

# Retail Council of Canada - Stakeholder Submission

Renewed Regulatory Framework for Electricity

Travis J. Allan Laura Zizzo

Submitted: April 20, 2012

PHONE FAX WEE



Part I:	RETAIL COUNCIL OF CANADA'S VISION AND KEY PRIORITIES	. 3
(a)	The RRFE Process and RCC	. 3
(b)	RCC's Vision	. 4
(c)	RCC's Priorities	. 4
PART II:	BACKGROUND: RCC & THE RETAIL SECTOR	. 7
(a)	RCC	. 7
(b)	Methodology and Approach	. 8
(c)	Retailer Electricity Use	. 9
(d)	Economic Context – The Retail Sector Under Pressure	12
PART III:	Detailed RCC Recommendations	15
(a)	Communication & Smart Grid	15
(b)	Approach to Rate Setting	19
(c)	Performance Standards and Incentives	21
(d)	Period of COS/IRM Review under Partial PBR	25
(e)	Total Bill Mitigation	25
<i>(f)</i>	Integration of Planning	27
(g)	Reliability	30
(h)	Streamlining Regulatory Processes	30
APPENDIX	1 – "ONTARIO'S HYDRO: DEBATE OVER HYDRO OWNERSHIP REIGNITED"	31
APPENDIX	2 – RETAIL ELECTRICITY USE AND IMPLICATIONS OF PROPOSED REGULATORY CHANGES. "PB REPORT"	32



Part I: Retail Council of Canada's Vision and Key Priorities

# (a) The RRFE Process and RCC

The Retail Council of Canada ("RCC") is pleased to participate in the Renewed Regulatory Framework for Electricity consultation process (the "RRFE"). RCC agrees that the issues covered under the RRFE, in addition to the related issue of the correct role of conservation and demand management as a component of efficient network investment planning, will be central to the Ontario Energy Board's (the "Board's") success in meeting its important and challenging mandate to oversee "...the province's electricity and natural gas sectors through effective, fair and transparent regulation and in accordance with the objectives set out in the governing statutory framework."

RCC believes that large and/or sudden price increases for electricity or a retreat from incentives-based regulatory measures designed to promote economically efficient investments in the electricity sector have the potential to seriously undermine the Board's ability to fulfill its mission "[t]o promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at reasonable cost."<sup>2</sup>

Because of the crucial importance of electricity price and quality to the retail trade, RCC looks forward to working proactively to assist the Board in understanding the concerns of Ontario retailers.

#### A Note on Structure

This submission has integrated responses to issues for comment and the framework for discussion raised by the Board in the Staff Discussion Papers,<sup>3</sup> the Straw Man Model Regulatory Framework<sup>4</sup> (the "Straw Man")

Ontario Energy Board "What we Do" <a href="http://www.ontarioenergyboard.ca/OEB/Industry/About+the+OEB/What+We+Do">http://www.ontarioenergyboard.ca/OEB/Industry/About+the+OEB/What+We+Do</a>.

<sup>&</sup>lt;sup>2</sup> Ibid.

Ontario Energy Board. Staff Discussion Paper on Distribution Network Investment Planning. EB 2010-0377, November 8, 2011; Ontario Energy Board. Staff Discussion Paper on Approaches to Mitigation for Electricity Transmitters & Distributors. EB-2010-0378. November 8, 2011; Ontario Energy Board. Staff Discussion Paper on Defining & Measuring Performance of Electricity Transmitters & Distributors. EB-2010-0378. November 8, 2011; Ontario Energy Board. Staff Discussion Paper on the establishment, Implementation and Promotion of a Smart Grid in Ontario; EB-2011-0004. November 8, 2011; and Ontario Energy Board. Staff Discussion Paper on Regulatory Framework for Regional Planning for Electricity Infrastructure. EB-2011-0042. November 8, 2011.



and Attachment A: Issues for Comment to the Board's letter of April 5, 2012<sup>5</sup> throughout. In the latter,<sup>6</sup> the Board asked for RCC's vision and priorities for a sustainable and long-term regulatory regime, which are addressed in the following two subsections.

