OPA shall not commence the procurement process under section 25.32 of the Act unless it has, in consultation with interested parties, made an assessment of the capability of the IESO-administered markets to, or the likelihood that investment by other persons will,
 - (a) meet the need for electricity supply or capacity as identified in an assessment made under section 25.29 of the Act; or

- (b) deliver measures that will manage electricity demand or result in the improved management of electricity demand as described in clause 25.32 (1) (b) of the Act.

Factors for consideration

- 2. The OPA shall not commence the procurement process under section 25.32 of the Act unless,
 - (a) it has considered the factors identified in the integrated power system plan in respect of the advisability of entering into contracts;
or
 - (b) in the opinion of the OPA, after consultation with the IESO, extraordinary circumstances exist that justify proceeding with a procurement process without consideration of the factors mentioned in clause (a).

Principles in the procurement process

- 3. In developing procurement processes under section 25.31 of the Act, the OPA shall comply with the following principles:
 - 1. Procurement processes and selection criteria must be fair and clearly stated and, wherever possible, open and accessible to a broad range of interested bidders.
 - 2. To the greatest extent possible, the procurement process must be a competitive process.
 - 3. There must be no conflicts of interest or unfair advantage allowed in the selection process.
 - 4. To the greatest extent possible, the procurement process must not have an adverse impact outside of the OPA procurement process on investment in electricity supply or capacity or in measures that will manage electricity demand as described in subsection 29.32 (1) of the Act.

No adverse impact of contract

- 4. The OPA shall ensure that, to the greatest extent possible, any contract it enters into under subsection 25.32 (1) of the Act does not contain any

terms or conditions that have an adverse impact on investment by persons who are not parties to such a contract with the OPA in electricity supply or capacity or in measures that will manage electricity demand as described in subsection 29.32 (1) of the Act.

AMPCO and Brookfield submitted that the issues list should contain issues related to Sections 1 and 2 of Regulation 426/04 which have to do with the commencement of the procurement process. AMPCO argued that the consultations and assessments contemplated in sections 1 and 2 of the Regulation would take considerable time and delay procurement if they were left until after the approval of the IPSP. AMPCO therefore assumed that the OPA had begun these activities and could provide information in this hearing process.

Brookfield argued that the legislature appears to have intended that the procurement process would act as a proxy for the Board's review of the prudence and cost effectiveness of contracts, and therefore all aspects of Regulation 426/04 should be included in the issues list and in the review of the procurement processes.

The OPA argued that the Board approves the procurement processes but does not supervise the exercise of those processes. Sections 1 and 2 are related to activities which must be undertaken after the procurement processes are approved but before they are exercised. Therefore, the OPA argued, these sections are not part of the review and approval of the procurement processes.

The Board agrees that sections 1 and 2 of Regulation 426/04 are outside the scope of the review of the procurement processes. The Board's mandate is to review the procurement processes themselves. The OPA must ensure that it meets the requirements of sections 1 and 2 before exercising the approved procurement processes. Ensuring compliance with these requirements is not part of the Board's review of the procurement processes. The Board will not include any issues in the issues list based on sections 1 and 2 of the Regulation.

OWA recommended that the principles contained in section 3 of Regulation 426/04 be included in the issues list. The OPA agreed that these principles were within the scope of the Board's review and approval of the proposed procurement processes. The Board finds that these issues should be explicitly included in the issues list. The Board notes that the reference in subsection 3(4) to section 29.32(1) of the Electricity Act appears to be erroneous, and should, in fact, be a reference to section 25.32(1). The Board will make this change in its Issues List.

Brookfield argued that section 4 of Regulation 426/04, which deals with the impact on investment of terms and conditions of contracts entered into by the OPA, should be the basis of an issue on the Board's approved list. The Board will not add such an issue to the list, for the reasons articulated below regarding the Board's decision not to review contracts. However, the issues raised by Bullfrog Power and Brookfield regarding the procurement processes' impact on investment are included in the IPSP-related procurement issues 7(iv) and (v) in the OPA Revised Issues List, and in Regulation 426/04 in section 3(4), and are therefore part of the issues the Board will consider in its review.

Consumer protection

Several parties argued that the Board should consider, in its review of the procurement processes, risk allocation and consumer protection with regard to the impact on electricity prices of OPA contracts. For example, SEC suggested an issue that asked how consumer interests would be protected in procurement processes.

