ELECTRICITY DISTRIBUTION EFFICIENCY
SUMMARY OF CONSULTATION PROCESS

Prepared for:

Ontario Energy Board
2300 Yonge Street
27th floor
Toronto, ON M4P 1E4

Navigant Consulting Ltd.
Bay Adelaide Centre
333 Bay Street, Suite 1250
Toronto, ON M5H 2S7

416-777-2440
www.navigantconsulting.com

February 21, 2013

TABLE OF CONTENTS

1 Introduction and Project Objectives

1.1 Background

As part of its 2012-15 Business Plan, the Ontario Energy Board (OEB) identified several key initiatives. One of these was to "assess how the Board's approach to the regulation of electricity distributors may affect the ability of distributors to realize operational or organizational efficiencies that benefit customers". The Board had previously identified consolidation as one possible means for increasing productivity and efficiency and understood that electricity distributors had indicated that productivity and efficiency could be improved through shared service and similar arrangements or through a broader scope of service offerings. The Board retained Navigant to help it engage distributors and other stakeholders in discussions of potential opportunities for efficiency improvements and how the Board's codes, licenses, and regulatory processes related to licensing and MAAD's may affect distributors business and organizational arrangements.

1.2 Project Objectives

The focus of the review was on actions that distributors could take to improve their operating efficiency and reduce O&M costs and how the Board could support distributors in undertaking such activities. Since rate-setting and performance measures are currently under review as part of a discussion of the Renewed Regulatory Framework for Electricity (RRFE), this study did not focus on these areas. The question of how to actually measure "efficiency" was raised by a number of distributors and stakeholders in the context of the consultation. Most of those who raised this issue made the point that considerations of efficiency should look beyond OM&A costs to consider the state of capital assets and the level of service provided to customers. Input received from stakeholders and distributors relating to rate setting, performance measurement and benchmarking were not part of the scope of this project but were conveyed to Board staff to inform other Board initiatives addressing these issues.

Ontario's electricity distributors have undertaken a number of initiatives over the past decade to improve efficiencies and reduce operating costs. A number of distributors have amalgamated, developed shared service arrangements to provide services to other distributors or to provide billing and customer care services on behalf of their shareholders or others. Recognizing this experience, the Board wished to engage distributors and stakeholders in a consultation process to obtain their ideas on the types of changes that could be implemented so that the Board's processes and policies would support distributor's efforts to improve the efficiency of their operations through economies of scale or scope, including consolidation.

For the purposes of this review, we have defined "improved efficiency" in the traditional sense of "decreasing the level of input required to produce the same level of output" and have focused largely on opportunities for greater efficiency to lower distributor OM&A costs. It should be noted that while this project focusses on opportunities to improve the distributor's efficiency, it did not attempt to quantify the cost savings or gains that could be achieved by different approaches.

1.3 *Approach*

The approach taken in this project is based on the Board's and Navigant's understanding that Ontario electrical distributors have undertaken or considered a wide range of different approaches to improve their operating efficiencies. Distributors and stakeholders are very familiar with the Board's Codes, licence requirements, licence amendment processes, regulatory instruments and other processes and how these requirements may influence distributors' abilities to reduce costs through amalgamations, shared service arrangements or other initiatives to reduce costs through economies of scope and scale. A key element of the project was therefore to consult with distributors and stakeholders to obtain their input on these issues.

Navigant worked with OEB staff to develop a set of research questions designed to elicit specific information on what distributors and stakeholders see as the key areas of opportunity for improved efficiency, the barriers limiting pursuit of these opportunities and more specifically, the extent to which these barriers are related to or are driven by the Board's regulatory requirements or processes.

Interviews were carried out with a sample of distributors and stakeholders. Figure 1 below summarizes the sample plan used for the consultation process. A list of distributors and stakeholders consulted as part of the sample is included in Appendix A.

Figure 1: Sample Plan

Stakeholder Group	Sampling Approach
Distributors	Census of top 10 electricity distributors Sample of up to 10 other distributors. Representative of EDA
Stakeholders	Up to 10 representatives of stakeholder groups, including: • Groups active as interveners on electric distribution applications before the Board representing various consumer interests. • Groups representing distributor shareholders. • Other potentially affected parties (i.e. electrical contractors).

In addition to consulting with distributors and stakeholders, Navigant reviewed existing regulatory requirements in Ontario to identify requirements and issues that might impede distributors from pursuing the identified opportunities and mapped these requirements to the various areas of opportunity. Navigant will also conduct a review how the areas of potential regulatory change identified as part of the consultation have been addressed in other jurisdictions.

1.4 Research Questions

The discussion guide used in meetings with distributors and stakeholders was designed to answer the following research questions to address the key research objectives for the project:

- *What are the main opportunities for increasing distributor efficiency?*
- *Which of these opportunities are currently being pursued by distributors?*
- *Why are these specific opportunities being pursued? What benefits do they bring to distributors and/or ratepayers?*
- *Are there any opportunities for efficiencies that could be pursued but are not currently being pursued?*
- *What are the primary barriers preventing opportunities from being pursued?*
- *Are any of the barriers driven by Ontario's regulatory structure and framework? If so, please describe?*
- *What could the OEB do to reduce or eliminate any perceived barriers in its own policies and practices?*
- *Are there initiatives the OEB could under take to promote and incent a distributor to engage in opportunities that would increase distributor efficiency?*
- *What do you see as the primary barriers preventing distributors from engaging in further consolidation?*
- *What could be done to assist those distributors who may wish to consider merging or consolidating with or selling to another distributor?*

1.5 Organization of the Report

The purpose of this report is to summarize feedback received from distributors and stakeholders with regards to the objectives and research questions outlined above.

Section 2 of the report, which follows, summarizes feedback received from distributors and stakeholders on what they indicated to be the greatest opportunities for distributors to improve efficiency and reduce operating costs, the barriers limiting action on those opportunities and areas where the regulatory system could be modified or regulatory initiatives could be taken to support distributors in pursuing those opportunities. This discussion starts by reviewing the specific functions within distributors which were identified as having the greatest potential for efficiency gains and then moves on to discuss how distributors and stakeholders feel these efficiencies could be achieved; through shared services which achieve efficiencies of scale or scope, consolidation, the creation of new services or by improving the efficiency of internal processes or other innovations.

The discussion of opportunities and barriers in section 2 identify a number of regulatory issues where changes were suggested to either remove impediments to or to better support efficiency gains. The final section (section 3) presents potential areas of regulatory change based on issues raised by individual distributors and stakeholders in our discussions. They are presented here in order to facilitate discussion as part of the consultation meeting and to help identify key areas for the Board to consider in supporting further improvements to distributor efficiency.

2 DISTRIBUTOR/STAKEHOLDER FEEDBACK

Discussions with distributors and stakeholders identified a wide range of initiatives that are currently being undertaken or considered to improve distributor efficiency. While the discussions tended to center on alternative approaches to obtain those gains, the key opportunities identified involved efficiency gains achieved through increasing the scale of distributor functions. Increases in scale are viewed as the key opportunity in that they permit distributors to spread fixed cost elements over a greater number of customers and apply technologies which require a large system in order to be economic.

