

Written Submission

And

Text of Oral Presentation To The

Ontario Energy Board Hearings RP- 2004-0020

on

Review of Further Efficiencies in the Electricity
Distribution Sector

By

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**Comments on Staff Discussion Paper
“Review of Further Efficiencies in the Electricity Distribution Sector”
February 16, 2004**

I would like to thank the Board for this opportunity to present Newmarket Hydro’s comments on efficiency in Ontario’s electricity distribution sector.

Assumptions based on one-dimensional information require validation

The discussion paper’s title and focus is on furthering efficiencies, yet it does not provide any evidence of any progress made in this regard since passage of the Electricity Competition Act (the ‘ECA’). There is, however, an inordinate amount of information on the number of customers served by distributors; the change in these, and the number of distributors. The conclusion that the discussion paper is using the number of customers served as the only metric for efficiency is obvious. I am very concerned that, in doing this, Ontario’s electricity distribution sector will evolve into a small number of inefficient entities. Neither the customer nor the electricity industry as a whole will be well served. To illustrate this concern, consider Figure 2 on page 20 of the discussion paper. It lists jurisdictions and customers served by distributor. If customers per distributor are the metric for efficiency, then we conclude Greece is the most efficient, Luxembourg the least. We submit that, jurisdictions that have pursued efficiency in their distribution sector should also be characterized by a high degree of technical innovation.

In a recent study conducted by the International Telecommunications Union (the ‘ITU’)¹, a set of metrics was established to define internet access and usability, expressed as a digital access index (‘DAI’). It then applied these metrics internationally. The result? Of the jurisdictions in Figure 2, Greece is the worst, Sweden the best. Switzerland, which is cited in the discussion paper as having the most extremely fragmented distribution sector, has a world class DAI.

My point is simple. Initiatives based on assumptions drawn from one-dimensional information lack the dynamics of a comprehensive set of metrics to fully understand their impact. They are at extreme risk of failing to achieve any positive results.

With no effective metrics, perceived gains may really be losses

In the ITU study noted, the real work was in developing the metrics for the study. As the discussion paper notes in section 3.1, there are many factors requiring consideration in the efficiency equation. Defining these metrics to form a cohesive measure of efficiency should be the focus of this discussion. We are asked to comment on the achievement of efficiencies in Ontario’s distribution sector. I am concerned that many comments will be difficult to assess, as we

¹ Institute of Electrical and Electronics Engineers Inc. “IEEE Spectrum” magazine. February 2004, Volume 41, Number 2. Article “Bit Map” by Steven M. Cherry, Harry Goldstein and Stephen Cass.

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lack a set of metrics to evaluate them. Of far greater concern to me is the fact that I am seeing disturbing indicators that efficiency is actually declining:

- (a) The Electricity Distributors Association reciprocal insurance exchange's (the 'Reciprocal') audited financial statements show operating costs for claims and adjusting rose an alarming \$1.8 M or 52.7% in 2003. This needs more detailed analysis, but I make four observations:
- There is no mention in the statements of a singular event or events impacting the business in the audited year
 - The Reciprocal's members include the largest LDCs in Ontario
 - The largest members of the Reciprocal have the largest impact on its costs
 - There is a direct relationship between efficient and diligent operation and maintenance of any business entity and its insurance claims record.
- (b) The February 2004 Electrical and Utilities Safety Associations ('EUSA') monthly magazine has an article "The Simmering Volcano"² that states "the years 2002 and 2003 saw an increase in serious incidents among those utilities that had been involved in an amalgamation."

You can only improve what you can measure

We should, after 2 years of a PBR flawed by legislative interventions and minimal service quality indicators, rationally begin the efficiency exercise by defining a set of meaningful metrics and then applying them. Different distributors will exhibit different strengths. These strengths can then be analyzed, and incentives for all to embrace their cause applied. In doing so, we begin the process to achieve best of breed. Consolidating bad habits with good is just another bad habit or, using the carrot and stick analogy noted in the discussion paper, when the carrot is dangled, the mule better be pointed in the right direction!

² Electrical & Utilities Safety Association magazine Safety Matters February, 2004 Volume 7 Number2. Article The Simmering Volcano by Gary Shewan.

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Valid strategy and metrics yield valid results

Through the ECA and market readiness restructuring of NHL, a properly formulated business plan, established by the company as opposed to consultants who have no stake in its ultimate success was followed. We used controllable costs per customer and employee safety as metrics to measure the company's progress. Only two were used as time was of the essence. In conjunction with these metrics, an interim strategic plan with a focus on the core business of electricity distribution and a rational strength, weakness, opportunity and threat ('SWOT') analysis was prepared. The hard work of pointing the mule was done before the carrot was dangled.

Our results to date demonstrate this approach was extremely effective:

- Controllable costs per customer of \$168 in 1999 were in the lowest quartile of the then Municipal Electric Utilities ('MEU'). They rose by only 9% through restructuring to \$179 in 2002. They are still in the lowest quartile of the new LDCs.
- Based on the weighted average costs per customer by utility size, NHLs 2002 costs at \$179 compares very favourably to:
 - \$204 for LDCs with less than 15,000 customers
 - \$194 for LDCs in the 15,000 to 60,000 customer range; and
 - \$212 for LDCs serving more than 60,000 customers

Appendix A of our written submission supporting this presentation contains the details of this analysis.

