REGION OF OTTAWA-CARLETON — REPORT
RÉGION D'OTTAWA-CARLETON — RAPPORT

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DATE	10 February 1999
TO/DEST.	Co-ordinator Corporate Services and Economic Development Committee
FROM/EXP.	Chief Administrative Officer Regional Solicitor (Acting)
SUBJECT/OBJET	**ENERGY COMPETITION ACT, 1998 - POTENTIAL IMPACTS OF HYDRO-ELECTRICITY RESTRUCTURING**

DEPARTMENTAL RECOMMENDATION

That the Corporate Services and Economic Development Committee and Council receive this report for information.

BACKGROUND

The *Energy Competition Act, 1998* (Bill 35) received Royal Assent on 30 October 1998 and will be proclaimed in force in stages in the coming months. The Bill has been described as providing for the break-up of Ontario Hydro. In fact, the Bill will bring about substantial changes in the whole electricity sector and could strengthen the role of the successor corporations of Ontario Hydro in competing in an emerging North American energy market. These changes are to be fully implemented by the year 2000.

Currently there is a virtual monopoly in the generation, delivery and sale of electricity. Ontario Hydro controls over 90 percent of the generation of electricity in the province and owns major transmission lines. Ontario Hydro Retail, a component of Ontario Hydro, distributes and charges for power in most rural areas of the province. In other local areas, 276 local municipal electric utilities (MEUs) have the exclusive right to distribute and charge for hydro. It should also be noted that the *Power Corporation Act* has provided a method of rural rate assistance to ensure that hydro rates for rural residents (who are generally more costly to serve) do not exceed average municipal rates by more than 15 percent.

IMPETUS FOR CHANGE

A number of factors have contributed to the need for reforms in the electricity sector. Several other jurisdictions have opened up their electricity markets to competition in a similar way to the long-distance telephone markets and natural gas markets. The ownership of transmission lines and distribution lines will continue to be held by a successor to Ontario Hydro and MEUs. Private sector entities will be able to generate electricity or purchase electricity and sell that to customers either directly or through agents, brokers and marketers.

Alberta, British Columbia, Manitoba and Quebec have allowed or are in the process of allowing competition in electricity generation and sales. More significantly, a number of states in the United States have allowed competition and the Federal Energy Regulatory Commission in the U.S. has recently dictated that any power generator seeking to sell more power into the U.S. will have to show that it is operating at home in a competitive environment. If the successor companies of Ontario Hydro are going to be able to sell more power in the U.S., Ontario will have to have a competitive electricity market. Also, in order to compete to attract business through low power rates, Ontario must be in a position to allow large consumers of electricity to negotiate for the best power rates available.

The situation at Ontario Hydro has also been a large reason for reforms. Political interference in the selection of generation facilities, the mismanagement of nuclear generation and the huge debt ($39.1 billion) incurred by Ontario Hydro (which is guaranteed by the provincial government) needed to be addressed.

REVIEW OF CHANGES

Bill 35 formally splits up Ontario Hydro into four separate entities:

(1) the Ontario Electricity Generation Corporation (“Genco”);
(2) the Ontario Electric Services Corporation (“Servco”);
(3) the Independent Electricity Market Operator (“IMO”);
(4) Ontario Hydro Financial Corporation (“Debtco”).

Genco’s shares will, at least initially, all be held by the provincial Crown. Any future debt it incurs will not be guaranteed by the Crown. Genco will have to operate as a business corporation which will have to compete with the private sector to sell the energy that it produces.

Servco’s shares will also be held by the provincial Crown. Any of its future debt will not be guaranteed by the Crown. Servco will be a business corporation owning major transmission lines and taking over Ontario Hydro Retail electricity distribution mainly in rural areas. Rural rate assistance will be preserved at rates set by regulation. Servco will be able to expand its distribution area by purchasing distribution assets of municipal electric utilities if the local utility wishes to sell these distribution assets.

The IMO will be the day-to-day watchdog of the electricity market. It will control electricity traffic on Servco's transmission lines to ensure that all suppliers have fair access to these lines to provide electricity supply to customers. The IMO will also take action to ensure that there are sufficient electricity supplies to meet customer demands. The IMO will also set rules for players in the electricity market and investigate breaches of these rules.