Throughout the report we differentiate between opportunities relating to economies of scope and scale. For convenience we use the term "scale" when referring to opportunities between distributors (LDC to LDC) and "scope" when referring to opportunities outside of the distribution business (i.e. water and sewer billing services to municipalities). It is important to note, however, that both approaches can provide similar benefits. A distributor that provides billing services to another distributor and a distributor which provides water and sewer billing to a municipality can both benefit by distributing the associated costs over a larger base. In a sense, both approaches can increase the number of bills (scale) of the distributor's billing operation and lead to improved efficiency. Our interpretation of the feedback received from the consultation is that both approaches can contribute to efficiency improvements and that different approaches may be appropriate for different distributors depending on their individual circumstances. For example, PowerStream has pursued a strategy of increasing efficiency by acquiring scale through consolidation while Utilities Kingston has pursued a strategy of increasing efficiency by increasing the scope of its operations across multiple utility services.

Given that many of the opportunities identified by the review centered on the "scalability" of distributor functions, however achieved, we have broken the discussion which follows into two parts.

1. The first portion presents a discussion of which functions or services provided by distributors were identified by distributors and stakeholders as having the greatest potential for efficiency improvements,
2. The second portion then discusses the different approaches that distributors and stakeholders described to achieve increased scale in those functions (i.e. scale, scope or consolidation).

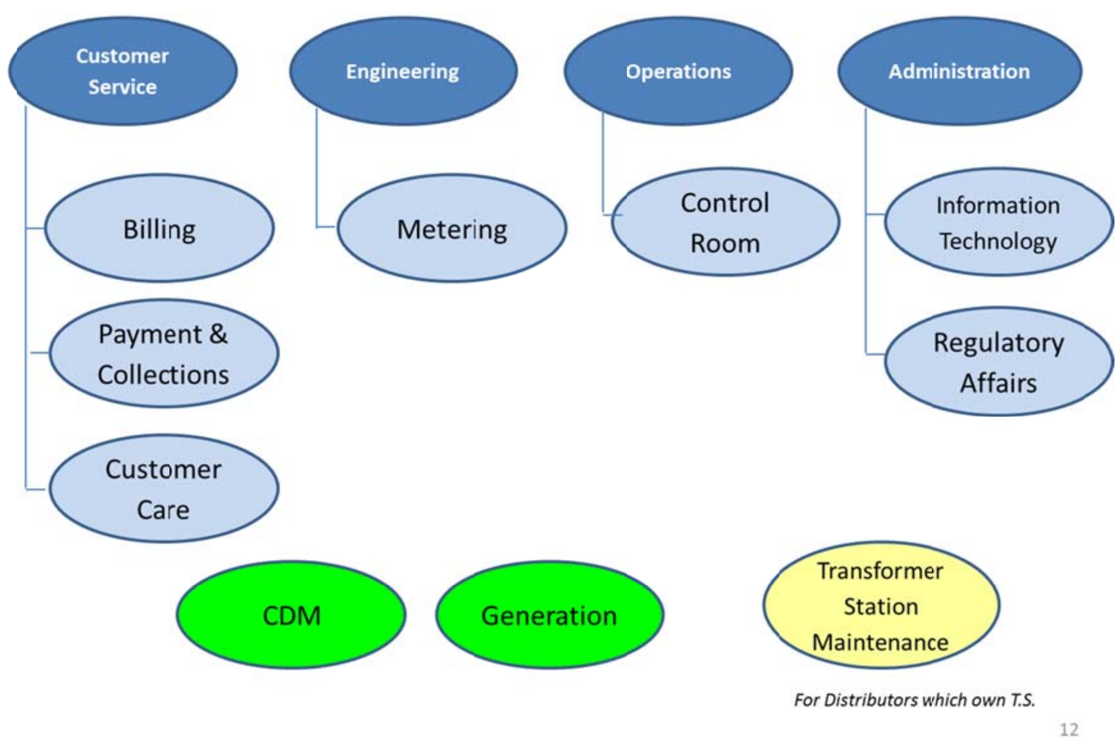
To be clear, the concept of presenting these two elements separately is Navigant's, however, the identification of which business functions offered the greatest potential for efficiency and the approaches to achieving scale are both based on feedback received during the consultation.

In addition to issues of scalability, a number of distributors suggested opportunities related to improvements to internal processes and innovative solutions to reduce costs associated with new investments and of course, costs associated with regulatory processes. These opportunities will be addressed following the discussion of issues related to scale.

2.1 Opportunities for Improved Efficiency - Distributor Functions

The activities that may be carried out by distributors are strictly defined by legislation[1]. In order to operate their businesses, however, distributors carry out a wide range of functions as shown in Figure 2. The figure shows an illustrative breakdown of common distributor functions. While this is not intended to represent all of the functions carried out by distributors, it includes those most frequently referenced during the consultation. The figure includes some relatively new functions (in green), such as CDM and generation management as well as some functions (shown in yellow) such as TS maintenance that don't apply to all distributors.

Figure 2: Distributor Functions



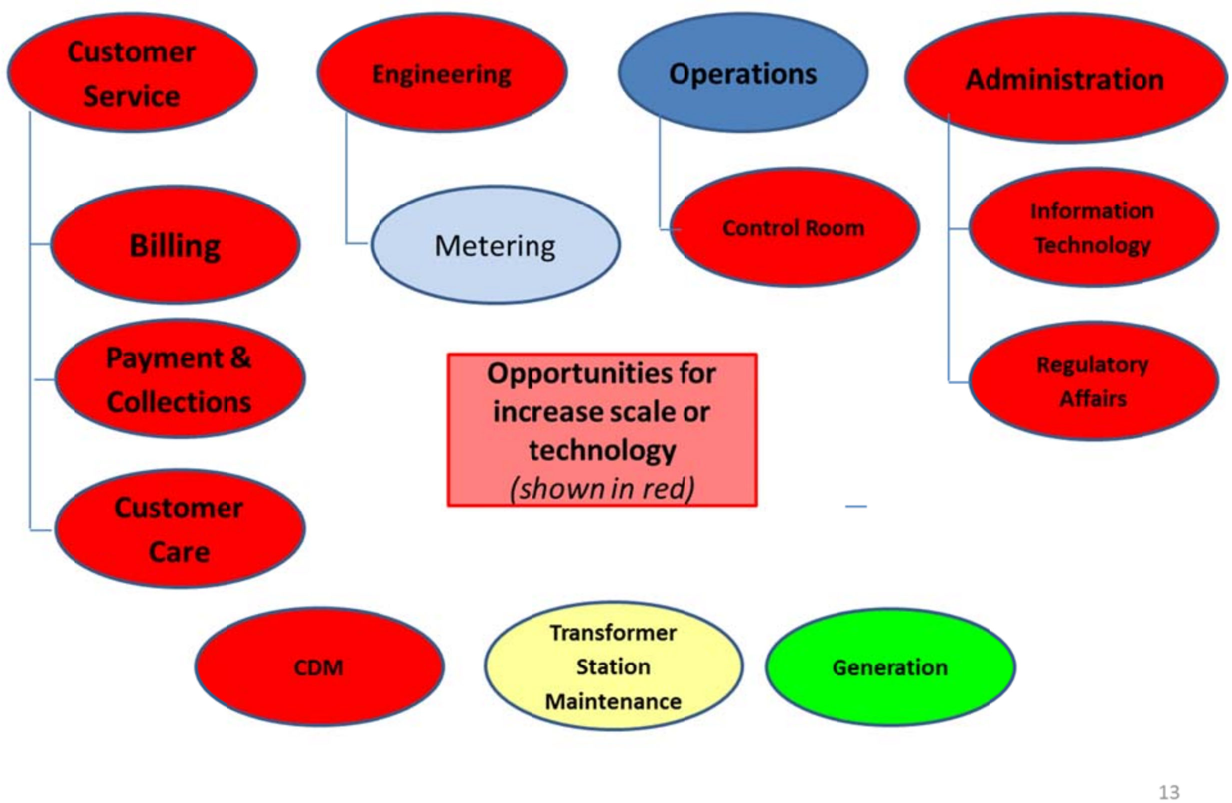
---

[1] Section 71 of the Ontario Energy Board Act restricts distributors from carrying out any business activity "other than transmitting or distributing electricity".