- This year, NHL is receiving the EUSA President's Award for 250,000 employee hours worked without a compensable injury. With our staff complement, it has taken us 3.5 years to accumulate the hours recognized.

In pre ECA days a generally accepted rule of thumb for efficiency was an LDC's Controllable Costs per customer. It wasn't perfect because of service differences between LDCs. Some provided more, some less and accounting practices differed. Some transferred costs to capital rather than operations but I believe it is a reasonable proxy for efficiency. The employee safety performance cannot be questioned.

The result is a former efficient MEU was transitioned into a very efficient LDC safely and efficiently. It was not accomplished through consolidation. Growth helped somewhat as our customer count rose 10% from 1999 to 2002. The

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biggest contributor was a rational strategy based on the core business of electricity delivery and our core competencies with at least a minimum set of metrics to measure progress. It worked. It's the only methodology that will lead to a desired result.

Some of NHL's success were achieved by taking new approaches to the electricity distribution business that are directly pertinent to the points raised in the discussion paper:

(a) *Scale and operational efficiency can be difficult to distinguish*

Through its participation in the Upper Canada Energy Alliance, NHL is provided with wholesale settlement services at 50% of the cost of other market offers at market opening. By utilizing a service bureau approach, the need for additional staff, contingency and restoration plans as well as training in settlement system software was eliminated. The Alliance pricing is not a scale efficiency. Rather, it is the result of a concerted effort by 10 LDC presidents to understand the wholesale settlement process, conduct a SWOT analysis, and identify the most effective way to deploy it for their respective LDCs. In reality, its efficiency is operational.

(b) *Business partners represent a wealth of efficiency opportunities*

As part of its retail market readiness planning, NHL entered into an applications service provider (ASP) agreement for its customer information system. We are now provided with real contractual guarantees of a system that is compliant with and tested for Ontario's retail market at cost less than owning it.

Last year we launched a community outreach program through a private consultant to reduce utility theft and enhance public safety. In January of this year, we deployed an interactive voice recognition system that handled 70% of all customer calls in its initial month of operation. These successes are not ours. They are due to business partners that measure their success by the success of NHL.

NHL is also actively investigating the merits of distributed generation in concert with an Ontario generator and other LDCs. The Board has been given more details on this initiative from Northland Power. We expect results will mirror the ones we have enjoyed with our other business partners.

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Good contractual relationships with competent business partners is a real source of operational and scale efficiencies. We need to know if large distributors are willing to contract out those business activities that achieve efficiencies, yet are not critical to the core business. I suspect they tend to internalize them or contract them to inefficient affiliates, negating any efficiency gain that may be realized through consolidation.

- (c) Through NHLs evolution, we responded to other challenges internally. We were one of a very few LDCs that connected an embedded retail generator during market opening. Connection and settlement agreements were executed without issue. We developed Offers to Connect in compliance with the Distribution System Code (the ‘DSC’) that are being used by Board staff as models for other distributors.

Section 3 of the discussion paper is a good and fairly balanced discussion of the concepts to focus on in the development of regulatory policy and a set of cohesive metrics to attain balanced efficiency. In this context, the primary focus on scale in sections 4 and 6 is inconsistent with the paper’s purpose. As NHL’s performance demonstrates, only through a set of balanced metrics can balanced efficiency that respects customer, industry and economic needs be achieved.

LDCs and load serving entities

NHL’s initial SWOT analysis of LDCs entering the load serving entity (‘LSE’) business yields the following findings:

LDC Strengths

- None

LDC Weaknesses

- Power procurement is not a core business
- Power procurement is not a core strength

LDC Opportunity

- LSE responsibilities for LDCs opens an opportunity to distort efficiency and other core business metrics, allowing perverse behavior to go undetected.

LDC Threats

- Under Section 29 of the ECA, LDCs have a legislated obligation to sell electricity to consumers that is absent in other distribution sectors such as natural gas.

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- The risk inherent in power procurement can become infinite when the procuring entity is under a legislated obligation to sell it to consumers.
- Mitigation of the procurement risk will result in default pricing that is unacceptable to consumers.

If LSEs are to be implemented, energy wholesalers or new commercial entities should be considered long before LDCs.

Positioning distributors as price takers in a spot electricity market is an effective mechanism to minimize the commodity risk created by the ECA Section 29 obligation. Should LSEs be implemented and/or the Independent Market Operator implements a day ahead market as envisioned in their market evolution program, distributors will need relief from the Section 29 obligation to forestall an unacceptable escalation in commodity risk.

Planning in the electricity distribution sector

Understandably, emerging issues in distribution system planning are being characterized as seams issues between distribution service areas. In reality, there are three root issues, two of which are operational with the third being structural.