The Ontario Hydro Financial Corporation will be responsible for managing Ontario Hydro's debt. A portion of the debt (currently set at $15.8 billion) will be allocated to Genco and Servco to account for the value of hydro generation, transmission and distribution assets which these corporations will receive. The remaining portion of the debt (currently set at $23.3 billion) - often referred to as the "stranded debt" - will be paid in two ways. Genco, Servco and MEUs which enjoy tax exemptions will have to make special payments equivalent to the taxes payable if they were in the private sector. These payments, anticipated to generate $15.4 billion, will be made to the Financial Corporation towards retirement of the debt. These payments are also designed to level the field of competition with the private sector; hence, these payments as payments to the provincial treasury will continue even after the debt is paid. To the extent that the equivalent to tax payments cannot satisfy the stranded debt (an amount estimated to be $7.9 billion), a Competition Transition Charge will be added as an amount on hydro bills paid by consumers (and perhaps as charges on electricity generators) and ultimately received by the Financial Corporation.

IMPACT ON MUNICIPAL UTILITIES

Significant changes will occur for MEUs. Local municipalities, who are the owners of hydro distribution assets, whether they distribute power alone or through a utility commission, will have to establish a business corporation within two years. This business corporation will hold the municipality's assets relating to hydro generation, transmission, distribution and retailing. The municipality will hold all of the shares of the corporation initially, but may sell the shares subject to Ontario Energy Board approval.

The incorporated MEUs will operate and maintain distribution wires. They will also will be the default suppliers of electricity: they will have to supply power to customers who have not contracted for supply from someone else or where that private supplier cannot supply power. To the extent that a customer does not contract for electricity supply from the private sector, the MEU will be required to provide that supply. In other words, for the individual consumer, the lights will stay on. To the extent that the MEU wishes to compete with the private sector for customers by offering preferential rates, it will have to do so through an affiliate.

ROLE OF ONTARIO ENERGY BOARD

The role of the Ontario Energy Board (OEB) will be considerably expanded. It will license all participants in the electricity sector, including MEUs and electricity agents, brokers and marketers. It will set standards, criteria and performance targets for licence holders. It will approve transmission and distribution rates for the use of Servco's and the MEUs' lines. The OEB will approve construction of transmission and distribution lines, will approve amalgamations of MEUs, asset transfers and large share transfers involving distributors and transmitters of electricity. The OEB will also be responsible for implementing policy directives issued by the Minister of Energy, Science and Technology and approved by Cabinet.

OPERATION OF ELECTRICITY MARKET

In order to appreciate fully the impact of these reforms on municipalities it is important to understand how the electricity market is anticipated to function. Electricity has become a commodity traded on the open market. Unlike virtually any other commodity, electricity cannot be stored to any significant extent in an economic way. It must be produced on demand. That demand can fluctuate significantly by time of day, by season, by weather conditions and by sector. Furthermore, the means of transporting the commodity to consumers is through transmission lines. The transmission grid made up of these lines may either not exist as between a generation facility and a proposed customer or be so limited in operating capacity that it cannot be accessed.

The purchase and resale of electricity is an extremely risky undertaking given demand fluctuations. It is difficult to predict what the demand for power will be on a given day, and the price for power can fluctuate dramatically in response to that demand. A dramatic example of this fluctuation occurred in the mid-western United States this past summer during a heat wave when the price of power went from a range of 3.5 cents per kilowatt hour (kwh) to over $7.00 (an increase of over 200 times). At the time of the increase, five nuclear power plants in the area were shut down for maintenance.

Genco, having such substantial control over generation of electricity, could withhold supply of power and drive up the market price for electricity in the province. In order to prevent this from happening, the electricity Market Design Committee created by the Minister of Energy, Science and Technology has recently recommended that a cap be imposed on average electricity prices charged by Genco. To the extent that average electricity prices exceed 3.8 cents per kwh over the next four years, it is recommended that Genco be required to rebate that excess to customers. This will force Genco to generate power to drive the market price down to that level.

In order to provide a more stable market for electricity prices a Market Design Committee created by the Ministry of Energy, Science & Technology released a report in late January 1999 setting out proposed measures to provide greater electricity supply reliability. Among the measures to assist in ensuring adequate electricity supply and stable prices is control by the IMO over when generating plants may shut down for maintenance and entry by the IMO into “must-run” contracts with power generators to ensure that some necessary plants will have available supplies of power during crucial periods.

MUNICIPAL CONCERNS

The new world of competition in the electricity sector will create significant demands on local utilities. It remains to be seen how well they will adapt to these changes.

