

STAFF REPORT ACTION REQUIRED

City Participation in Review of Provincial Integrated Power System Plan and Procurement Processes

Date:	November 21, 2007
То:	Executive Committee
From:	Chief Corporate Officer Bruce Bowes, Deputy City Manager Richard Butts and City Solicitor Anna Kinastowski
Wards:	All
Reference Number:	P:\2007\Internal Services\F&re\Ec07134F&re-AFS6467

SUMMARY

This report seeks Council's confirmation of the City's participation as an intervenor in Phase 1 of the Ontario Energy Board ("OEB") review of the Integrated Power System Plan ("IPSP") and Ontario Power Authority ("OPA") procurement process; and provides staff with instructions to submit to the OEB, no later than December 13, 2007, written comments on the draft issues list for Phase 2 of the review of the IPSP and OPA procurement process.

RECOMMENDATIONS

The Chief Corporate Officer, Deputy City Manager and the City Solicitor recommend that:

- 1. Council ratify the interim steps taken to date by the City Solicitor to seek Intervenor status from the OEB in order for the City to participate as an Intervenor in Phase 1 of the Ontario Power Authority's application for review and approval of the Integrated Power System Plan and the Ontario Power Authority's procurement processes;
- 2. Deputy City Manager Richard Butts in consultation with the City Solicitor, the Manager, Energy Efficiency Office and the Director, Toronto Environment Office, provide no later than December 13, 2007 written comments on the issues to be considered by the OEB during Phase 2 of the review of the IPSP and procurement process, to address the matters outlined in Appendix "C" to this Report;

- 3. Deputy City Manager Richard Butts report back to Council with respect to the City's participation in Phase 2 of the application, including a recommendation regarding necessary resources and cost;
- 4. authority be delegated to Deputy City Manager Richard Butts, in consultation with the City Solicitor, to sole-source the necessary legal counsel and consulting services to either represent the City or to advise City staff with respect to Phase 1 of the Ontario Power Authority's application; and
- 5. the appropriate City staff be authorized to take any action necessary to give effect thereto.

Implementation Points

The OEB intends to proceed with its review of the Integrated Power System Plan and OPA procurement processes in two phases.

In Phase 1, the OEB will develop an issues list. This list will determine which issues will be addressed in the subsequent review of the application. Only those issues on the approved issues list will be considered during the review. Upon instructions of the OEB, the OPA has developed a proposed issues list for the review of the IPSP and the proposed procurement processes, structured by reference to the findings the OEB has to make, according to the legislation and Ministerial directions.

A copy of the OPA issues list is appended to this report as Appendix "A". The OEB is seeking stakeholders' views on what issues should be considered by the OEB in its review. The City Solicitor will confirm to the OEB the City's intention to intervene in Phase 1. Deputy City Manager Richard Butts, in consultation with the City Solicitor, the Manager, Energy Efficiency Office and the Director, Toronto Environment Office, will provide written comments on the issues list to be considered by the OEB, subject to any Council direction.

Phase 2 will be the review of the evidence filed by the OPA with its application and by any other parties, including the City. The OEB will publish a further notice later, at the start of Phase 2, providing details on how the City may participate in Phase 2 of the proceeding. Deputy City Manager Richard Butts will report back to Council with recommendations regarding the City's participation in Phase 2 of the application, including recommendations regarding necessary resources and cost.

FINANCIAL IMPACT

The OEB may choose to proceed with Phase 1 of the Ontario Power Authority's application by way of written or oral hearing. The OEB will not hold a written hearing if a party satisfies the OEB that there is good reason for holding an oral hearing. The OEB instructed intervenors to indicate in their letter of intervention the intervenor's preference for a written or oral hearing, and the reason for that preference.

The City has indicated its preference for a written hearing; however, various intervenors representing a variety of interests have indicated a preference for an oral hearing. It is not possible at this time to predict whether there will be an oral hearing. If an oral hearing is ordered by the OEB, and if it is necessary for the City to be represented at those hearings, it may be necessary to retain a law firm or other consultants to either represent the City or to advise City staff.

Funding of up to \$50,000 for outside legal and consulting services, as required, with respect to any issues arising from the review of the proposed issues list as noted in the body of this report, will be provided from the Better Buildings Partnership Program, included in the Sustainable Energy Plan 2008 Recommended Capital Budget.