VECC in its written submission stated that to be "appropriate" the proposed procurement processes must:

- Ensure timely delivery of required resources as required
- Provide for a reasonable sharing of risks between suppliers and consumers
- Ensure that contract prices are effective
- Be sufficiently transparent that consumers are assured they are receiving fair value

In its written submissions, AMPCO proposed the following issue: "Has the OPA demonstrated that its procurement process fairly apportions risk between consumers and suppliers?" In its oral submissions, AMPCO stated that the OPA had provided evidence in this case on the issue of risk apportionment. VECC in its written submission stated that in order for the procurement processes to be appropriate they must (among other points) provide for a reasonable sharing of risks between suppliers and consumers. CCC echoed the same concept in one of its proposed issues.

The OPA argued that to include the risk, pricing and the other matters raised by VECC as issues in this hearing would be to examine OPA contracts. The OPA in its submissions argued that risk and pricing were associated with specific contracts and not

the procurement process. The examination of OPA contracts, the OPA argued, is outside of the scope of the hearing.

The Board agrees that the examination of contracts or a form of contract is not within the Board's responsibility as outlined in the Electricity Act section 25.31(4). However, it is clear that each negotiated contract or standard contract that the OPA enters into will have particular costs which will contribute to the price of electricity in Ontario. While the Board will not examine contracts, it is an appropriate issue to consider whether the OPA's procurement processes do or should allow for consideration of cost in order to protect Ontario consumers. As discussed earlier in this decision, the objectives in section 1 of the OEB Act inform the Board's exercise of its power to review and approve the procurement processes without overriding the direction that has been provided by the legislature as set out in section 25.31(4) of the Electricity Act. Similarly, the Board agrees that the question of transparency could be examined when considering the appropriateness of the procurement processes.

The Board finds that the questions of risk allocation, impact on consumer pricing and transparency within the procurement processes are all included in the issue based on section 3 of Regulation 426/04 and in the following general issue:

Should the Board approve the OPA's proposed procurement processes as being appropriate for managing electricity supply, capacity and demand in accordance with the IPSP?

The Board will substitute this general issue for the one proposed by the OPA in the Procurement Process section of the OPA's Revised Issues List.

Specific Concerns

APPPrO in its written submission requested that this issue be on the issues list: "Should non-utility generators be considered sole proponents for purpose of the procurement process?" APPPrO also suggested that an issue regarding follow-on contracts with NUGs be on the list.

The OPA argued that these considerations are not within the scope of the review of the procurement processes as they have to do with entering into procurement processes previously approved by the Board. The Board concurs that the issues as framed by APPPrO are not part of our review of the proposed procurement processes. The OPA's treatment of any specific generators or class of generators as it enters into contracts is

the mandate of the OPA, not the OEB. However, if the procurement processes negate the opportunity for contract renewal for a certain class of generators, that element of the processes would appropriately be considered in the review of the processes. The need for fairness and transparency in the processes are highlighted in the issues based on section 3 of Regulation 426/04.

CanSIA and Pollution Probe argued that an appropriate area of examination in the review of the procurement processes is the prioritization of, or possible barriers to, certain types of resources. CanSIA's concern was specifically focused on solar energy, although CanSIA was clear that they were not asking for a review of the Standard Offer Program. The Board agrees with the OPA's submission that the specific issues suggested by Pollution Probe are outside the review of the procurement processes. Nor will the Board undertake a specific review of the procurement of solar energy. However, concerns regarding barriers to certain types of generators in the future under the procurement processes are included in the issues based on the principles articulated in section 3 of Regulation 426/04.

CanWEA suggested the following issues: "Has the OPA provided enough detail in its procurement plans to inform procurement decisions and process throughout the life of the Plan?" and "Does the Plan provide flexibility in procurement schedules in light of lead times for certain technologies?"

CanWEA's rationale was that the Plan should specify how procurements will be made for all resources and provide more certainty as to timing, targets and in-service dates for new supply. The Board believes that these questions are not related to the procurement processes, but to the planning for procurement within the IPSP. Issue 7(vi) in the OPA Revised Issues List, as well as the general review of whether the IPSP is economically prudent and cost effective would appear to cover the questions raised by CanWEA.

The Board therefore finds that the issues for review of the IPSP in relation to procurement are:

28. Has the OPA, in developing the IPSP, identified and developed innovative strategies to encourage and facilitate competitive market-based responses and options for meeting overall system needs?
29. Has the OPA, in developing the IPSP, identified measures that will reduce reliance on procurement under section 25.32(1) of the Act?

