Chatham-Kent Hydro Inc. (CK Hydro) and Middlesex Power Distribution Company (MPDC) are providing this submission to the Ontario Energy Board (Board) in the stakeholder proceeding RP-2004-0020 – Review of Further Efficiencies in the Electricity Distribution Sector.

## Background CK Hydro and MPDC

CK Hydro was formed as an amalgamation of eleven former Municipal Electric Utilities (MEU) in 1998. The amalgamation of the MEUs was part of the municipal amalgamation of approximately twenty-two municipalities and townships. CK Hydro serves approximately 32,000 customers.

MPDC was formed as an amalgamation of three former MEUs, with the largest utility being the former Town of Strathroy. MPDC serves approximately 6,800 customers.

CK Hydro and an affiliated company, Chatham-Kent Utility Services Inc (CK Utility), have a working relationship with MPDC to provide improved service and cost savings to the customers. This is a good example of Local Distribution Companies (LDCs) that have similar objectives working together to provide good service to the customers.

CK Hydro and MPDC were two of very few LDCs that offered the fixed reference price to the small Standard System Supply (SSS) customers during the first seven months of deregulation. The customers were not impacted by the significant spot prices. The objective was to minimize customer impact during the transition period; main focus for the LDCs was to put the customer first.

CK Hydro also is one of a few LDCs that did not apply for the maximum Return on Equity (ROE) of 9.88% that was approved by the Board, instead they applied for an ROE of 6.05%. This decision was to reduce customer impact, enhance economic development in the Municipality of Chatham-Kent and to provide further incentives to the CK Hydro for efficiencies.

**Issues for Discussion**

**1. Further consolidation**

Further consolidation should be allowed to occur naturally, between willing parties and done under commercial guidelines. Any consolidation should not be legislated or regulated.

Consolidation should be encouraged to the municipal boundaries. When the Municipality of Chatham-Kent amalgamated along with the MEUs in 1998, the provincial report had recommended that CK Hydro should provide all of the electric system. The report had identified savings to the customers by having one

service provider. Cost of serving customers by one LDC in a municipal boundary will be lower compared to having more than one LDC in the area[1].

Currently in the Municipality of Chatham-Kent there are two distributors; CK Hydro and Hydro One. The rates and services are better for the CK Hydro customers. This causes confusion for the customers of both LDCs.

The Board should encourage the provincial government to extend the transfer tax exemption. The transfer tax is a significant barrier to further mergers and amalgamations. With the transfer tax exemption there will not be any penalties for LDCs that make the business decision to merge and or amalgamate.

LDCs do not have to merge or amalgamate to obtain benefits of scale. LDCs can obtain benefits of scale by doing a couple of activities; provide billing and collecting for the water and wastewater companies and contract out some of the services that they provide in the billing and collecting area.

CK Hydro receives billing, collecting and customer care services from their affiliate CK Utility. CK Utility provides similar services to the water and wastewater companies in the Municipality of Chatham-Kent. Therefore there is a significant benefit in sharing costs which is very efficient.

Some of the billing functions can be contracted out which can provide significant efficiencies. By not having internal software for the billing functions or the high priced technology staff in house there can be significant savings and efficiencies to the LDC.

Some of the vendors that are used by CK Utility have a large share of the LDC market in Ontario. The software provider for the billing and customer care function serve approximately 20 LDCs and 600,000 end use customers. Therefore when changes are required to meet the many new regulations the costs are shared amongst many LDCs and many customers thereby the benefits of scale are realized.

The meter reading and the Electronic Business Transaction (EBT) service providers also serve many LDCs and end use customers. Again the medium size LDC can obtain significant efficiencies by working with very experienced and good service providers.

Many larger LDCs provide these services in house which can be expensive. These LDCs may not obtain the same benefits of scale as do the medium size LDCs that work with service providers that have many LDCs as clients and serve many end use customers.

## 2. Incentives

The Board has many regulatory means to provide LDCs incentives to be more efficient. One area is in the Performance Based Regulation (PBR) plan. The PBR regime for the electricity industry in Ontario has not been given much of a chance to succeed. The transition period to deregulation has taken much longer and with the passing of Bill 210 it was essentially stopped.