Deputy City Manager Richard Butts will report back to Council with recommendations regarding the City's participation in Phase 2 of the application, including recommendations regarding necessary resources and cost, which will likely be substantial. At that point, Council will make decision as to the City's further involvement in Phase 2.

The City may apply to the OEB for recovery of its costs reasonably incurred in the course of its intervention in this proceeding under the OEB's Practice Direction on Cost Awards.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

ISSUE BACKGROUND

Under the *Electricity Act, 1998*, (the "Act") the OPA is responsible for developing both an integrated power system plan (IPSP) and appropriate procurement processes for managing electricity supply, capacity and demand in accordance with its approved IPSP. The IPSP and procurement processes must both be submitted to the OEB for review and approval.

On August 29, 2007 the OEB received from the OPA applications for review and approval of the IPSP and for the electricity procurement processes of the OPA.

In developing the IPSP, the OPA was required to comply with the Act, the government's Supply Mix Directive and Ontario Regulation 424/04 (the "Integrated Power System Plan Regulation"). Under the Act, the OEB is required to review the IPSP to ensure that it complies with directions issued by the Minister of Energy and that it is economically prudent and cost effective. In addition, the OEB is required to review the OPA's proposed procurement processes.

On October 31st, 2007 the OEB published notice of the OPA's application. In that notice, the OEB stated that it is seeking comment on the issues which are proposed to be heard in the review of the IPSP and OPA procurement processes. The OEB's notice specified that a letter seeking intervention in Phase 1, compliant with the OEB's rules and filing

guidelines, must be received by the OEB and copied to the OPA no later than 14 days from the publication date of the notice. The City Solicitor consulted with the Manager, Energy Efficiency Office and the Director, Toronto Environment Office, and received instructions to seek intervenor status in Phase 1 to preserve the City's right to participate in the proceedings pending Council approval. Accordingly, a letter dated November 13, 2007, attached to this report as Appendix "D" has been submitted to the OEB and the OPA. The letter indicates that it is subject to Council ratification.

COMMENTS

Scope of OEB Review

It is important to appreciate the limited scope of review to be conducted by the OEB. The IPSP process is marked by the following key characteristics:

- 1. Ministerial accountability and responsibility for fuel mix decisions through a supply mix directive: it is the Provincial Government, and not the OEB or the OPA which is responsible for articulating the goals that the IPSP is to achieve. On June 13, 2006, the Minister of Energy provided direction to the OPA in relation to the preparation of the IPSP (the "Supply Mix Directive") a copy of which is attached as Appendix "B";
- 2. planning carried out through a public agency in accordance with governmental consultation requirements: it is the OPA, and not the OEB, that has the statutory role of developing the IPSP in compliance with the Supply Mix Directive; and
- 3. a scoped and focused OEB review process: the OEB's review is restricted to determining (i) whether the IPSP complies with the Supply Mix Directive; and (ii) whether the IPSP is economically prudent and cost effective. The mandate of the OEB does not extend to determining whether the goals expressed in the Supply Mix Directive are appropriate, economically prudent or cost effective. It will not consider the extremely broad range of values that the government considered in developing the Supply Mix Directive or the relatively broad range of matters considered by the OPA in developing the IPSP.

The IPSP presents a prioritized implementation plan that responds to the Ontario government policy direction conveyed through the Supply Mix Directive.

The Supply Mix Directive

In its Supply Mix Directive to the OPA, the government stipulated that the province's electricity requirements should be met from the following resources in this priority order:

- 1. Conservation
- 2. Renewable resources
- 3. Nuclear power for remaining baseload requirements
- 4. Natural gas-fired generation for peaking, high-value and high-efficiency uses
- 5. Coal-fired generation replaced by cleaner sources in the earliest practical time frame (the government later determined through regulation that coal phase-out will occur by the end of 2014 at the latest)

The Supply Mix Directive also states that the IPSP must strengthen the transmission system to: enable the achievement of the supply mix goals set out in the Supply Mix 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 in a manner consistent with the need to cost effectively maintain system reliability.

The Issues List

The Notice of Application in this Proceeding states that the OEB has "instructed the OPA to develop a proposed issues list for the review of the IPSP and the proposed procurement processes, structured by reference to the findings that the Board has to make, according to the legislation and Ministerial directions."