30. Has the OPA, in developing the IPSP, identified factors that it must consider in determining that it is advisable to enter into procurement contracts under subsection 25.32 of the Act?

In addition, the following issues will form Part B of the issues list:

1. Do the OPA's procurement processes provide for simpler procurement processes for electricity supply or capacity to be generated using alternative energy sources or renewable energy sources, or both, where the supply or the capacity or the generation facility or unit satisfied the prescribed conditions?
2. In developing its procurement processes, has the OPA complied with the following principles:
 - (a) Procurement processes and selection criteria must be fair and clearly stated and, wherever possible, open and accessible to a broad range of interested bidders;
 - (b) To the greatest extent possible, the procurement process must be a competitive process;
 - (c) There must be no conflicts of interest or unfair advantage allowed in the selection process; and
 - (d) To the greatest extent possible, the procurement process must not have an adverse impact outside of the OPA procurement process on investment in electricity supply or capacity or in measures that will manage electricity demand as described in subsection 25.32(1) of the Electricity Act.
3. Should the Board approve the OPA's proposed procurement processes as being appropriate for managing electricity supply, capacity and demand in accordance with the IPSP?

ABORIGINAL PEOPLES CONSULTATION

Five Aboriginal organizations, including four First Nations Groups and the Metis Nation of Ontario, made written and/or oral presentations to the Board. The perspective of each was different; however, collectively they put forward a case for the full inclusion of Aboriginal Peoples in the discussion of issues at this hearing. The common theme of their presentations was that Ontario's Aboriginal Peoples want to participate fully in, and benefit fully from, this hearing, the IPSP and the projects which will flow therefrom.

In addition to the presentations made on behalf of Aboriginal Peoples, the following groups were supportive of the positions taken by the Aboriginal Groups: Northwatch, NOMA, SEC and OEA

The OPA, in its Revised Issues List, proposed an overarching issue to deal with the concerns raised by Aboriginal Peoples as follows:

Have all Aboriginal Peoples whose existing or asserted Aboriginal or treaty rights are affected by the IPSP or the Procurement Process been identified, have appropriate consultations been conducted with these groups and if necessary, have appropriate accommodations been made with these groups?

The OPA agreed to modify the original wording of this issue to replace the word "are" with the words "may be" to reflect the submission of the Saugeen Ojibway Nations, which Mr. Pape indicated mirrored the language used by the Supreme Court of Canada. The other Aboriginal Groups that were present at the hearing were in agreement with this wording.

The National Chief's Office made written and oral submissions which together propose a plan to remove what they described as systemic barriers to meaningful participation in IPSP implementation. While recognizing in its written submission that the Board may not have the jurisdiction to consider all of the issues they were raising, the National Chief's Office let it be known that it was their purpose to engage in constructive dialogue on all of the issues which were within the jurisdiction of the Board. In addition, it was noted that discussions with the Ontario government would be ongoing. The National Chief's Office indicated that their primary purpose was to make their concerns public and to affect positive amendments to public policy to accommodate their position.

It was further submitted that First Nations wished to participate as full and equal partners toward a common goal and to accomplish that goal it would be necessary to build institutional and human capital in First Nations communities. They submitted that in so doing, the First Nations could help Ontario meet its future energy supply requirements.

The National Chief's Office proposed an issues list that augments the principles set out in Regulation 426/04. The proposed recasting of these principles incorporates a consideration of their expressed concerns; therefore, they submitted that their issues would best be addressed during the discussion of the procurement processes. Their representative stated, "Given that your examination of our contention concurs that such discrimination exists, amendments must be made to the tenets of this process to enable us to participate." They also provided, by way of example, the following list of programs that are designed to remove the barriers that they have identified.

- A First Nations Capacity and Governance Program and Fund
- A First Nation Venture Capital Fund
- Preferred access for First Nations and bidders from First Nations Communities to grid connections
- A Set Aside Program for First Nations and bidders from First Nation communities; and/or
- Installation of enabling transmission lines to service energy generation by First Nations and bidders from First Nation communities.

The FNEA indicated that it has a membership of about 20 First Nations (in Southern Ontario) who are actively engaged in planning and developing energy projects as community economic development initiatives.