Phase 1 PBR has a productivity factor of 1.5%. All LDCs must reduce their rates by 1.5%, which is a reasonably high number considering the LDC sector had gone through many years of frozen rates as well as rate decreases. The industry was much more efficient than previously thought.

In setting the parameters for Phase 2 PBR the Board will approve the new productivity factor. This productivity factor should be a better reflection of what the LDC sector is capable of doing since the Board will have been the regulator for about 5 years. Much more information will be known. If the Board is inclined to provide more efficiency in the sector they have the option to approve a productivity factor that has a "stretch" factor in it. That is the productivity factor can be a little higher than it other wise would be.

Example could be, if studies show the appropriate productivity factor is 1.5% the Board could approve a 1.7% productivity factor, a 10% premium. The Board will have to ensure that the productivity factor is not too high such that the LDC will not have enough funds to provide a safe and reliable service that is expected from the customers.

The Distribution System Code (DSC) sets out many of the requirements of the LDC. In particular it summarizes the rules for connecting new customers. These rules are to protect the new customers and the current customers. The OEB should improve the guidelines for what costs are to be allocated to the new customers. It is possible that an LDC can charge the new customer additional costs for upstream facilities that are not really caused by the new customer. This could be inefficient because the LDC will be charging customers for work that they would otherwise have to pay in the current revenue stream.

The Transmission System Code (TSC) should restrict a transmission company from being a distributor. Therefore Hydro One should only be in the transmission business. The transmission system requires a significant amount of time and effort to ensure Ontario is not the cause of the next big blackout. Separation will ensure there is no cross subsidization between the two companies, which can be inefficient. In New Zealand a state-owned corporation operates network separately from the distribution business[2].

The Affiliate Relationship Code (ARC) should allow for providing services to a water and wastewater company. The ability to provide other services will only reduce the costs for the LDC and make them more efficient.

CK Hydro supports the ARC in separation of other services. This will allow for the LDC to concentrate on LDC functions. This will reduce subsidization and should assist LDCs in being more efficient.

The role of the Board should change to a more light-handed regulatory regime. The Board needs to focus their time and effort on the big issues in the industry and should spend less time with the LDCs.

The Board in providing their duties in a light-handed regulatory regime should use benchmarking in regulating LDCs. LDCs should report regularly to the Board on the financial and service quality indicators, rates and rate setting methodologies, and their conditions of service. The Board should focus mostly on the ROE. If the LDC is significantly higher than that is expected by a monopoly LDC the Board should then step in with heavy handed regulation for that LDC. This is the regulatory environment in New Zealand[2].

The LDC sector is and should be a self-regulating industry. The high standards that have been existent in the industry are an example of the self-regulating nature of the industry. There are many people that are key players in the various LDCs that are professional accountants, engineers and other associations that must meet the professional standards. Therefore they are working towards high standards.

Another important factor in ensuring the LDC is meeting high standards is the shareholder. Municipalities own the majority of LDCs. The municipalities are very conscious of the services that are provided by the LDC. Municipalities require the electricity system to be safe, reliable and at low costs. These qualities of a good LDC will assist the municipality in meeting their economic development objectives and to ensure a high quality of services are provided to their residents. Electricity is an essential service and therefore is vital to any municipality's economic development plan.

## 3. Load Serving Entities (LSE)

In providing the Standard System Supply (SSS) service to the small end use customers it is important that they are protected from the volatility of the spot market price. The new pricing mechanism must not be as volatile but at the same time must be a reasonable reflection of the actual costs of electricity at that time.

The Board in setting regulations for a LDC to be a LSE must ensure that the risk to the distribution business is minimal. The main function of an LDC is to provide distribution service. The Board and the industry must ensure that the regulations and business practices do not put undue risk on this business.

If the Board allows the LDC to be a LSE it is important that there is a mechanism in place to change rates regularly. The gas industry currently has the Quarterly Rate Adjustment Mechanism (QRAM) which could be used in the electricity industry. A model similar to the QRAM will allow regular rate changes to reflect the current price of electricity and will provide protection to both the customer and the LDC.