A copy of the OPA's issues list is appended to this report as Appendix "A". The OEB is seeking stakeholders' views on what issues should be considered by the OEB in its review.

The OEB's review is restricted to determining (i) whether the IPSP complies with the supply mix directions issued by the Minister on June 13, 2006 (the "Supply Mix Directive"); and (ii) whether the IPSP is economically prudent and cost effective.

The issue of compliance with the Supply Mix Directive involves a determination of whether or not the OPA acted beyond its authority in developing the IPSP. It is a matter of legislative compliance, not economic judgment; the OEB will be making a determination of whether the OPA met the specific terms of the Supply Mix Directive. The Supply Mix Directive contains two types of requirements. First, it contains a number of supply mix and transmission related resource requirements in paragraphs 1 to 6 (the "Resource Requirements"). Second, the Supply Mix Directive contains a requirement that the OPA must comply with the Intergrated Power System Plan Regulation in developing the IPSP (the "Plan Development Requirements"). The legislation directs the OEB to determine whether the OPA has complied with both of these requirements.

The issues list needs to be framed in such a manner as to permit the OEB to conclude whether the IPSP will meet the Resource Requirements. The OEB is required to determine whether the objectives in the Supply Mix Directive will be met if the Plan is followed. This requires a review of each specific term of the Supply Mix Directive and a finding of either compliance or non-compliance. The issues to be considered by the OEB are not whether the IPSP provides an optimal way to meet the Resource Requirement, but whether the Resource Requirement will be met. The issue of how effectively the IPSP satisfies the requirements in light of the OEB's review criteria (economic prudence and cost effectiveness) is a separate issue.

With respect to the Plan Development Requirements, the issue is whether the OPA met the requirements in the Integrated Power Supply Plan Regulation. In making this determination, it will be necessary to focus on the precise requirements of the regulation. The evaluation of whether the requirements have been met involves measuring the OPA's activities against a standard that requires some interpretation.

Economic Prudence and Cost Effectiveness

After the OEB determines the compliance issue, the next step is to review the plan by reference to the criteria of economic prudence and cost effectiveness. In its Report on the Review of and Filing Guidelines Applicable to the IPSP, the OEB states that economic prudence requires that the IPSP be sufficiently resilient to ensure that the IPSP's goals, including goals for adequacy, reliability, renewable energy sources and conservation and demand management, 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.

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

A cost effective solution achieves its goals at the lowest overall plan cost as measured on a \$/kW or \$/kWh basis. However, the IPSP must consider or address non-quantitative, non-financial or non-economic factors (such as some of the factors outlined in the Integrated Power Supply Plan Regulation) in choosing among alternative means of achieving the goals set out in the Supply Mix Directive. The OEB accepts, in each case, that the alternative chosen may be cost-effective and economically prudent even if it is not the "least cost" solution.

In making these assessments, the OEB 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. The OEB will also require an understanding of the financial and other risks associated with IPSP initiatives. The OEB is particularly concerned that environmental costs, such as those associated with air emissions, be considered in the development of the IPSP as such costs are not reflected fully in the cost of electricity. The OEB will wish to understand how the OPA took environmental externalities into account in considering alternatives ways of achieving the goals set out in the Supply Mix Directive.

Significance

The outcome of the OEB's consideration of the IPSP may have a significant impact on the supply of electricity to residential, business and industrial consumers of electricity in Toronto, and on the rates which those consumers will pay for that supply. The outcome may also have a significant impact on the City's Official Plan, which has policies and designations that protect residential lands throughout the City from industrial use. In addition, the City of Toronto's Climate Change, Clean Air and Sustainable Energy Action Plan contains numerous policies and programs that support significant electricity demand reduction through energy efficient design, renewable energy generation and district-based heating and cooling.

In addition to electricity conservation initiatives, the OPA has identified various distributed electricity generation and transmission alternatives that require development for meeting potential mid-term and long-term reliability needs of central and downtown Toronto. The OPA has identified three new transmission options which may have dramatic impact on City residents' health, land use and planning.

The development of options for meeting forecasted mid-term and long-term electricity reliability needs of central and downtown Toronto, based on a scenario of steadily increasing demands and aging infrastructure, may have a negative impact on City residents' health, land use and planning, community cohesion and air quality.