The FNEA argued that the OPA's interpretation of its legislative mandate is overly narrow and restrictive, inhibiting the inclusion of First Nations. The FNEA argued that community-based First Nation's projects ought to have an equal footing with larger, corporate-driven projects in the development of the IPSP. Providing some advantages and assistance to those community-based energy development initiatives to off-set the positions held by large energy corporations, should be part of the IPSP.

The Saugeen Ojibway Nations described, in its oral submissions, the Crown's obligation to consult Aboriginal Peoples and to accommodate their collective Aboriginal and treaty

rights and interests. They submitted that, in Ontario, this obligation was borne by the Minister of Energy, not the OPA or the Board. It was, however, also indicated that proponents, such as the OPA, can and should assist in the Crown's discharge of its obligations by establishing a partnership directly with Aboriginal Peoples in the context of a specific project or plan.

The representative of the Saugeen Ojibway Nations suggested that the sufficiency of the consultation with Aboriginal Groups should be determined near the end of the hearing to allow ongoing contact with the Crown to continue and to give the Crown an opportunity to discharge its obligations.

NAN questioned whether the IPSP recognized the needs of First Nations in remote communities in northern Ontario and the potential for hydro electric generation in NAN territory. They also questioned the OPA's commitment to siting inter-provincial transmission lines within NAN territory and to assisting the funding and development of projects which would provide power directly to First Nations communities in northern Ontario. These developments would, in turn, provide a marketable commodity, attract investment and would become part of the long range economic recovery strategy for these First Nations.

The Metis Nation represents the citizens of the Metis Nation living in Ontario, as well as rights-bearing Metis communities located throughout the province. The Metis have Aboriginal rights, but they do not have a land base nor signed treaties with any Canadian governments. They have unextinguished rights that coexist with First Nations throughout the province. They discussed the developing common law concerning the Crown's duty to consult.

The National Chief's Office, the FNEA, the Saugeen Ojibway Nations, NAN and the Metis Nation suggested several additional issues that should be added to the issues list. These issues involved the following topics: bidder selection criteria; conflicts of interest or unfair advantage; encouragement of community-based development; social, economic political and environmental concerns; involvement and effects on Aboriginal lands and communities; consultation and accommodation; remote communities; potential for energy generation and transmission; and capital assistance.

The Metis Nation proposed the following two issues:

Does the IPSP include ongoing processes and mechanisms to ensure appropriate consultation, and, if necessary, accommodations with all Aboriginal

Peoples whose Aboriginal and treaty rights stand to be affected through the implementation of the IPSP?

Does the IPSP identify or propose ongoing processes and mechanisms to ensure all Aboriginal peoples whose existing or asserted rights stand to be affected by future iterations of the IPSP are appropriately consulted, and, if necessary, accommodated?

The OPA submitted that the issues presented by the National Chief's Office were beyond the scope of the IPSP and the jurisdiction of the Board, and that the Board did not have the jurisdiction to create a general levelling of the playing field or to eliminate systemic discrimination, through the review of procurement processes or the IPSP. The OPA acknowledged the concerns of the First Nations, stating that the OPA has heard these concerns during the course of its engagement with Aboriginal Peoples in the development of the IPSP and has brought the concerns, which are beyond the jurisdiction of the Board, to the attention of the Minister.

The OPA argued for exclusion of the Metis Nation's proposed issues described above, stating that a review of the treatment of future IPSPs and the types of engagement appropriate for future IPSPs, as well as the nature of the OPA's engagement for projects that may be contemplated in the IPSP, would be of little practical value at this time.

The Board finds the issue proposed by the OPA (as modified) appropriately addresses the concerns raised by Aboriginal Groups as they pertain to the IPSP and the procurement processes. The Board will review the adequacy of the consultation and accommodation of Aboriginal Peoples by the OPA to determine whether the requirements of the common law, to the extent it applies to the IPSP, have been satisfied. That review may include some consideration of the specific concerns regarding the procurement process raised by the National Chief's Office and other Aboriginal Groups. In making the finding that the concerns raised by the various Aboriginal Groups can be dealt with under this issue, the Board takes note of the submission of Mr. Pape for the Saugeen Ojibway Nations that consultation must be carried out with a view to addressing the substantive issues and concerns of Aboriginal Peoples.