These business functions are generally viewed as being a required part of providing distribution services. A number of related services which were carried out by distributors prior to the introduction of the Electricity Act, 1998, including street light maintenance, water and waste water operations, equipment rental, or other services are restricted or no longer permitted within the distributor's operations and where offered are generally provided through an affiliate. Others, such as water and wastewater billing may be permitted within the distributor under certain conditions.

While many of these distribution functions may be viewed as scalable, most of the feedback from distributors and stakeholders focused on a sub-set of distributor functions that were viewed as offering the greatest potential savings. The functions highlighted in red in Figure 3 were identified in the consultation process as having the potential to be provided through Shared Service arrangements or to provide savings in a consolidation. While a number of distributors and stakeholders expressed caveats regarding the trade-offs involved (i.e. loss of local knowledge), these functions were generally viewed as areas where the application of technology and scale could reduce costs and increase operational efficiencies.

Figure 3: Distributor Functions



As Figure 3 indicates, much of the potential for improving efficiency through increased scale focused on Administration and Customer Service functions (billing and collections, customer information systems, call center functions) and Conservation and Demand Management. Somewhat related to this area, Information Technology was raised by a number of distributors as a significant area of potential.

Many distributors and stakeholders indicated that they believed the appropriate or optimal scale differs between the various functions provided by Distributors. As a result, some functions are seen as offering greater opportunities for efficiency improvements than others. In general, operations functions are generally viewed as less scalable, while Administration, IT, Customer Service, Control Room, and some Engineering functions are viewed as offering significant opportunities for economies of scale.

Countering this belief that increased scale could reduce costs, several distributors indicated that they felt that they could reduce costs by bringing functions now carried out by the Meter Data Management and Repository (MDM/R) back in-house; indicating that they could provide the same functions at a lower cost. Differing opinions were expressed around potential benefits of increasing scale in areas such as operations. While larger distributors saw the potential for operational efficiencies in terms of improved technology, smaller utilities tended to express concerns about response times if they were part of a larger organization.

2.2 *Perceptions of Scale Opportunities*

There is considerable diversity among electricity distributors in Ontario. Differences in size, service territory characteristics, business philosophies and strategies, shareholder relations and history all influence distributor views. As a result, it is not surprising that the strategies for achieving increased operating efficiency also differ and to some extent reflect each distributor's circumstances.

A larger customer base can be achieved by a number of means; including consolidation with other distributors and the development of various types of shared services; either with other distributors providing electric service or through the provision of services to other agencies/utilities (ie. water and sewer billing). Consolidation with another utility brings all services together in one organization; capturing synergies across all utility functions that can benefit from increased scale. Shared services, on the other hand, can capture synergies from select functions. As discussed above, while most of the discussion of consolidation focussed on bringing electrical distributors together, similar benefits could be achieved through consolidating across different utility services (i.e. bringing electric, water, wastewater, etc. together in one organization).

A considerable diversity of opinion was found with respect to where opportunities exist, whether different approaches would, in fact, increase efficiencies and whether those opportunities are worth pursuing. The greatest area of consensus was found around opportunities for shared services, which is seen as the key opportunity by most distributors and many stakeholders.

Shared Services:

Shared services opportunities exist both with respect to 'Scale' and 'Scope'. To reiterate, in the discussion that follows we will define these as follows:

- ***Scale*** – providing or sharing services related to existing distributor functions (as shown earlier in Figure 2) between existing distributors (i.e. providing billing-related service or Control Room functions to another licensed Distributor).
- ***Scope*** – providing or sharing services related to existing distributor functions to non-distributors such as shareholders or municipalities (i.e. provision of water/wastewater billing and customer services for a municipality).

In both instances, efficiencies are obtained by leveraging existing capabilities and infrastructure to provide additional services.

The perceived value of scope vs. scale tends to differ based on distributor size, location and circumstances. Many larger and more urban distributors view scale opportunities as significant and expressed the view that Distributors should "stick to the knitting" and focus on their areas of expertise. Distributors supporting scope opportunities tended to be smaller/medium sized utilities, primarily outside of the GTA, with a history of involvement in multiple services. Distributors with a history of operating as multi-service utilities (essentially PUC's) saw the greatest potential in pursuing this type of scope opportunity. In many instances these distributors view themselves as having limited opportunities to partner with nearby distributors. While most distributors indicated efficiency and cost reductions as the rationale for pursuing shared services arrangements, a number of distributors expressed the view that shared services could serve and have served to increase acceptance of consolidation at some point in the future. Some stakeholders and distributors which favour greater consolidation argued that the Board could encourage the either consolidation or greater use of shared services by placing more stringent requirements on smaller distributors with respect to reporting (i.e. requiring more expensive systems to record telephone answering performance) and in rate-setting. Smaller distributors on the other hand felt that such requirements would simply add to ratepayer costs without adding value or necessarily driving consolidation.

A number of barriers to the expanded use of shared services were suggested, and will be discussed below. The most commonly expressed reason for not seeing more shared service arrangements, however, has simply been a lack of willing partners or buyers of such services.

Consolidation:

Most distributors and stakeholders interviewed felt that efficiencies could be improved through consolidation of smaller distributors; in particular those embedded in HONI territory. The majority of both distributors and stakeholders, however, were of the view that there is very little appetite among existing smaller distributor shareholders to pursue consolidation.

Views on the potential benefits of consolidating medium and large distributors were also quite diverse. Many of the large distributors see consolidations as offering potential to increase efficiencies and improve shareholder value. Distributors which had completed mergers, amalgamations or acquisitions stated that their experience indicated that significant savings could be achieved. A number of other large distributors on the other hand, indicated that they are not convinced that a business case exists or that the potential savings are sufficient to overcome what they view as diseconomies of scale or to justify the premium that would be required to interest potential partners.

While some suggestions were made on specific areas that could improve the business case for consolidation, regulatory requirements (i.e. the MAAD's process) were generally not viewed as a significant barrier to consolidation. While some who had not been through the process expressed some concern, respondents who had been through the process felt that it was reasonable and "not onerous".

Innovations and Internal Efficiencies:

By far the greatest number of comments received related to concerns around costs associated with processes related to meeting various regulatory requirements. While not the main focus of the review, a number of comments were provided relating to opportunities to streamline or simplify rate regulation. As mentioned earlier, these suggestions have been provided to Board staff to provide input to other Board initiatives, but were not the focus of this study. Other opportunities will be discussed more fully in section 2.3.5 below.