#### (b) RCC's Vision

RCC envisions a sustainable long-term regulatory regime involving:

- Well-designed economic incentives and prudent planning that keep electricity costs as low as possible
   while maintaining current service levels
- Predictable prices for electricity over multiple years
- Ideally, the maintenance of current prices and, where that is impossible, smooth, predictable rate
  changes with limits on total bill price increases based on the ability of businesses, consumers and the
  economy to tolerate price changes
- Better communication of price projections and of opportunities to reduce electricity use in a language that businesses understand

# (c) RCC's Priorities

The final two questions posed in Attachment A to the Board's April 5, 2012 letter asked about priorities. RCC's priorities are for the Board to create a framework that adequately assesses and grounds decision-making in affordability and efficiency. The following three background points are especially relevant to this position:

In his helpful expert submission to the Board during the RRFE, Mr. Bruce Sharpe of Aegent Energy Advisors Inc. projected dramatic electricity cost increases over a short time that, if left unchecked, are likely to place serious

Attachment A to the February 6, 2012 letter from Kirsten Walli, Board Secretary to All Participants in Consultations EB-2010-0377, EB-2010-0378, EB-2010-0379, EB-2011-0043 and EB-2011-0004; All Licensed Electricity Transmitters and Distributors and; All Other Interested Stakeholders. *Re: Renewed Regulatory Framework for Electricity Update on the Consultation Process Board File Nos.: EB-2010-0377, EB-2010-0378, EB-2010-0379, EB-2011-0043 and EB-2011-0004* (found online at: <a href="http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/RRFE\_strawman\_letter\_20120206.pdf">http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/RRFE\_strawman\_letter\_20120206.pdf</a>).

April 5, 2012 letter from Kirsten Walli, Board Secretary to All Participants in Consultations EB-2010-0377, EB-2010-0378, EB-2010-0379, EB-2011-0043 and EB-2011-0004 Re: Provision for Written Comments by Stakeholders Renewed Regulatory Framework for Electricity Board File Nos.: EB-2010-0377, EB-2010-0378, EB-2010-0379, EB-2011-0043 and EB-2011-0004 (found online at: <a href="http://www.ontarioenergyboard.ca/OEB/">http://www.ontarioenergyboard.ca/OEB/</a> Documents/EB-2010-0377/RRFE\_Written\_Comments\_20120405.pdf).

Referred to from this point forward as "Attachment A to the Board's April 5<sup>th</sup> letter".



strain on the finances of electricity consumers.<sup>7</sup> Based on RCC's expert report on retailer electricity use,<sup>8</sup> these price increases have the potential to seriously harm Ontario's retail sector and undermine public confidence and support for the regulation of electricity in Ontario.

In addition, recent media coverage reports that the provincial government is now actively contemplating removing restrictions on the sale of municipally owned distribution companies. While RCC does not take a position on this contemplated sale, RCC believes that, at a minimum, it will be in the interests of consumers and the province to have strong, economically grounded incentives and planning rules in place for distributors and transmitters in advance of any privatization. Failure to set up a system that more closely resembles a competitive market, especially in the event of a sale or widespread consolidation of distributors, is likely to weaken public confidence in the regulation of electricity in Ontario.

Finally, as discussed in section II(d) below, retailers face severe economic headwinds and are especially vulnerable to large and/or sudden rate increases.

Based on its consultation with members, RCC has the following priorities for the development of the RRFE:

# Communication

- 1. Work with consumer groups and survey consumers to clarify key elements that should be included on electricity bills in Ontario.
- 2. Require the regular creation and wide publication of 1 to 5 year total bill electricity price predictions for various rate classes in a format that is easy for electricity consumers who have limited or no

Bruce Sharp, P. Eng. Aegent Energy Advisors Inc. "Ontario Electricity Price Increase Forecast December 2011 to December 2016" report to RRFE dated March 21, 2012 prepared for Canadian Manufacturers & Exporters ("CME"); Consumers Council of Canada ("CCC"); Federation of Rental-housing Providers of Ontario ("FRPO"); School Energy Coalition ("SEC"); Vulnerable Energy Consumers Coalition ("VECC") [referred to hereafter as the "Aegent Price Forecast" (found online at: <a href="http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/CME\_SUB\_Ontario%20Elec%20Price%20Increase%20Forecast%202012.pdf">http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/CME\_SUB\_Ontario%20Elec%20Price%20Increase%20Forecast%202012.pdf</a>).