With respect to the two issues proposed by the Metis Nation, quoted above, the Board is of the view that the appropriate time to assess the adequacy of consultation regarding any particular plan is when that plan is submitted to the Board. This current Board

panel cannot bind future panels, and would not attempt to dictate to the Crown or to Aboriginal Peoples how consultation or engagement should occur in the future. The Board, in this application, is to assess the adequacy of consultation and accommodation for the IPSP and the procurement processes that are before us. No issues regarding consultation for future Plans or projects will be added to the list.

The Board therefore finds that the issue for review of the IPSP and the procurement processes in relation to Aboriginal Peoples consultation is:

Have all Aboriginal Peoples whose existing or asserted Aboriginal or treaty rights may be affected by the IPSP or the procurement processes been identified, have appropriate consultations been conducted with these groups, and if necessary, have appropriate accommodations been made with these groups?

COMMENTS ON THE IPSP

The Board received 29 comments on the issues list. Most of the concerns of these parties are valid considerations for the hearing of the IPSP and are covered within the issues list. Many issues raised in the comments were very similar to the submissions made by intervenors and are therefore addressed in the Board's findings in other sections of this decision. Two issues raised in the letters of comment have not been otherwise dealt with.

One is a suggestion that the Board should consider if the nuclear component of the plan should exceed 14,000 megawatts. This suggestion is outside the scope of the proceeding. The Board's mandate, in part, is to ensure compliance of the Plan with the Supply Mix Directive. That Directive sets the limit for installed, in-service capacity of nuclear power to 14,000 MW over the life of the Plan. The Board cannot require that the IPSP exceed this amount. Therefore this issue will not be considered in the hearing.

The second submission was that the Board should consider reductions to financial barriers for low-income consumers, including targeted funding for these consumers. The Board finds that this issue is out of scope. It is not within the Board's mandate to consider special pricing or funding for low-income consumers as part of this proceeding. Neither the IPSP nor the Board's review is intended to be a review of which parties pay the costs of the plan.

COST AWARDS

The Board will issue its decision on cost awards for Phase 1 of this proceeding in due course.

ISSUED at Toronto, March 26, 2008.

ONTARIO ENERGY BOARD

Original Signed By

Pamela Nowina
Presiding Member

Original Signed By

Ken Quesnelle
Member

Original Signed By

David Balsille
Member

APPENDIX A: ISSUES LIST

A. The Integrated Power System Plan (“IPSP”)

The Electricity Act, section 25.30(4):

The Board shall review each integrated power system plan submitted by the OPA to ensure it:

- **complies with any directions issued by the Minister and**
- **is economically prudent and cost effective.**

Issues:

Conservation (including conservation vehicles and load reduction initiatives as listed in the Supply Mix Directive)

1. Does the IPSP define programs and actions which aim to reduce projected peak demand by 1,350 MW by 2010, and by an additional 3,600 MW by 2025?
2. Has the OPA, in developing the IPSP, identified and developed innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures?
3. Is the mix of conservation types and program types included in the Plan to meet the 2010 and 2025 goals economically prudent and cost effective?
4. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 goals?
5. Is the implementation schedule for conservation initiatives economically prudent and cost effective?

Renewable Supply (including sources of renewable energy as listed in the Supply Mix Directive)

6. Does the IPSP assist the government in meeting its target for 2010 of increasing the installed capacity of new renewable energy sources by 2,700 MW from the 2003 base, and increase the total capacity of renewable energy sources used in Ontario to 15,700 MW by 2025?
7. Is the mix of renewable resources included in the Plan to meet the 2010 and 2025 targets economically prudent and cost effective?
8. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 targets?

9. Is the implementation schedule for the renewable resources in light of lead times for supply and transmission economically prudent and cost effective?

Nuclear for Base-load

10. Does the IPSP plan for nuclear capacity to meet base-load requirements and limit the installed in-service capacity of nuclear power over the life of the Plan to 14,000 MW?

11. What is the base-load requirement after the contribution of existing and committed projects and planned conservation and renewable supply?

12. Is the IPSP's plan to use nuclear power to meet the remaining base-load requirements economically prudent and cost effective?

13. In the context of the determination of economic prudence and cost effectiveness, is the IPSP sufficiently flexible to accommodate building new nuclear plants or refurbishing existing plants or both?

14. Is the schedule for implementing base-load resources in light of lead times for supply and transmission economically prudent and cost effective?

Natural Gas

15. Does the IPSP 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?

16. Has the OPA, in developing the IPSP, identified opportunities to use natural gas in high efficiency and high value applications in electricity generation?