- (1) Sections 6.5.3 and 6.5.4 of the DSC requiring long term load transfers to end within 5 years of the Code coming into effect.
- (2) Distributor's responses to requests for access to their distribution system contained in their Offers to Connect
- (3) Legislatively forced municipal amalgamations that have ignored municipal ownership of LDCs.

The DSC

Distributors have always openly collaborated on system planning. Prior to the issuance of the DSC, rational and efficient plans to supply boundary growth were made. In many cases, long term load transfers ('LTLT') were employed. The most economic way to reliably supply the new customer was identified and implemented independent of asset ownership. If the new customer was in one distributor's service area but supplied by another, then a LTLT was established. The customer would remain with the incumbent distributor, and a reimbursement mechanism for costs incurred by the serving distributor was established. A simple, effective and efficient process. Under the DSC, the incumbent and serving

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distributor must be one and the same. What was a planning exercise has been transformed into a service area issue. Reinstatement of an old, operationally efficient process rather than considering new solutions to problems that shouldn't exist is respectfully suggested.

Distribution system access – Offers to Connect

I suspect NHL is unique as it has filed for a service area amendment, not because of a boundary growth issue or a desire to compete for new customers, but because a customer has formally requested us to connect them in a community outside of our existing service area. The customer has concluded that they can more effectively address their electrical service needs with NHL as opposed to other distributors. As I noted previously, NHL's Offers to Connect ('Offers') are being used by Board staff as models for others. Our Offers are fair and transparent. Customers value them and would like all distributors, regardless of size to make similar ones. This is not a structural issue. It is purely operational. Interestingly enough, we've been informally approached by other customers to work with them outside of our service area. In every case, the incumbent distributor is at least three times our customer count. We have concluded that large distributors are less responsive to their customers and are less willing to provide fair and transparent service than NHL.

Diluting customer issues using scale does nothing to resolve them.

Municipal amalgamations

The legislated municipal mergers that formed municipalities like Chatham-Kent and Greater Sudbury left them as a shareholder in an LDC that only serves certain communities within their constituency. The legislation redrew municipal boundaries and merged any LDCs within them without regard to distribution service areas. Quite understandably, both the LDC and their municipal shareholder have a desire to explore the benefits of rationalizing all services within the new municipality, but can identify no formal process, other than filing for a service area amendment to do this.

This issue arose through legislation, not industry restructuring or customer growth. If there was a weakness in planning, it occurred at the time the legislation was crafted. The results of that weakness have been 'handed off' to the electricity distribution sector to resolve.

LDCs that find themselves 'incontiguously amalgamated' because of flawed municipal amalgamation legislation should have a way of exploring

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a business case for rationalization. If the service area amendment process is not desired, then an alternative needs to be developed.

These situations are a perfect opportunity to explore the controllable structural efficiency strategy noted on page 10 of the discussion paper “In areas where operational contiguity generates efficiency gains, distributors would be able to restructure their operations so as to exploit the opportunities.” It would seem that the service area amendment process is ideally suited to these situations.

In closing, NHL takes no position on distribution sector consolidation other than it will achieve unexpected and undesired results at the present time, unless examined on a case-by-case basis. Our sole point in this submission is to reinforce to stakeholders and the Board the need for a validated policy with cohesive metrics to guide the sector in a direction that will achieve real and verifiable gains for consumers and the industry. Let’s put our energies into being a jurisdiction that can prove we’re the best rather than a jurisdiction that simply looks good.

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Appendix A

Table of LDC Controllable Costs

	Average weighted controllable cost per customer for the group	Highest utility controllable cost per customer in the group	Lowest utility controllable cost per customer in the group
Utilities less than 15,000 customers	\$ 203.76	\$ 236	\$162.25
Utilities more than 15,000 customers less than 60,000	\$ 194.12	\$ 221.73	\$ 179.69
Utilities more than 60000 customers	\$ 211.36	\$ 256.66	\$ 185.25

Method selection

The 92 utilities in the Province of Ontario were divided into three groups. From the groups of utilities with less than 15,000 customers and the group consisting of utilities greater than 60,000 customers, a sample of five utilities were randomly chosen without statistical sampling techniques. For the sample of utilities size between 15,000 and 60,000 customers a sample size of four utilities were chosen without statistical sampling techniques.

Once the sample utilities were chosen, Audited Financial Statements were obtained for the years ending 2002, and 2001. Customer counts were obtained through the utility and through the Ontario Energy Board if the utility could not provide a count.

Controllable costs were defined as amounts listed on the Audited financial Statements as Billing and Collecting costs, Distribution, Engineering and General and Administrative costs. These Audited Expenditure line items amounts were added together then divided by the customer count to arrive at the controllable cost per customer.

It should be noted that these costs could differ between utility depending on different accounting treatment adopted by LDC's. There are consistent guidelines applicable to accounting treatments for LDC's therefore these differences in accounting treatment for certain expenditures should be immaterial.

Audited financial statements were chosen to provide financial information as these are released to the stakeholders to evaluate the stewardship of the LDC.