See section 2(b) Methodology and Approach, below, for more information on the expert report.

<sup>&</sup>lt;sup>9</sup> J. Spears. "Ontario's hydro: Debate over hydro ownership reignited", Toronto Star (April 16, 2012), Included as Appendix 1.



knowledge of the electricity sector - to understand, so they can make effective, efficient decisions about energy use and efficiency.

- 3. Work with consumer groups and survey consumers to clarify key elements that should be included in communication about energy management opportunities in Ontario.
- 4. Encourage the provision of, or subsidies for standardized customer-centric Behind-the-Meter ("**BTM**") equipment.
- 5. Require utilities to share a consumer's full consumption data with the consumer in real time in a format that the consumer will understand.
- 6. Require utilities to share anonymized consumption data from neighbouring consumers for benchmarking purposes with consumers who are willing to share their own data (also on an anonymized basis).

# Rate Setting

7. Require regular sensitivity studies to understand the economic capacity of residential and business consumers (including those in the retail sector) to absorb year-over-year electricity price increases and price shocks as proposed by Canadian Manufacturers & Exporters ("CME").

#### **Performance Standards and Incentives**

- 8. Adopt a comprehensive performance incentive system that requires distributors to prioritize investment and incentivizes superior investment and performance through comprehensive rate or revenue caps based on external factors, including customer ability to pay and industry productivity.
- 9. If the Board elects to proceed with a PBR system<sup>10</sup> it should measure performance and provide incentives based on on external productivity measures for operation and maintenance ("**O&M**") and capital investment, along with setting lengthened periods between any rebasing to improve productivity gains.

 $<sup>^{10}</sup>$  As defined on p23 of this submission, below.



10. Incorporate strong incentives to evaluate the economic effectiveness of aggressive conservation and demand management as an alternative to new build as a central component investment prioritization.

# **Regional Planning**

- 11. Improve regional planning coordination between all relevant sector participants to avoid inefficient expenditures, while ensuring that consumer representatives have a meaningful opportunity (including participant funding) to test and provide input on plans.
- 12. Set up a clear, systematic regional planning process with well-advertised steps, deadlines and contact points.
- 13. Incorporate strong requirements to evaluate the economic effectiveness of aggressive conservation and demand management as an alternative to new build as a central component of any capital investment driven by electricity demand.

# Mitigation

14. Set a yearly price-ceiling mitigation threshold based on total bill price increases in consultation with consumer groups and in light of the sensitivity study mentioned above to protect business and consumers from damaging electricity price increases and price shocks.

Part II: Background: RCC & the Retail Sector

(a) RCC

RCC is the voice of the retail sector in Canada, representing 80% of retail sales nationally and 43,000 store fronts of all retail formats, including department, specialty, discount, independent stores and online merchants. In 2011, RCC's Grocery Division was established to represent Canada's largest grocery retailers, covering more than 90% of all grocery sales in the country.



RCC is a not-for-profit organization funded by membership, sponsorship fees and revenues that it derives from the services it provides to governments and agencies in furtherance of the retail trade in Canada. As the premier policy voice for retailers across Ontario and Canada, RCC represents the direct interests of Ontario retailers as consumers of electricity. As discussed below, retailers have unique electricity consumption patterns that create particular concerns relating to electricity pricing and supply.

The retail sector employs over 800,000 people in Ontario and is the Province's second largest employer.

Ontario is home to Canada's largest collection of best-in-class retail chain head offices, distribution centres and store locations, vital links for Ontario's economy.