2.3 *Categories of Opportunities*

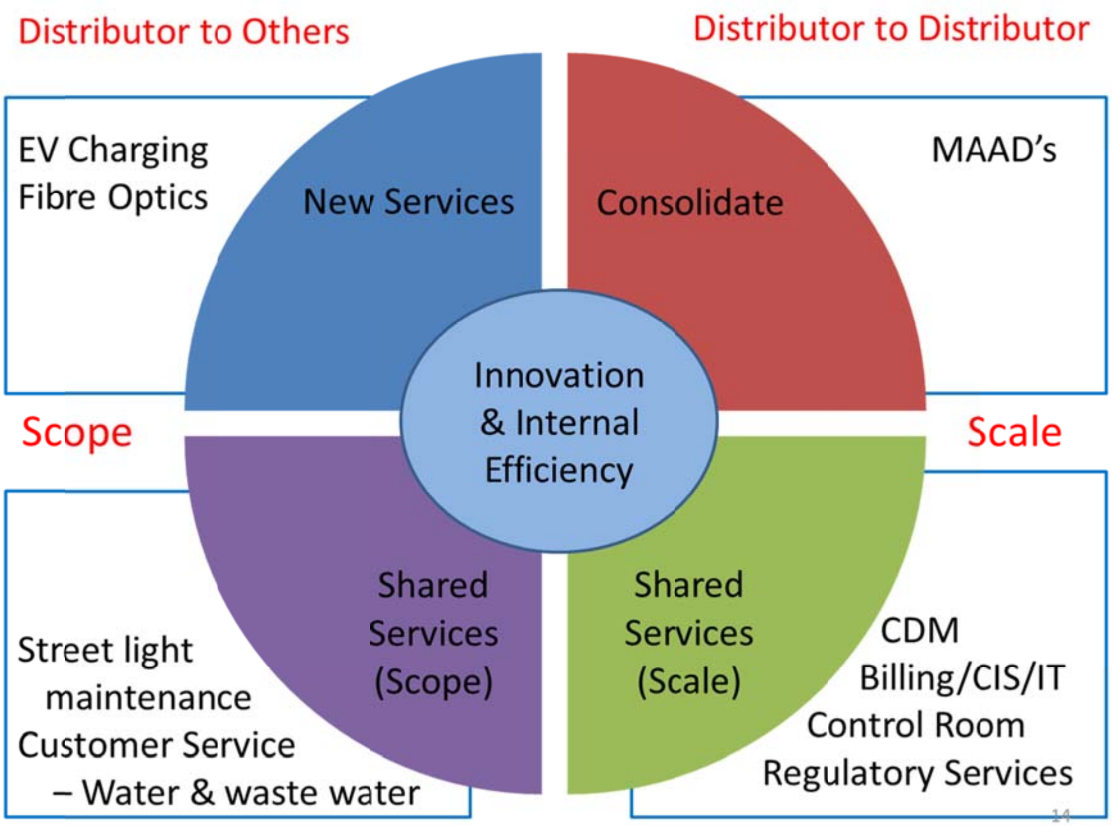
In general the opportunities presented by Distributors and Stakeholders can be represented as five broad categories of opportunities as shown in the table and figure below. These opportunities will be discussed in the order shown in the table below, which approximately represents the frequency with which participants raised the opportunity in our discussions.

Table 1: Opportunity Categories

	Opportunity	Type of Economy
1.	**Shared Services between Distributors**	Economies of Scale
2.	**Shared Services with Shareholder (or others)**	Economies of Scope
3.	**Development of New Services**	Economies of Scope

4.	**Consolidation**	Economies of Scale
5.	**Innovations to improve efficiency of internal processes**	Internal

Figure 4: Opportunities' for Distributor Efficiency



The following sections discuss the feedback received regarding each of these categories of opportunity.

2.3.1 Shared Services between Distributors

Summary:

Many distributors and stakeholders suggested that significant opportunities exist to provide shared services between distributors. While most distributors indicated that the biggest barrier to the greater use of shared services is a lack of "willing partners", this was the most widely identified area of opportunity suggested by both large and smaller distributors as well as by Stakeholders.

The main regulatory impediments identified by distributors centered around regulatory uncertainty and risk and the cost of meeting existing regulatory requirements.

Opportunities:

Shared services are already being pursued by a number of Distributors and have been considered by others. Groups of utilities share resources for a specific purpose, such as meeting the need for engineering drawings, or to share capabilities among utilities using the same type of systems. For example some distributors using the same billing system (i.e. Harris or Daffron) share costs in implementing and testing software changes required to meet new requirements.

The most common approaches include:

1. One distributor providing services related to distribution services to other Distributors; leveraging existing systems and capabilities to serve other, generally smaller distributors (i.e. provision of billing services or control room functions).

2. A group of Distributors forming a Shared Services organization which provides services to member Distributors. The 13 member CHEK group follows this type of arrangement. Similarly the Utility Standards Forum, formed as a not-for-profit corporation to provide engineering drawings required by utilities, now serves approximately 50 utilities.

3. Less formal collaboratives in which a group of Distributors work together to meet shared objectives (i.e. shared advertising, CDM program delivery, joint purchasing, etc.). For example, the Coalition of Large Distributors (CLD) Group, the Niagara Erie Public Power Alliance (NEPPA), and distributors in the Region of Waterloo have worked together to coordinate activities or share resources for CDM program planning and implementation.

The functions most often identified as being suited for shared services include such Customer Service functions such as sharing CIS infrastructure, customer care and billing functions. Other types of services mentioned as opportunities include:

- Finance/Regulatory Affairs.
- Control Room (particularly where TS ownership involved)
- CDM planning and program implementation.
- Engineering

All of these areas are seen as having the potential to benefit from increasing scale, technology or specialized expertise.

Barriers:

The most commonly mentioned barrier to the increased provision of shared services was the lack of willing partners or clients. In part this seems to reflect the fact that Distributors have many of these services in place. As a result, decisions to pursue shared services tend to arise at the point where a distributor is looking at a system replacement, substantial upgrade or other step increase in resource requirements.

Shared services have been most successful in areas where new needs have arisen (i.e. the creation of CDM initiatives), the "problem" to be solved through a shared service arrangement is clear to potential service users and is not something they are already doing. In other areas, part of the problem was felt to be in "problem recognition"; essentially that distributors don't fully recognize the requirements associated with new regulatory or other changes until they have already invested in addressing those changes.

Where potential partners exist, a number of distributers indicated that regulatory uncertainty and the costs of meeting regulatory requirements inhibited their ability to pursue shared service arrangements.

- While there was a broad recognition and acceptance that accounting for such activities must be in place to prevent cross-subsidization by ratepayers, different opinions were expressed as to whether these types of services could be offered by the LDC or whether they must be offered via an affiliate. For example, if a distributor has an existing 7x 24 hour control room and wishes to share that service with a neighbouring utility, can this be done within the distributor or is an affiliate required? It was suggested that the Board could provide clarity around the question of the conditions under which an affiliate would be required.

- Concern was expressed regarding the cost and some risks associated with creating an affiliate company to carry out such activities. ARC requirements regarding the separation of staff were viewed as a significant barrier by some, particularly smaller utilities. Using the example of a utility sharing a control room mentioned above, if an affiliate is required then distributors face significant restrictions on staffing in order to comply with confidentiality requirements as well as issues relating to collective agreements. A number of distributors argued that sharing business functions identified as being part of the distribution business with other distributors should not require the creation of an affiliate. It was suggested that concerns regarding cross-subsidization could be addressed through the same type of ring-fencing or accounting used by distributors to track water and wastewater billing costs or CDM program costs.