Reliability Needs of Central and Downtown Toronto

Section E of the OPA's application contains the transmission evidence. Exhibits E-2-1 to E-2-7 describe generally how the OPA planned transmission to address reliability and meet the three transmission objectives mandated by the Supply Mix Directive. In Exhibit E-5-5 the OPA has considered and developed options for meeting potential mid-term and long term reliability needs of central and downtown Toronto. It has considered the mid-to long-term potential reliability needs to be (a) supply capacity, (b) infrastructure renewal, and (c) vulnerability to high-impact events (such as loss of one of the two supply paths). The OPA has identified a number of options to address these needs, including distributed generation and transmission; all options are addressed in detail. These options are complex undertakings and would involve long lead times.

At this stage, the OPA is not recommending solutions to address potential reliability needs for Toronto. Rather, the OPA recommends that development work be undertaken so that appropriate solutions are available to address reliability needs if they materialize in the mid-term (2015 to 2017). Early development work needs to be undertaken in order to preserve some potential options with long lead times (e.g. distributed generation or new transmission) as available solutions for the 2015 to 2017 time period. The OPA acknowledges that it may be that reliability needs will not emerge in this time period, or that, if they do, these options are not the appropriate solutions. However, the OPA considers it prudent to consider and develop these options so that they are available, if and when required. Any preferred solution will be subject to applicable regulatory processes (e.g., environmental assessment, leave-to-construct).

Toronto 3rd Supply Options

The OPA is currently considering three transmission options connecting to the Hearn station. One option involves a conventional high voltage alternating current connection from the Parkway station north of the City. The other two involve a high voltage direct current connection from the Sir Adam Beck station in Niagra Falls or from the Bowmanville station east of the City. Based on information received from transmitters, the OPA has concluded that transmission options require long lead times, potentially up to eight years.

There is an Option B1 that proposes a 3rd transmission line for approximately 900 MW running underground from Parkway Transformer Station to Hearn Substation (approximately 26 km long), costing \$353 Million plus \$57 Million to rebuild Hearn Substation for a total of \$410 Million.

Option B2 proposes a 3rd transmission line for approximately 900 MW running underground from Parkway Transformer Station to Hearn Substation, with the exception of a 6 km stretch from Pharmacy Avenue to Leaside Transformer Station which will be overhead on existing right-of-way, costing \$294 Million plus \$57 Million to rebuild Hearn Substation for a total of \$351Million.

Option C proposes to install 2 x 230 kilovolt circuits in an underground tunnel from the Esplanade to Hearn Substation including terminations at the two stations costing \$100 Million plus \$57 Million to rebuild Hearn Substation for a total of \$157 Million.

Alternatively, the Niagara HVDC option proposes to install 2 x 300 MW circuits from Sir Adam Beck Generating Station to Hearn Substation using HVDC Light transmission system running under Lake Ontario from Niagara to Toronto estimated at \$484 Million.

Distributed Generation

Initial reviews by the OPA indicate that the application of distributed generation on a scale of 300 MW in Downtown Toronto faces a number of technical issues and challenges. Addressing the short circuit issues at the main 115 kV transmission stations is essential to connecting additional generation at the transmission or distribution level. Issues of grid connection, siting and sizing to avoid adverse effects, generator coordination, frequency and voltage control need to be addressed. Further investigation is also required to determine better costing as well as the potential of new technologies to meet central and downtown Toronto needs.

The OPA Recommendations

To meet the potential range of needs facing central and downtown Toronto, the OPA has identified the need for the following development work in the near term:

- 1. technical and survey studies to assess potential performance issues and costs, and to develop a plan for large scale application of distributed generation in Toronto;
- 2. investigations to explore the feasibility and scope of work of increasing the short circuit capacity at the Leaside, Manby and Hearn stations;

- 3. engineering and technical studies to establish the scope of facilities and detailed costs for the transmission options;
- 4. due diligence study for the suitability of direct current transmission technology for supply to Downtown Toronto; and
- 5. initiation of the work to obtain the necessary environmental assessment approvals for the preferred plan.