As the default suppliers of electricity, MEUs will initially have all of the customers in their areas. As the default suppliers, the MEUs will be required to serve customers who do not or cannot obtain supply from the private sector. The MEUs will be required to purchase electricity on the spot market and flow through that cost to customers. These will be charged initially on the basis of estimated average market prices with adjustment bills being charged to customers to reflect any increases above the projected average market price. The MEUs will no longer have a lien on property for the cost of electricity supplied to the property.

Meanwhile, private sector electricity suppliers will be able to select the best consumers and offer rates based on deals struck with energy generators and marketers for future energy supply. MEUs can only compete to sell electricity through retail affiliates established by the MEUs. They will have to have some flexibility in the rates offered to keep and attract customers and will incur substantial risk of loss in so doing. This risk may be abated by economies of scale to the extent that MEUs can expand their customer base and carefully market, predict demand for electricity and purchase that power at the best rates available on the market.

Bill 35 places significant restrictions on the ability of MEUs to expand their customer base. MEUs are permitted to amalgamate and purchase other MEUs. They may also attempt to serve areas previously serviced by Ontario Hydro Retail by purchasing the distribution assets of the new Servco in a particular area. However, unlike previous legislation, nothing will force Servco to sell these assets. In relation to Ottawa-Carleton, this could create an impediment on seeking to set up a utility to serve customers on a region-wide basis including Cumberland, Osgoode, Rideau and West Carleton (areas currently served by Ontario Hydro Retail).

Bill 35 also has a significant negative impact on municipalities as road authorities. A new amendment to the legislation introduced before Third Reading and without public consultation likely prevents road authorities from regulating the activities of hydro utilities on roads beyond dictating where wires will be placed within the roadway. It is unclear whether road authorities will be able to control the times when road cuts are undertaken. Under the Region's *Regional Regulatory Code*, there are significant restrictions on road cuts being undertaken during peak rush hour periods. These restrictions may not apply to hydro utilities, thereby potentially resulting in more traffic disruptions arising from hydro works on roads. Furthermore, the hydro utilities are exempted from paying any compensation for the right to install, maintain and repair their utility plant within the roadway beyond paying for any damage caused to the road after reinstatement of the road cut. This effectively prevents road authorities from charging road cut permit fees to cover the cost of issuing permits and inspecting road cuts prior to, during and after reinstatement. In effect, municipalities are forced to subsidize costs associated with electricity transmission and distribution.

<u>POTENTIAL OPPORTUNITIES</u>

Bill 35 may also provide some opportunities for the Region. The Bill permits the Region to set up a hydro utility business corporation to generate, transmit, distribute and sell power, or any one or combination of these activities. It is unlikely that the OEB would permit the Region to set up a system of wires in competition with MEUs. However, the Region could attempt to amalgamate existing MEUs and obtain Servco assets so as to form a region-wide utility. Any acquisition of assets would require agreement with the MEUs and Servco.

As a large consumer of electricity, the Region can track its consumption of power and attempt to purchase its power needs at the best available rates on the market. It could do this on its own, in respect of certain facilities, or join a consortium (much as has been done to purchase natural gas).

The Region could also make use of some of its facilities to generate power. There is power generation capacity at the Robert O. Pickard Centre through the burning of sewage digester gases and at the Trail Road landfill site through the burning of methane generated from decomposing waste. Bill 35 introduces amendments to the *Environmental Protection Act* which authorize restrictions on the supply of power generated through polluting processes. Licensed retailers will be required to disclose to the Minister of the Environment the levels of prescribed contaminants generated in producing electricity. Retailers will also be required to disclose the nature of fuel used to produce power and the process used to generate that power. The amendments will introduce a scheme of environmental credit trading to permit producers of relatively clean power to sell their credits to producers of polluting power. If the Region’s methods of producing power are considered to be environmentally clean, it will have the opportunity to generate power at relatively low cost when the revenues generated from the sale of its environmental credits are taken into account. Ministry officials have been contacted to determine whether the Region will be required to establish separate business corporations in order to generate power from these facilities.

<u>CONCLUSIONS</u>

The *Energy Competition Act, 1998* introduces significant changes to all sectors of the electricity field. Ontario Hydro is being restructured into four separate companies. Municipalities which currently own distribution assets will have to incorporate businesses to carry out these activities. They will have to compete with the private sector for electricity sales if they wish to retain a strong customer base and not simply operate wires. The rates they set for use of wires will be regulated based on performance targets and criteria (not simply cost). The legislation provides significant challenges to all municipalities while also providing some opportunities to generate, purchase and supply power on a more efficient and environmentally-friendly basis.

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