- A number of distributors expressed concern that confidentiality requirements in the ARC are unnecessarily restrictive and not relevant to some of the activities which might be carried out by the affiliate. While there was uniform agreement that a distributor should not provide information to an affiliate that would provide an unfair competitive advantage, it was felt that the current restrictions were targeted at affiliates involved in energy services or Retailing and therefore unnecessarily restrict functions such as street light maintenance or the provision of water and wastewater billing. Distributors suggested that the confidentiality requirements be reviewed and that limitations on sharing of staff be relaxed in circumstances where information sharing does not confer a competitive advantage on the affiliate.

- Concerns over service territory restrictions were also raised by several distributors. Distributers indicated that it was unclear whether the distributor could offer services to a neighbouring distributor without amending its license (for example, if a utility operating a 7x24 hour control room offered to provide control room services to a neighbouring distributor).

2.3.2 Shared Services with Shareholders (or others)

Summary:

A significant number of distributors indicated that they are benefitting from or could benefit from leveraging existing capabilities to provide similar services to their shareholder municipality. Other distributors felt that greater economies could be achieved through achieving scale within electrical distributors, and expressed concern about taking on functions outside of what they feel are their core competencies.

In most cases, the scope opportunities raised involved the provision of billing and customer care services related to water and wastewater billing and streetlighting. Some distributors raised the possibility of sharing services such as tree trimming and owning or operating water and wastewater operations (effectively a PUC). While most of the emphasis was on the provision of services to the distributor's shareholder, others indicated that they would like to be able to provide services to municipalities in their service territory which are not shareholders, or to nearby municipalities not included in their service territory.

Most of those interviewed felt that distributors should be able to provide services that are part of Distributor's normal business (such as billing and customer services) to their shareholder while services viewed as "competitive" must be provided via an affiliate, but significant uncertainty was found to exist around both when affiliate would be required and the rules that must be followed.

Opportunities:

The most common type of shared service opportunities raised by distributors and stakeholders included the following type of arrangements:

a. Provide services to municipalities in service territory (i.e. water/wastewater billing or other services, streetlights, etc.) that leverage existing distributor capabilities.
b. Share services with municipal shareholders (i.e. IT infrastructure, forestry equipment, etc.).

Barriers:

The main barriers or concerns raised with regards to shared services arrangement involved the requirements of the Affiliate Relations Code (ARC). Many of the same concerns discussed with regards to "Shared Services between Distributors". Discussions with distributors and stakeholder indicated:

- Considerable uncertainty around the ARC; including when an affiliate is required.
- That the requirements of the ARC are widely perceived to be more onerous than required to meet the Board's objectives and result in additional costs and regulatory risk;

affecting the consideration of opportunities which could increase efficiency. One example of the perceived regulatory risk offered by a distributor related to limitations on contract length in the ARC and the requirement to seek alternative prices after 5 years. The 5 year term was viewed as not being long enough to recover costs in some instances and several distributors felt that the affiliate would be placed at an unfair competitive advantage relative to other bidders at the point of contract renewal.

- A number of distributors expressed concerns with the use of fully allocated costs in setting prices between the affiliate and the utility. For the convenience of the reader, excerpts from the ARC have been included in Appendix B.
- Privacy requirements are viewed by many distributors as being out-of-date and largely unnecessary. Distributors expressed the view that most information held by the utility is public or, in the case of consumer information, protected by other legislation or regulations. In many instances the information which utility employees would have access to (i.e. customer data in a utility's CIS) would not confer any benefit to the employees conducting work on behalf of the affiliate (i.e. street light maintenance or tree trimming). Eliminating this requirement could enable a utility to make a work crew completing street light maintenance available to respond to after-hours trouble calls.

There is widespread agreement that a distributor's ratepayers must be protected and that the affiliate should not receive any competitive advantage, but most distributors interviewed felt that the ARC requirements were unnecessarily complex and restrictive in trying to achieve that goal. Stakeholders interviewed generally indicated a willingness to consider changes to the ARC but were clear that the intent must be maintained.

Other regulatory concerns raised included:

- Limitations placed on distributor activities in the Electricity Act and the OEB Act; for example, with respect to offering water and sewer billing services and streetlight and traffic light maintenance.
- The ability to provide billing services to a shareholder municipality through the distributor if such services had not been provided historically.
- The ability to serve municipalities other than the distributor's shareholder. For example, a distributor may serve several communities which do not have an ownership stake but could still benefit from a shared service to provide water and wastewater billing.
- The ability to provide services to municipalities or other clients outside of the distributor's service territory.
- Regulatory changes which make the provision of shared billing more difficult or create a disincentive for clients of the billing service. Distributors raised examples

such as bill presentment rules which complicate the inclusion of water and wastewater billing data, or requirements around the order in which payments are applied to multiple services.

2.3.3 New Services

Summary:

Very few of the Distributors raised the issue of developing new services and those which did generally indicated that they expected that any such opportunities would be pursued through an affiliate company. Some distributors and stakeholders raised the possibility of new areas of opportunity around topics such as providing electricity charging stations for electric vehicles (EV's).

Opportunities:

Opportunities for new services raised by Distributors and Stakeholders included:

1. Selling access to Fiber Optic cable installed for utility communications,
2. The development of electric vehicle (EV) charging facilities,
3. High voltage services to end use customers. This was primarily raised by small/medium distributors in areas where distributors indicated the there was limited or no local contractor capacity to provide such service.

Barriers:

- The main barrier identified to the development of new services was simply developing a business case and finding willing partners and customers.
- Some specific opportunities (i.e. EV charging services) may raise issues not anticipated in current Ontario's current regulatory structure. For example, the ***California Public Utilities Commission (CPUC)*** decided that companies that sell electric vehicle charging services to the public will not be treated as "public utilities" pursuant to the Public Utilities Code and therefore not subject to regulation[2]. It is not clear how distributors would be treated if they established such services.

[2] http://docs.cpuc.ca.gov/word_pdf/AGENDA_DECISION/121242.pdf.

2.3.4 Consolidation

Summary:

Interviews with Distributors and Stakeholders found very mixed perceptions of the value of consolidation. Several large utilities see opportunity to reduce costs, increase efficiency and improve shareholder return through consolidation and have reported such savings from past consolidations. Other large utilities believe that increased size will bring diseconomies. Most distributors and stakeholders feel that efficiencies could be improved if smaller utilities were consolidated, however, some small utilities argue they are efficient and that their customers would face increased rates if rates were brought in line with HONI rates for the areas around them.

There is a widespread consensus that the key barrier to further consolidation lies in shareholder resistance. The perception of most distributors and stakeholders is that shareholders feel that consolidation will result in loss of local control, may raise rates and/or reduce service levels for local ratepayers, and result in loss of local employment.

Opportunities:

Consolidation can take a number of forms:

a. Merge with an existing distributor
b. Sell to or Acquire an existing Distributor
c. Purchase a portion of a service territory (i.e. expanding service to municipal boundaries of Distributor's shareholder).
d. Transfer of Long Term Load Transfer customers (LTLT) resulting in a boundary adjustment.