RCC and its members share a goal of developing, designing and delivering conservation activities that reduce retailer energy consumption both within their facilities and among their customer base. In 2009, RCC undertook a Market Characterization Study in partnership with the Ontario Power Authority. The study provided data on retailers' participation in conservation and demand management ("CDM") programs and research on the retail sector's energy conservation needs, opportunities and barriers across the province. RCC has members served by each of Ontario's 80 local distribution companies ("LDCs") and is committed to partnering with each LDC to achieve provincial conservation and demand management targets.

Based on the strong interest of its members in the RRFE, RCC seeks to work with the Board toward ensuring a cost-effective and dependable electricity system that fosters economic growth in Ontario.

# (b) Methodology and Approach

This submission draws on RCC extensive institutional experience working with retailers and outreach to its members. In addition to drawing on years of experience representing the retail sector, RCC contacted its membership in advance of the March 28-30, 2012 Stakeholder Conference to locate retailers in Ontario who

<sup>&</sup>lt;sup>11</sup>Retail Council of Canada "RCC Market Characterization Study FINAL REPORT" (April 22, 2010) (found online at <a href="http://www.retailcouncil.org/training/research/industry/opa\_rcc\_marketcharacterizationstudy.pdf">http://www.retailcouncil.org/training/research/industry/opa\_rcc\_marketcharacterizationstudy.pdf</a>).



have an expressed interest in the issues covered by the RRFE. Members were contacted in writing and given an opportunity to explain their concerns to RCC.

There is limited publically available data on retailer consumption of electricity in Ontario. To effectively represent retailers and provide the Board with valuable advice, RCC identified the need to better understand how retailers consume electricity in Ontario. To that end, RCC retained experts from Parsons Brinckerhoff, Halsall and Loop Initiatives (the "PB Team")<sup>12</sup> to provide a report explaining retailers' electricity use. This interdisciplinary team was chosen to apply findings based on electricity consumption by retailers to the issues and questions posed in the Staff Discussion Papers and Straw Man. The full report prepared by the PB Team, entitled *Retail Electricity Use and Implications of Proposed Regulatory Changes* dated April 3, 2012 (the "PB Report") is attached here as Appendix 2.

Following the March 28-30 Stakeholder Conference, a meeting with selected retailers was held in Toronto to obtain further input. This process provided a valuable opportunity to understand the perspectives of interested retailers, while at the same time making RCC members aware of the matters covered by the RRFE consultation.

#### (c) Retailer Electricity Use

Many retailers, especially small and medium sized retailers, have limited or no understanding of their electricity use profile.<sup>13</sup> However, for those retailers that do, electricity costs and energy management are seen as clear competitiveness issues. Figure 1, taken from the PB Report, shows estimated retailer electricity consumption breakdown by end use and relevant retailer type (general retailer vs. grocer). It shows there are

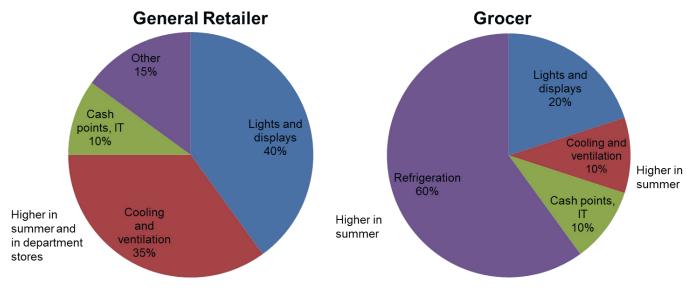
The PB Team includes the following members: Silvian David Stern, P.E. (New York); Doug Webber, P. Eng., LEED AP BD&C (Toronto); Francisca Quinn, M. Sc (Toronto); Philippe Bernier, M.Phil, P.Eng., LEED AP O&M (Toronto); and Eric Chisholm, Certified Energy Manager, LEED AP O&M (Toronto). Together the PB Team has broad technical expertise and experience in the power, energy and retail sectors. More information can be found in Travis Allan's April 18, 2012 Request for Eligibility to Claim Costs for an Expert (found online at <a href="http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/RCC\_expert\_cost\_REQ\_20111216.pdf">http://www.ontarioenergyboard.ca/OEB/\_Documents/EB-2010-0377/RCC\_expert\_cost\_REQ\_20111216.pdf</a>).