17. How can gas be used for peaking, high value and high efficiency purposes?

18. How can gas-fired generation contribute to meeting transmission capacity constraints?

19. Is the IPSP's plan for additional gas resources for peaking, high value and high efficiency purposes and for contributing to transmission capacity constraints economically prudent and cost effective?

Replacement for Coal-Fired Generation

20. Does the IPSP plan for coal-fired generation in Ontario to be replaced by cleaner sources in the earliest practical time frame that ensures adequate generating capacity and electricity system reliability in Ontario?
21. 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)?
22. What are the remaining requirements in all of these areas?
23. Will the IPSP's combination of gas and transmission resources meet these remaining requirements in the earliest practical timeframe and in a manner that is economically prudent and cost effective?

Transmission

24. Does the IPSP plan to strengthen the transmission system to:
- (a) Enable the achievement of the supply mix goals set out in the Supply Mix Directive?
 - (b) Facilitate the development and use of renewable energy resources such as wind power, hydroelectric power and biomass in parts of the province where the most significant development opportunities exist?
 - (c) Promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the need to cost effectively maintain system reliability?
25. What is the effect, if any, on the IPSP of the results of the OEB consultation *Review of Cost Responsibility Policies for Connection to Electricity Transmission Systems*?
26. Is the IPSP strategy for transmission economically prudent and cost effective?

Consultation with non-Aboriginal Interests in Developing the IPSP

27. Has the OPA, in developing the IPSP, consulted with consumers, distributors, generators, transmitters and other persons who have an interest in the electricity industry in order to ensure that their priorities and views are considered in the development of the Plan?

Procurement-Related Issues in Developing the IPSP

28. Has the OPA, in developing the IPSP, identified and developed innovative strategies to encourage and facilitate competitive market-based responses and options for meeting overall system needs?
29. Has the OPA, in developing the IPSP, identified measures that will reduce reliance on procurement under section 25.32(1) of the Act?
30. Has the OPA, in developing the IPSP, identified factors that it must consider in determining that it is advisable to enter into procurement contracts under subsection 25.32 of the Act?

Environmental Issues in Developing the IPSP

31. Has the OPA, in developing the IPSP, ensured that safety, environmental protection and environmental sustainability are considered?
32. Has the OPA, in developing the IPSP, ensured that for each electricity project recommended in the Plan that meets the criteria set out in subsection 2(2) of Regulation 424/04, the Plan contains a sound rationale including:
- (a) an analysis of the impact on the environment of the electricity project; and
 - (b) an analysis of the impact on the environment of a reasonable range of alternatives to the electricity project?

IPSP in General

33. Do the forecasts relied upon by the OPA in developing the IPSP, and the uncertainties attributed to them, present a reasonable range of future outcomes for planning purposes?
34. Does the IPSP meet its obligation to provide adequate electricity system reliability in all regions of Ontario?

B. Procurement Processes

1. Do the OPA's procurement processes provide for simpler procurement processes for electricity supply or capacity to be generated using alternative energy sources or renewable energy sources, or both, where the supply or the capacity or the generation facility or unit satisfies the prescribed conditions?

2. In developing its procurement processes, has the OPA complied with the following principles:

(a) Procurement processes and selection criteria must be fair and clearly stated and, wherever possible, open and accessible to a broad range of interested bidders;

(b) To the greatest extent possible, the procurement process must be a competitive process;

(c) There must be no conflicts of interest or unfair advantage allowed in the selection process; and

(d) To the greatest extent possible, the procurement process must not have an adverse impact outside of the OPA procurement process on investment in electricity supply or capacity or in measures that will manage electricity demand as described in subsection 25.32(1) of the Electricity Act.

3. Should the Board approve the OPA's proposed procurement processes as being appropriate for managing electricity supply, capacity and demand in accordance with the IPSP?

C. Aboriginal Peoples Consultation for both the IPSP and the Procurement Processes

1. Have all Aboriginal Peoples whose existing or asserted Aboriginal or treaty rights may be affected by the IPSP or the procurement processes been identified, have appropriate consultations been conducted with these groups, and if necessary, have appropriate accommodations been made with these groups?