If LDCs are responsible for the LSE the Board should review the working capital requirements of the LDCs and make necessary changes. The current working capital in the rates is set at the pre-deregulation method. With the significantly different cash flow requirements the current working capital may not be correct. There should be a lead-lag study of the cash flow; this will assist in ensuring the working capital requirements for rate setting are just and reasonable.

Commercial guarantees may be difficult for some LDCs, however all LDCs currently are meeting security requirements with the Independent Electricity

Market Operator (IMO). Therefore they should be able to meet commercial requirements of contracts with the generators.

For LDCs that have some difficulty in meeting the commercial guarantees should have the opportunity to partner with other LDCs to provide the services of an LSE.

CK Hydro and MPDC believes that the medium size LDC can meet the obligations of a LSE. Both LDCs were able to provide the fixed reference price to the small customers during the first seven months of deregulation. The LDCs did have reduced cash reserves but they did not go bankrupt. If there would have been a QRAM in place the negative impact would have been reduced. Therefore LDCs should be given an opportunity to provide the services of a LSE.

## 4. Distribution Planning and Technological Innovation

CK Hydro believes that in order to achieve further efficiencies in the distribution sector in the areas of technology and distribution planning there must first be some discussion about current best practices in the industry. The consultation will no doubt lead to some comparison of the larger LDCs who claim to be more financial and technologically efficient vs. the mid to smaller LDCs. CK Hydro would welcome this type of comparison and would recommend the OEB consider

data like the 2003 Utility Performance Management Survey produced by the MEARIE group where 15 large, 14 medium and 8 small LDCs participated in the survey. CK Hydro's average controllable expense, operation and maintenance expense and administration expense is significantly lower than the average of the large LDCs included in the MEARIE survey.

While CK Hydro's costs are significantly lower, CK Hydro is as technically advanced as the larger LDCs. For example, the largest LDC in Ontario has no GIS or SCADA and fault analysis equipment on their distribution system, while CK Hydro's system includes all of these types of technology. This is primarily due to savings from less bureaucracy, low administration costs, fiscally accountable local decision makers and empowering people to make decisions as close to the customer levels as possible. Another factor that contributes to mid size LDCs continuing to be technically innovative is the fact that our labour costs are significantly less than the larger LDCs. For example the average Power Line Maintainer rate at the largest LDC in Ontario is approximately 20% higher than CK Hydro's rate. Based on the size of CK Hydro's work program it would cost an additional $200,000 annually to pay rates comparable to what the largest LDC in Ontario pays.

In CK Hydro's experience of amalgamating 11 utilities into one in 1998, wage rates migrated to the highest of the utilities included in the amalgamation. This

has to be considered when rationalization or amalgamation plans are discussed as the ratepayer may be subjected to the higher costs of higher labour rates.

The facts are that local control and ownership of an LDC like Chatham-Kent will ensure labour rates are controlled and are competitive.

## 4.1 Distribution Planning

Chatham-Kent Hydro has met every challenge of the new electricity market on schedule.

New to LDCs has been the transfer and upgrade of wholesale metering assets from Hydro One to the local distribution companies. CK Hydro has 25 of these meters required for the IMO to settle our power costs and has completed all the transfers and upgrades required to this point. CK Hydro has partnered with another medium size LDCs affiliate company to perform meter service provider services at approximately one half the costs that Hydro One was charging for the same service. This is an example of a large LDC not having competitive rates, which impacts the entire distribution and Transmission system. If CK Hydro were afforded the opportunity to expand our service territory to our Municipal boundaries there would be approximately 15 fewer wholesale meters required for settlement purpose. This would save approximately $750,000 in capital and $115,000 in annual maintenance and depreciation expense.