<sup>&</sup>lt;sup>13</sup> Parsons Brinkerhoff, Loop Initiatives and Halsall Associates. *Retail Electricity Use and Implications of Proposed Regulatory Changes dated* April 3, 2012 (the "**PB Report**") at pp8-10, attached to this submission at Appendix 2.



distinct profiles for general retailers and grocers and these patterns are reflective for small and large retailers.<sup>14</sup>

Figure 1 – Estimated retailer electricity consumption breakdown by retailer type, by end user



Sources: Loop Initiatives interviews with large retailers. Small retail assumed to be similar (lack of data/analysis).

If retailers use refrigerators or freezers at their retail locations (e.g. grocery stores) refrigeration is usually the largest electricity load component, comprising almost two-thirds of electricity use. If there is no (or very little) refrigeration on-site, the largest load component is lighting and displays, closely followed by cooling and ventilation.<sup>15</sup>

Retailers are very exposed to electricity price fluctuations throughout the day. Many smaller retailers are subject to time of use ("**TOU**") pricing.<sup>16</sup> It is important to note that peak times generally correspond to the times that retailers must use the most electricity (lights, computers, cooling and ventilation must be "on" to make sales). Retailers generally strive to switch off any unneeded electrical equipment during closed hours.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup> *Ibid* at p6.

<sup>15</sup> *Ibid* at p6.

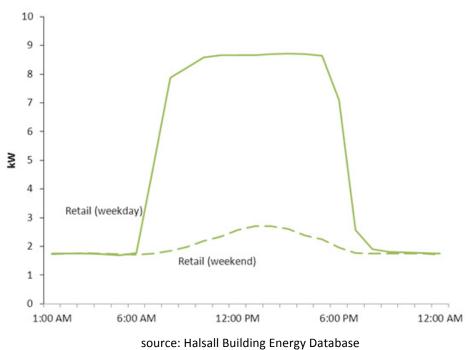
<sup>16</sup> *Ibid* at p10.

<sup>&</sup>lt;sup>17</sup> *Ibid* at p7.



Retailer exposure to TOU is shown in Figure 2 below, which provides the TOU data for 34 sub-metered retailers in a downtown combined office and retail complex<sup>18</sup> (please note that due to the nature of the location, stores sampled here are generally closed on weekends and evenings after 6pm).

Figure 2: Hourly electricity demand in sample of apparel stores



As Figure 2 illustrates, TOU pricing has been particularly hard on retailers. Consultations with retailers conducted by both the PB Team and RCC indicate that it is extremely difficult for retailers to shift consumption to off-peak times or to moderate consumption during peak hours without large capital investments. Retailers told the PB Team and RCC that attempts to reduce electricity consumption through changes to the store environment other than capital investments have a direct negative impact on sales. In all reported instances, a decrease in electricity use through the reduction in air conditioning and/or lighting use resulted in a detectable decrease in sales that eclipsed energy cost savings. It appears shoppers are more likely to leave

<sup>18</sup> Ibid at p7.



stores (and forego making purchases) or go to rival stores if the environment is not a pleasant temperature and fully illuminated. As stated in the PB Report:

One sophisticated Department Store retailer revealed that in its well-documented summer study, where air conditioning and lighting levels were reduced during three separate hours to save power, reductions created a knock-on impact of a drop in sales that more than offset any electricity savings generated. "Who wants to shop in a dark and hot department store when the mall outside is bright and cool". <sup>19</sup>

An additional concern for many retailers is their legal status as tenants. Some retailers are in multi-year leases with landlords that assign them a share of utility costs that is not correlated to their actual electricity use.