APPENDIX B: OPA REVISED ISSUES LIST

Revised Issues List

Part I – The IPSP

Issue (1): Compliance with Directions Issued by the Minister of Energy: Supply Mix Directive, June 13, 2006

1. Does the IPSP define programs and actions which aim to reduce projected peak demand by 1350 MW by 2010, and by an additional 3,600 MW by 2025?
2. Does the IPSP assist the government in meeting its target for 2010 of increasing the installed capacity of new renewable energy sources by 2,700 from the 2003 base, and increase the total capacity of renewable energy sources used in Ontario to 15,700 MW by 2025?
3. Does the IPSP plan for nuclear capacity to meet base-load requirements and limit the installed in-service capacity of nuclear power over the life of the plan to 14,000 MW?
4. Does the IPSP 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?
5. Does the IPSP plan for coal-fired generation in Ontario to be replaced by cleaner sources in the earliest practical time frame that ensures adequate generating capacity and electricity system reliability in Ontario?
6. Does the IPSP plan to strengthen the transmission system to:
 - Enable the achievement of the supply mix goals set out in this directive?
 - Facilitate the development and use of renewable energy resources such as wind power, hydroelectric power and biomass in parts of the province where the most significant development opportunities exist?
 - Promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the need to cost effectively maintain system reliability?
7. Does the IPSP comply with Ontario Regulation 424/04; specifically, in developing the integrated power system plan, has the OPA done the following:
 - i. Consulted with consumers, distributors, generators, transmitters and other persons who have an interest in the electricity industry in order to ensure that their priorities and views are considered in the development of the plan?
 - ii. Identified and developed innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures?
 - iii. Identified opportunities to use natural gas in high efficiency and high value applications in electricity generation?
 - iv. Identified and developed innovative strategies to encourage and facilitate competitive market-based responses and options for meeting overall system needs?
 - v. Identified measures that will reduce reliance on procurement under section 25.32(1) of the Act?

- vi. Identified factors that it must consider in determining that it is advisable to enter into procurement contracts under subsection 25.32 of the Act?
- vii. Ensured that safety, environmental protection and environmental sustainability are considered in developing the plan?
- viii. Ensured that for each electricity project recommended in the plan that meets the criteria set out in subsection 8(2) of Regulation 424/04, the plan contains a sound rationale including:
 - (a) an analysis of the impact on the environment of the electricity project; and
 - (b) an analysis of the impact on the environment of a reasonable range of alternatives to the electricity project?

Issue (2): Economic Prudence and Cost Effectiveness

Conservation

1. Is the mix of Conservation types and program types included in the plan to meet the 2010 and 2025 goals economically prudent and cost effective?
2. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 goals?
3. Is the implementation schedule for Conservation initiatives economically prudent and cost effective?

Renewable Supply

1. Is the mix of renewable resources included in the plan to meet the 2010 and 2025 targets economically prudent and cost effective?
2. Would it be more economically prudent and cost effective to seek to exceed the 2010 and 2025 targets?
3. Is the implementation schedule for the renewable resources in light of lead times for supply and transmission economically prudent and cost effective?

Nuclear for Baseload

1. What is the baseload requirement after the contribution of existing and committed projects and planned Conservation and renewable supply?
2. Is the IPSP's plan to use nuclear power to meet the remaining baseload requirements economically prudent and cost effective?
3. Is it more economically prudent and cost effective to build new plants or refurbish existing plants to supply new nuclear power?
4. Is the schedule for implementing baseload resources in light of lead times for supply and transmission economically prudent and cost effective?

Replacement for Coal Fired Generation

1. 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)?

2. What are the remaining requirements in all of these areas?
3. Will the IPSP's combination of gas and transmission resources meet these remaining requirements in the earliest practical timeframe and in a manner that is economically prudent and cost effective?

Natural Gas

1. How can gas be used for peaking, high value and high efficiency purposes?
2. How can gas-fired generation contribute to meeting transmission capacity constraints?
3. Is the IPSP's plan for additional gas resources for peaking, high value and high efficiency purposes and for contributing to transmission capacity constraints economically prudent and cost effective?

Part II -- The Procurement Process

Are the OPA's proposed procurement processes appropriate to manage electricity supply, capacity and demand in accordance with the IPSP?

Part III - Aboriginal Peoples Consultation

Have all Aboriginal Peoples whose existing or asserted Aboriginal or treaty rights are affected by the IPSP or the Procurement Process been identified, have appropriate consultations been conducted with these groups and if necessary, have appropriate accommodations been made with these groups?