The OPA concludes that commencing this development work will provide the flexibility to meet potential needs in the 2015 to 2017 timeframe. The OPA's estimated cost of the development work is expected to be approximately \$10 million to \$12 million representing 2% of a potential plan cost for a new supply source in Toronto. The OPA believes these are prudent expenditures necessary to permit effective decision making for complex and large capital cost projects in a period and environment of significant uncertainty.

Staff have reviewed the IPSP recommendations described above and the OPA's issues list and propose a commentary on the issues list generally within the scope set forth in Appendix "C".

How the City May Participate

The City can participate in the development of the issues list in two ways.

1. Provide Written Comments to the OEB

The City may provide written comments on what issues the OEB should consider in reviewing the plan and procurement processes. Comments must be received by the OEB no later than December 13, 2007.

2. <u>Become an Intervenor</u>

The City may request to become an intervenor in order to actively participate in Phase 1 by appearing before the OEB to make formal submissions on the issues list. The OEB has strict rules and timelines for interventions and filings. A letter seeking intervention, compliant with the OEB's rules and filing guidelines, was required by the OEB and copied to the OPA within 14 days of the last date of publication of the OEB's notice with respect to the OPA's application. A letter requesting that the City be granted Intervenor Status with respect Phase 1, pending Council confirmation of the City's participation, was filed by the City Solicitor on November 13th 2007. A copy of the intervention request is attached as Appendix "D".

For Phase 1, intervenors are invited to make written submissions on the draft issues list proposed by the OPA. Submissions must be filed with the OEB and copied to the OPA no later than December 13, 2007.

The OEB will issue further procedural documents relating to the development of the issues list, and the review of the application and supporting evidence in Phase 2.

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SIGNATURES

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ATTACHMENTS

- Appendix "A" Ontario Power Authority Issues List
- Appendix "B" Supply Mix Directive
- Appendix "C" Outline of Proposed City Comments on Issues List
- Appendix "D"- Letter dated November 13, 2007 from the City Solicitor addressed to Ontario Energy Board and Ontario Power Authority.

APPENDIX "C"

OUTLINE OF PROPOSED CITY COMMENTS ON ISSUES LIST

Comments will be directed towards developing an issues list structured by reference to the findings the OEB has to make regarding compliance of the IPSP with the Supply Mix Directive and that will permit the City to address the following issues in that context.

The City's position is that the IPSP plans to strengthen the transmission system do not sufficiently address alternatives and should be revised in a manner and with a scope that would more fully and directly:

- Promote system efficiency
- Promote system reliability in a cost-effective manner
- Reduce congestion over the long-term in a cost-effective manner
- Facilitate the integration of new distributed energy supply

The limited scope of the proposed technical development proposed by the OPA to address reliability in central and downtown Toronto is not sufficiently inclusive as it does not incorporate other necessary considerations outlined below.

The City should ask the OEB to consider if the recommended funding of development work to address alternative solutions to potential reliability issues in central and downtown Toronto, particularly engineering and technical studies to establish the scope of facilities and detailed costs for the third transmission line options, is economically prudent, and does it represent the best use of funds, considering the other Supply Mix Directive requirements, particularly the goals of

- maintaining the ability to use natural gas capacity at peak times and pursuing applications that allow high efficiency and high value use of natural gas;
- giving consideration to the priorities and views of the City of Toronto, expressed in its established plans and policies discussed below, as required by the Integrated Power System Plan Regulation;
- enabling the achievement of the goals regarding conservation and load reduction, in accordance with the priority accorded by the Supply Mix Directive;
- facilitating the development of renewable energy resources within the City of Toronto;
- identifying and developing innovative strategies to accelerate the implementation of conservation, energy efficiency and demand management measures;
- identifying opportunities to use natural gas in high efficiency and high value applications in electricity generation.

The City should also request the OEB to assess the impact of the proposed development work on Toronto Hydro's proposed distribution infrastructure renewal.

The City should also request the OEB to assess the impact of the proposed development work regarding the third transmission line on the relevant parts of the Toronto's Official Plan.