Utilities which have completed mergers or acquisitions of both contiguous and non-contiguous Distributors described OM&A savings in the range of 10-15%. Other large and mid-sized Distributors pointed out that their OM&A costs are already among the lowest in the province and expressed concern that they expected that any merger would raise their costs and their rates.

In the case of smaller Distributors, a number of those interviewed indicated the customers of smaller utilities could be provided with a greater variety and more sophisticated services if they were served as part of a larger Distributor. On the other hand, smaller Distributors expressed concern that distribution rates would be increased and response times could be reduced if they were absorbed into a larger non-contiguous system or the HONI network.

Barriers:

The consensus of most of the Distributors and Stakeholders was that the key barrier to further consolidation was a lack of willing partners. This applies to both distributor shareholders who do not wish to sell or amalgamate and to HONI, which is viewed as being unwilling to allow any loss of its territory to other Distributors.

Distributors expressed concern that there is a significant business risk involved in purchasing another distributor. They argue that the buyer typically pays a premium for the assets purchased but face regulatory uncertainty about whether they would then face limits on their ability to recover those costs. For example, if a building is determined to be surplus due to the consolidation of two service territories, will the shareholder be able to sell that property and retain the value as part of the "efficiency" gains resulting from the consolidation. Some distributors also pointed out that the cost recovery *"rules are based on net book value not fair market value"*. Similarly, they point out that while current rules permit shareholders to retain some of value of improved efficiency from an amalgamation for 5 years , that period is limited if the utility goes through "re-basing". In other words, as one distributor put it: *"if there is a need to re-base then you don't get protection for five years"*. Depending on the schedule that each distributor is on, or how rapidly the utility is growing, this may limit the period over which the shareholder may recover its up-front costs or benefit from the efficiency gains achieved as a result of the consolidation.

The current limitations on the ability to access private capital and limits on municipalities' ability to invest were mentioned by a few distributors and stakeholders. Those who felt favored greater access to private capital thought that the introduction of private capital would also bring greater creativity into the market, but most who raised the topic felt that obtaining federal acceptance of such a change would was unlikely. Similarly, the inability of municipalities to invest in ventures was viewed as a limit but as unlikely to change.

A number of distributors also expressed concerns over rules around service area amendments. Distributors see opportunities to increase scale through growing to serve all end-use customers within the boundaries of the municipalities that they serve. A number expressed concerns that the current practice treats HONI as the incumbent supplier of customers even in cases where the area being developed is currently not serviced but lies within the municipality served by the distributor. Service area amendments were also raised as an issue with respect to long term load transfers. Several distributors commented that the requirement to eliminate long term load transfers is resulting in inefficient service arrangements in some situations.

2.3.5 Improve efficiency and effectiveness of internal processes

Summary:

A small number of Distributors indicated that they are pursuing internal processes to support innovation and efficiency improvements a key strategic initiative. These distributors described programs and approaches that they have adopted to encourage and support innovation, creating congruence between initiatives and corporate strategy and helping improve project management of new initiatives once adopted.

Distributors also described a number of innovative approaches unique to their particular area. These ranged from a proposal to connect to a TS owned by a private generator, to a virtual utility integrating the provision of multiple services. These and other distributors raised concerns that the regulatory system has difficulty responding to innovative approaches that do not conform to the regular way of doing things.

While rate-setting and performance measures were not the main focus of this review, many of those interviewed raised issues with regards to the costs involved in meeting regulatory requirements; ranging from cost of service and rates applications to regulatory reporting and OEB audits. A common theme from those who raised such issues was a concern that efficiency improvements and streamlining of these processes could help reduce distributor costs. Numerous comments were also received about the costs involved in implementing system changes in response to legislative and regulatory changes. In addition to the cost of implementing these changes it was suggested that continued demands of this type consume limited IT and management resources; limiting distributor's ability to pursue opportunities or make changes which could improve operating efficiencies. Similarly distributors indicated that processes which limit their ability to include capital additions in their rate base will limit their ability to make investments in systems which could improve operating efficiencies.

Opportunities:

A number of approaches and opportunities were identified within this broad category:

1. Strategies to increase, target and support innovation, including:
    a. Priority setting based on Strategy – selection of projects for strategic alignment
    b. Improved project management

2. Regulatory reform
    a. Changes to reduce or simplify regulatory requirements, including the potential of reducing regulatory requirements for distributors which demonstrate a higher level of performance.

b. Reduce pace of regulatory and policy change or improve consultation process to ensure a more complete understanding of all changes required to implement the policy and of the implementation costs involved.
c. Increase policy/regulatory clarity thereby reducing uncertainty that inhibits action.

It should be noted that a number of distributors and stakeholders commented that they recognized the Board has been making changes to try to make regulatory processes more efficient.

Barriers:

The main perceived barrier to innovation is a lack of flexibility in the regulatory system and a related lack of clarity around how innovative approaches will be treated. One possible solution to these types of issues would be a greater reliance on objective-based or principles-based regulation similar to the approach adopted in the Finance industry[3]. Clearly establishing the principles that distributors are required to meet would reduce the regulatory uncertainty perceived by distributors while encouraging solutions which meet the intent of the regulations.

[3] The Ontario Securities Commission has adopted a regulatory approach based on principles-based regulation. See, for example, page 4684, http://www.osc.gov.on.ca/documents/en/About/op_20060609_on-cfa-adv-comm-report.pdf or Cristie Ford, "Principle-Based Securities Regulation", Expert Panel on Securities Regulation, 2009.

3 Potential Regulatory Changes

Review of key research questions:

As was discussed in the introductory section, the consultation with distributors and stakeholders was designed to address a number of key research questions. Given that the consultation involved discussions with individual stakeholders and distributors, different regulatory issues were raised by different participants and clearly not all participants addressed each of the barriers. The consultation meeting with the broader group of stakeholders and distributors provides an opportunity to confirm whether the issues identified in this report are viewed as the most significant issues to address.

The key questions relating to regulatory change are listed below:

- *Are any of the barriers driven by Ontario's regulatory structure and framework?*

The consultation identified a number of areas in which Ontario's regulatory structure and framework were perceived to limit distributor's ability to pursue opportunities to improve efficiencies. Some of these perceived barriers related to restrictions placed on distributor activities (i.e. section 71 and 73 of the OEB Act), or requirements of Board-established Codes such as the ARC. In other cases, distributors indicated that uncertainty around regulatory decisions increased perceived risk and therefore inhibited action. A listing of the key regulatory requirement identified as issues in the consultation is presented below.

- *What could the OEB do to reduce or eliminate any perceived barriers in its own policies and practices?*

A number of recommended changes were suggested by different participants to address specific regulatory requirements, such as reviewing the maximum contract terms, transfer pricing and confidentiality requirements in the ARC as discussed in the prior section. Given the nature of the initial consultation it was not possible to gauge the degree of consensus around these proposed changes.

- *Are there initiatives the OEB could under take to promote and incent a distributor to engage in opportunities that would increase distributor efficiency?*

A number of participants identified regulatory uncertainty as a factor limiting the likelihood of distributors pursuing efficiency opportunities. Some stakeholders and distributors suggested this could be improved through a Board initiative to bring greater clarity to Board decisions and increasing the ability of Board staff to provide advice on the Board's intent and precedents.