CK Hydro has an aggressive voltage conversion program, which will eliminate substations, reduce system losses and improve reliability. Our planning cycle extends out ten years with capital expenditures targeted annually for this program,

which will make the system more efficient as losses and maintenance costs will decrease. If CK Hydro were afforded the opportunity to expand to the Municipal Boundary the substations Hydro One currently owns in the Municipality would be included in CK Hydro's conversion plans. As the map shows the Municipality of Chatham-Kent would be more efficient to have one distribution planner for the Municipality. Service crews from both distributors pass each other constantly on the roadways of Chatham-Kent. CK Hydro believes that if it were the distribution planner for the entire Municipality that a significant savings could be achieved by eliminating some of the redundant assets currently required by Hydro One in Chatham-Kent.

Some of these assets are not only distribution equipment but also include staff, fleet and inventory.

In CK Hydro's opinion a more efficient distribution system for the Municipality of Chatham-Kent would not include Hydro One as a distributor. We feel Hydro One should focus on the transmission system.

Approximately $1,000,000 of capital and maintenance savings in Chatham-Kent alone has been identified if CK Hydro was afforded the opportunity to expand our service territory to our municipal boundary.

## 4.2 Technological Innovation

CK Hydro agrees that technological innovation is a key contributing factor in achieving dynamic efficiency. CK Hydro is an industry leader in the areas of Geographic Information System (GIS), Supervisory Control and Data Acquisition (SCADA) etc. and have done this by partnering with companies like Union Gas, Chatham-Kent PUC, the Municipality and Integraph, etc. to achieve results. CK Hydro has found that by partnering with other efficient companies to complete these types of initiatives the best practices tend to prevail.

Using GIS for work management functions will achieve more efficiency and savings. This will further improve the distribution planning and maintenance on the system. CK Hydro now has the ability to reduce costs for cable locating etc. as the GIS technology has now been converted to mobile technology with laptop computers installed on the service trucks.

This project has been a local Municipal initiative, which would not have included the electrical infrastructure if CK Hydro were not locally owned.

CK Hydro better serves it's customers in Chatham-Kent, as SCADA systems at the distribution level will ensure more efficient response to outages and other related power emergencies.

CK Hydro believes that the technological efficiency gains that medium size LDC's like CK Hydro should not be sacrificed to make larger LDC's more efficient. CK Hydro also believes that all the residents of the Municipality of Chatham-Kent should benefit from the same technological efficiency and service that CK Hydro customers have and should have the opportunity to expand our service territory to our Municipal boundary.

## 5. Regulation

In addition to the planning and technical savings and efficiency gains CK Hydro would realize by expanding our service territory, further savings could be achieved if the OEB took a more light handed approach to the stringent standards to maintain the distribution system. In CK Hydro's opinion the schedules and reporting required by the OEB to maintain substations, and patrol feeders are not required and the evidence of inappropriate maintenance practices will be identified in the Service Quality Indicators. LDCs who do not maintain their system will see SQIs degrade and will be subject to the appropriate regulatory

response. Locally owned LDCs have both the expertise and incentive to ensure appropriate maintenance is completed on the distribution system.

## 6. Summary

CK Hydro would like to provide the following summary of the key issues that the Board should review in analyzing efficiency in the electricity distribution sector;

- LDCs do not have to be large for the customers to receive the benefits of scale. Partnerships and contracting out of some of the services will provide those benefits for the customers.
- Mergers and amalgamations should not be forced.
- PBR mechanisms will provide financial efficiencies in the industry.
- With the appropriate set of rules LDCs can provide be a LSE.
- Ensure regulation does not prohibit and LDC to expand their service area to the municipal boundary.
- Provide an additional rate recovery mechanism to allow LDCs to invest in new technology.
- The Board should take a more light-handed approach to regulation.

The final note that CK Hydro is submitting:

Local control and accountability will drive LDCs to provide the efficiencies and services that will meet the customers needs.

**References**

[1] Fillippini, Massimo. Are Municipal Electricity Distribution Utilities Natural Monopolies?. Annals of Public and Cooperative Economics 69:2, 1998, pp 157 – 174

[2] Gunn, Calum and Sharp, Basil. Electricity distributions an unsustainable natural monopoly: a potential outcome of New Zealand;s regulatory regime. Energy Economics 21, 1999, pp 385 - 401