Toronto's Official Plan contains numerous policies that support electricity demand reduction through energy efficient design, renewable energy generation and district-based heating and cooling. Policies of particular relevance include 2.2.1-2 Downtown, 2.2.3-3cvii Avenues; 2.3.1-5 Healthy Neighbourhoods; 3.4-1, 18, 20 and 22 The Natural Environment; 3.5.1-3 Supporting the Foundations of Competitiveness; 5.3.2-1 Implementation Plans and Strategies for City-Building; and 5.3.4-1 Leadership and Advocacy. In the long run, the implementation of these policies will help to lower Toronto's electricity demands and the reliance on a centrally distributed energy system. The implications of an increased energy supply proposed by the OPA should be evaluated in the context of the reduced energy future that is contemplated by the Official Plan.

Several of the preliminary route proposals fall within areas designated as "Utility Corridors" in Toronto's Official Plan. Utility corridors are to be used primarily for the transmission and movement of energy, information, people and goods but also allow for a range of secondary uses, provided that potential public transit corridors and open space corridor links are protected. In 2005, the City undertook an extensive secondary uses planning exercise for the hydro corridors to identify intended future uses in the corridors. The Hydro Corridors Planned Public Uses Study was subsequently adopted by City Council and is currently being reviewed by the Province. City Planning staff are routinelv involved in development approvals related to secondary uses within transmission corridors. It is important that City Planning staff maintain an awareness of transmission options under consideration, so that potential constraints on secondary uses within the corridors are understood.

In addition, there are several areas where the proposed route for a new high voltage transmission line in a utility corridor could create a land-use conflict based on the City's Official Plan policies or the Hydro Corridors Planned Public Uses Study:

• The corridor south of McNicoll Ave between Kennedy Ave and Victoria Park Ave is identified in the Toronto Official Plan, Map 4, as a priority segment for the expansion of higher order transit. The Official Plan policies around the expansion of higher order transit speak to the importance of securing exclusive rights-of-way in identified corridors to help improve both the local and regional transit network. It would be important to ensure that the proposed high voltage transmission line does not preclude the opportunity to implement this proposed transit route. Additionally, GO Transit has also identified this corridor in its Bus Rapid Transit Network Plan to facilitate movement within the Greater Toronto Area. As a secondary use, the City of Toronto has identified this corridor as an opportunity to create an off-road path for bicycles.

- The Don Valley south of Eglinton to the Waterfront is designated as a Natural Area in the Official Plan, Maps 20 and 21. These lands are to be maintained in a natural state, allowing for utilities only where "no reasonable alternatives are available" and where the utilities are "designed to have only minimal adverse impacts on natural features and functions." An existing hydro corridor runs down the middle of the Valley. The addition of new high voltage transmission lines could create additional hazards for Toronto's natural heritage, in particular migratory bird populations.
- The Victoria Park hydro corridor to Eglinton Avenue was identified in the Hydro Corridors Planned Public Uses exercise as an opportunity to create a multi-use trail and restore natural heritage including watercourse naturalization
- Along Commissioners Street in the Portlands on Toronto's Waterfront the Official Plan, Map 4, identifies this corridor as a priority segment for the expansion of higher order transit. Additionally, the lands adjacent to this corridor are expected to undergo significant intensification as the Waterfront area develops. A number of Secondary Planning exercises have been undertaken for this area. A new high-voltage transmission line should be evaluated in that context.

For any proposed right-of-way on City streets where the wires are not buried, numerous issues will need to be considered related to improving and protecting the quality of the public realm. For example, there may be potential visual impacts or servicing impacts on adjacent development projects of new transmission towers and lines that will require careful analysis by the City.

Also, the City of Toronto wishes the OEB to consider health impacts of the third transmission line.

Toronto Public Health is reviewing the current information on health effects of exposure to electromagnetic fields (EMFs). Studies have shown a link between EMFs and the development of leukemia in children. Overall levels of EMFs in and right next to hydro corridors can be higher than those usually found both indoors and outdoors in Toronto. In 1993, based on the evidence then available, the former City of Toronto adopted a policy of prudent avoidance, which encouraged limiting exposure to EMFs in public spaces where practical and feasible at little or no cost. In 2002, the International Agency for Research on Cancer (IARC) published its review on the potential for EMFs to cause cancer. Based on this review IARC classified extremely-low frequency magnetic fields as a possible carcinogen.

If Council adopts an electromagnetic fields policy as proposed by the Board of Health, there could be land-use implications for all properties adjacent to high voltage lines in the city. The effect on sensitive land-uses such as residences, schools, recreation facilities and natural areas adjacent to high voltage lines will need to be carefully analyzed.