- *What could be done to assist those distributors who may wish to consider merging or consolidating with or selling to another distributor?*

One of the key concerns expressed by distributors considering potential consolidation was the time over which shareholders could benefit from any gains in efficiency resulting from consolidating the distributors. The recent Board ruling relating to the PowerStream/ Barrie amalgamation was referenced by a number of participants as being a significant concern in considering any future consolidation. Tying the period over which the shareholder can retain the benefits of consolidation to the timing of re-basing is widely seen as significantly limiting the benefit of future mergers; particularly where the distributors involved are experiencing rapid growth.

The rules governing service area amendments were also identified by a number of distributors as a barrier. A number of distributors expressed concern that the current rules favour HONI in situations where currently unserviced land adjacent to their service territory, and frequently within the boundaries of the municipality that they serve, is developed. Current rules assume that HONI is the incumbent provider and place the onus on the urban distributor to make the case as to why they should assume service of the new territory. Obviously opinions on this issue differ between urban distributors and HONI.

<u>Review of specific regulatory requirements:</u>

A number of specific regulatory requirements were identified as barriers by distributors and stakeholders that were perceived as limiting their ability to pursue a range of opportunities. Excerpts from the specific legislation, regulations or codes are presented in Appendix B.

1. Limitations on distributor activities:

   The limitations on distributor activities included in the Ontario Energy Board Act and Electricity Act were mentioned by some distributors as limiting their ability to pursue shared services. These restrictions were primarily viewed as limiting the ability to provide shared services of the type formerly provided by some PUC's or services such as street lighting or traffic signal maintenance.

2. Affiliate Relationships Code:

   a. Ability to provide services through distributor:

      A number of distributors expressed concerns around the cost and risks associated with the creation of an affiliate. Distributors indicated that they feel they are currently prevented from providing shared services to their municipal shareholder (i.e. water and sewer billing services) unless they had done so prior to the implementation of the Electricity Act. Removing this restriction would enable more distributors to pursue shared services efficiencies without the cost of creating an affiliate company.

Similarly, distributors expressed an interest in being able to provide water and wastewater billing on behalf of municipalities located within their service territory which are not shareholders.

Some distributors now provide water and wastewater or other billing services on behalf of municipalities outside of service territory through their affiliates. Most distributors recognized that an affiliate is required in these circumstances.

b. Clarity around when a service may be offered through a distributor

Shared services may be offered under a range of different conditions and distributors are often unsure of when an affiliate must be used to provide those services.

c. Confidentiality requirements in ARC

The confidentiality requirements in the ARC are viewed as being unnecessarily restrictive for most of the activities carried out by distributor affiliates.

d. Transfer pricing in ARC

A number of distributors indicated that they felt that the transfer pricing requirements in the ARC were unduly restrictive. The transfer pricing provisions essentially require that:

- When purchasing services from an affiliate the distributor should pay no more than the market price if a market exists, and no more than the affiliates fully allocated cost if no market exists.
- When selling to its affiliate, the distributor should charge no less than its fully allocated costs regardless of whether a market exists or not.

Some distributors felt that the requirement to bill an affiliate based on fully allocated costs placed the affiliate at a relative disadvantage relative to what other firms would expect to pay for similar services.

e. Term of contract in ARC

The maximum contract length and processes around the renewal of such contracts were raised by a number of distributors. In some instances, distributors face significant costs to develop the capabilities required for shared services. Limiting the maximum contract term over which such costs can be recovered to 5 years therefore limits the potential value of such investments.

Concerns were also expressed over the terms under which such contracts are renewed. Distributors expressed concern that they are placed at a competitive disadvantage. Since a great deal of information around their costs is public, distributors are concerned that potential competitors could readily underbid their offer for a renewed contract. Clearer rules around this renewal process, including the use of benchmarking as an alternative for establishing a reasonable transfer price could help reduce these concerns.

APPENDIX A: DISTRIBUTORS & STAKEHOLDERS CONSULTED

Distributors	**Meeting Held**
Hydro One Networks Inc.	✓
Toronto Hydro Electric System Ltd.	✓
Powerstream	✓
Hydro Ottawa Inc.	✓
Horizon Utilities Corp.	✓
Enersource	✓
London Hydro	✓
Hydro One Brampton	✓
Veridian	✓
Kitchener Wilmot Hydro Inc.	✓
Canadian Niagara Power (Fortis)	✓
Erie Thames Power Corp.	✓
Collus PowerStream	✓
Ottawa River Power Corp.	✓
Peterborough Distribution Ltd.	✓
Festival Hydro	✓
PUC Distribution Inc.	✓
Kingston	✓
Halton Hills Hydro Inc.	✓
Related Organizations:	
CHEC Group	✓
EDA	✓
Other Stakeholders:	
School Energy Coalition (SEC)	✓
Consumers Council of Canada (CAC)	✓
Association of Major Power Consumers of Ontario (AMPCO)	✓

APPENDIX B: SELECT REGULATORY REQUIREMENTS

Many of the comments regarding potential regulatory changes related to section 71 of the OEB Act and the requirement of the Affiliate Relationships Code (ARC). For convenience, sections 71 and 73 of the OEB Act and excerps from the ARC are presented below.

3.1 Limitations on Distributor Activities:

Electricity Act, 1998 (S.O. 1998, Chapter 15, Schedule A)

Section 144 - "a municipal corporation shall not generate, transmit, distribute or retail electricity, directly or indirectly, except through a corporation incorporated under the *Business Corporations Act* pursuant to section 142. 1998, c. 15, Sched. A, s. 144."

Ontario Energy Board Act, 1998[4]

Section 71 - (1) Subject to subsection 70 (9) and subsection (2) of this section, a transmitter or distributor shall not, except through one or more affiliates, carry on any business activity other than transmitting or distributing electricity. 2004, c. 23, Sched. B, s. 12.

Exception

(2) Subject to section 80 and such rules as may be prescribed by the regulations, a transmitter or distributor may provide services in accordance with section 29.1 of the *Electricity Act, 1998* that would assist the Government of Ontario in achieving its goals in electricity conservation, including services related to,

(a) the promotion of electricity conservation and the efficient use of electricity;

(b) electricity load management; or

(c) the promotion of cleaner energy sources, including alternative energy sources and renewable energy sources. 2004, c. 23, Sched. B, s. 12.

Exception

[4] Ontario Energy Board Act, 1998, consolidated version as of December 31, 2012, accessed via www.e-laws.com

(3) Despite subsection (1), a distributor may own and operate,

(a) a renewable energy generation facility that does not exceed 10 megawatts or such other capacity as may be prescribed by regulation and that meets any criteria that may be prescribed by the regulations;
(b) a generation facility that uses technology that produces power and thermal energy from a single source and that meets any criteria that may be prescribed by the regulations; or
(c) (c) a facility that is an energy storage facility and that meets any criteria that may be prescribed by the regulations. 2009, c. 12, Sched. D, s. 11; 2011, c. 1, Sched. 4, s. 1.

Municipally-owned distributors

73. (1) If one or more municipal corporations own, directly or indirectly, voting securities carrying more than 50 per cent of the voting rights attached to all voting securities of a corporation that is a distributor, the distributor's affiliates shall not carry on any business activity other than the following:

1. Transmitting or distributing electricity.
2. Owning or operating a generation facility that was transferred to the distributor pursuant to Part XI of the *Electricity Act, 1998* or for which the approval of the Board was obtained under section 82 or for which the Board did not issue a notice of review in accordance with section 80.
3. Retailing electricity.
4. Distributing or retailing gas or any other energy product which is carried through pipes or wires to the user.
5. Business activities that develop or enhance the ability of the distributor or any of its affiliates to carry on any of the activities described in paragraph 1, 3 or 4.
6. Business activities the principal purpose of which is to use more effectively the assets of the distributor or an affiliate of the distributor, including providing meter installation and reading services, providing billing services and carrying on activities authorized under section 42 of the *Electricity Act, 1998*.

7. Managing or operating, on behalf of a municipal corporation which owns shares in the distributor, the provision of a public utility as defined in section 1 of the *Public Utilities Act* or sewage services.
8. Renting or selling hot water heaters.
9. Providing services related to the promotion of energy conservation, energy efficiency, load management or the use of cleaner energy sources, including alternative and renewable energy sources. 1998, c. 15, Sched. B, s. 73 (1); 2002, c. 23, s. 4 (9).

Limitation

(2) In acting under paragraph 7 of subsection (1), the distributor's affiliate shall not own or lease any works, pipes or other machinery or equipment used in the manufacture, processing or distribution of a public utility or in the provision of sewage services. 1998, c. 15, Sched. B, s. 73 (2).

Municipal corporation

(3) Subsection (1) does not restrict the activities of a municipal corporation. 1998, c. 15, Sched. B, s. 73 (3).

3.2 Affiliate Relationships Code

The following sections of the Code were raised as potential issues during the consultation. The full Code can be found on the OEB website at:
http://www.ontarioenergyboard.ca/OEB/Industry/Rules+and+Requirements/Rules+Codes+Guidelines+and+Forms

Confidentiality provisions:

2.2.3 A utility shall not share with an affiliate that is an energy service provider employees that are directly involved in collecting, or have access to, confidential information.

2.3.1.1 The term of an Affiliate Contract between a utility and an affiliate shall not exceed five years, unless otherwise approved by the Board.

Transfer Pricing provisions:

Where a market exists:

2.3.3.1 Where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall pay no more than the market price when acquiring that service, product, resource or use of asset from an affiliate.

2.3.3.4 Where the value of a proposed contract over its term exceeds $500,000 or 0.5% of the utility's utility revenue, whichever is greater, a utility shall not award the contract to an affiliate before an independent evaluator retained by the utility has reported to the utility on how the competing bids meet the criteria established by the utility for the competitive bidding process.

2.3.3.6 Where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall charge no less than the greater of (i) the market price of the service, product, resource or use of asset and (ii) the utility's fully-allocated cost to provide service, product, resource or use of asset, when selling that service, product, resource or use of asset to an affiliate. (underlining added).

Where No Market Exists

2.3.4.1 Where it can be established that a reasonably competitive market does not exist for a service, product, resource or use of asset that a utility acquires from an affiliate, the utility shall pay no more than the affiliate's fully-allocated cost to provide that service, product, resource or use of asset. The fully-allocated cost may include a return on the affiliate's invested capital. The return on invested capital shall be no higher than the utility's approved weighted average cost of capital.

2.3.4.2 Where a reasonably competitive market does not exist for a service, product, resource or use of asset that a utility sells to an affiliate, the utility shall charge no less than its fully-allocated cost to provide that service, product, resource or use of asset. The fully-allocated cost shall include a return on the utility's invested capital. The return on invested capital shall be no less than the utility's approved weighted average cost of capital.

2.3.4.3 Where a utility pays a cost-based price for a service, resource, product or use of asset that is obtained from an affiliate, the utility shall obtain from the affiliate, from time to time as required to keep the information current, a detailed breakdown of the affiliate's fully-allocated cost of providing the service, resource, product or use of asset.

2.3.1 Term of Contracts with Affiliates

2.3.1.1 The term of an Affiliate Contract between a utility and an affiliate shall not exceed five years, unless otherwise approved by the Board.

2.3.1.2 Despite section 2.3.1.1, an Affiliate Contract between a utility that is a distributor and an affiliate that is exclusively for the provision of services, products, resources or use of asset related to a qualifying facility, the term of the Affiliate Contract may extend to a maximum of 20 years. Where an Affiliate Contract between a utility that is a distributor and an affiliate is for the provision of services, products, resources or use of asset related to, among other things, a qualifying facility, only that portion of the Affiliate Contract that relates to a qualifying facility may have a term that extends to a maximum of 20 years.

2.2 Providing or Receiving Services, Resources, Products or Use of Asset

Requires business case analysis (unless <100,000 or 0.1% of utility's utility revenue. (section 2.3.2.1)

Where a market exists:

2.3.3.1 Where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall pay no more than the market price when acquiring that service, product, resource or use of asset from an affiliate.

2.3.3.2 A fair and open competitive bidding process shall be used to establish the market price before a utility enters into or renews an Affiliate Contract under which the utility is acquiring a service, product, resource or use of asset from an affiliate.

2.3.3.3 Despite section 2.3.3.2, where satisfactory benchmarking or other evidence of market price is available, a competitive tendering or bidding process is not required to establish the market price for a contract with an annual value of less than $100,000 or 0.1% of the utility's utility revenue, whichever is greater. Where an Affiliate Contract has a term of more than one year, the annual value of the Affiliate Contract shall be determined by dividing the total value of the Affiliate Contract by the number of years in the term.

2.3.3.4 Where the value of a proposed contract over its term exceeds $500,000 or 0.5% of the utility's utility revenue, whichever is greater, a utility shall not award the contract to an affiliate before an independent evaluator retained by the utility has reported to the utility on how the competing bids meet the criteria established by the utility for the competitive bidding process.

2.3.3.5 The Board may, for the purposes of sections 2.3.3.3 and 2.3.3.4, consider more than one Affiliate Contract to be a single Affiliate Contract where they have been entered into for the purpose of setting the contract values at levels below the threshold level set out in section 2.3.3.3 or 2.3.3.4.

2.3.3.6 Where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall charge no less than the greater of (i) the market price of the service, product, resource or use of asset and (ii) the utility's fully-allocated cost to provide service, product, resource or use of asset, when selling that service, product, resource or use of asset to an affiliate.

2.3.4 Where No Market Exists

2.3.4.1 Where it can be established that a reasonably competitive market does not exist for a service, product, resource or use of asset that a utility acquires from an affiliate, the utility shall pay no more than the affiliate's fully-allocated cost to provide that service, product, resource or use of asset. The fully-allocated cost may include a return on the affiliate's invested capital. The return on invested capital shall be no higher than the utility's approved weighted average cost of capital.

2.3.4.2 Where a reasonably competitive market does not exist for a service, product, resource or use of asset that a utility sells to an affiliate, the utility shall charge no less than its fully-allocated cost to provide that service, product, resource or use of asset. The fully-allocated cost shall include a return on the utility's invested capital. The return on invested capital shall be no less than the utility's approved weighted average cost of capital.

2.3.4.3 Where a utility pays a cost-based price for a service, resource, product or use of asset that is obtained from an affiliate, the utility shall obtain from the affiliate, from time to time as required to keep the information current, a detailed breakdown of the affiliate's fully-allocated cost of providing the service, resource, product or use of asset.