Others who do pay based on their use may have limited or no control over lighting and climate control (since those services are provided by landlords) and thus have limited power to affect their electricity consumption and bills.

As a result of these factors, retailers are highly vulnerable to increased electricity costs, particularly when they occur quickly and/or without adequate communication in a language retailers understand. While some retailers, particularly large retailers, have found ways to reduce electricity use, these opportunities require significant time, funding, expertise and a solid business case backed by a meaningful understanding of future electricity prices. Because they have even fewer resources to devote to energy management, small and medium sized retailers are even more vulnerable to dramatic electricity price changes, particularly in the current economic context.

#### (d) Economic Context – The Retail Sector Under Pressure

Ontario retailers of all sizes and varieties are dependent on electricity to operate, remain competitive and provide jobs and economic activity. RCC must emphasize, however, that changes to the electricity sector are not occurring in a vacuum. The retail sector has faced dramatic economic shocks in recent years and retail profit margins are, in general, razor thin. As explained in this section, there is strong reason to believe that dramatic increases in electricity prices will cause substantial harm to the retail sector and employment in

Retail Council of Canada - Stakeholder Submissior

<sup>19</sup> Ibid at p9.



Ontario. As a result, retailers, their employees and the communities they serve have an important stake in issues relating to the appropriate pricing and dependable supply of electricity in Ontario.

There are a number of factors that affect retailer tolerance for electricity rate hikes. These include recent increases in the minimum wage in Ontario, rising costs associated with higher fuel prices and expanded exemptions on cross-border shopping limits. Together, these factors put intense pressure on retailers' already thin profit margins and make them highly susceptible to drastic and/or rapid increases in operating costs. Additionally, each year, new retailers, both domestic and international, expand their operations in the Ontario marketplace, creating new jobs and economic activity in the province. The cost of electricity is closely evaluated as a key component in the decision making process when retailers consider where to expand. Therefore, the competitiveness of electricity rates vis-à-vis other Canadian jurisdictions is important in the retail sector.

As consumers, retailers react to total bill increases that they experience. Total bill cost predictability is vital for retailers to make appropriate capital expenditures and staff training/hiring decisions. <sup>21</sup> To illustrate this point, the PB team compared electricity costs of various retail categories to the cost of a full-time employee, normalized to a small 1,500 square foot retail outlet. The results are communicated in Table 1 below. Please note that the PB Team used limited data from an office building shopping concourse that did not have a grocery outlet, therefore we do not have similar data to compare the grocery sector, but anticipate the results would be similar or even greater than the "Coffee/Drink/Snack" category because of the grocery sector's reliance on refrigeration.

<sup>&</sup>lt;sup>20</sup> In Staff Discussion Paper on Approaches to Mitigation for Electricity Transmitters and Distributors. November 8, 2011. EB 2010-0378, the Board asks about economic considerations that should be considered in a mitigation framework (pp29-30).

<sup>&</sup>lt;sup>21</sup> PB Report, *supra* note 13 at p17.



Table 1 Typical annual electricity use and cost, normalized to a 1,500 ft<sup>2</sup> shop, by retail category<sup>22</sup>

Retail Category	Annual Electricity Use (kWh)	Estimated Annual Cost (\$)	Equivalent to Full-time Employee Cost		
Apparel	356,620	3,562	17%		
Coffee/Drink/Snack	171,596	17,160	83%		
Convenience	41,182	4,118	20%		
General Retail	34,518	3,452	17%		
Photo/Printing	34,896	3,490	17%		

Retailers have consistently reported that, when faced with dramatic increases in operating costs, it is impossible to maintain profit margins in the short term via increases profits from sales. In a retail market as competitive as Ontario's, if price increases such as those predicted in the Aegent Price Forecast are permitted, retailers will need to offset them by decreasing operating costs. This means there is a strong risk that increases in the cost of electricity will force retailers to reduce the number of full and part time staff working in their stores.

The PB Report communicated the following key points:

- Electricity is key to retailer success<sup>23</sup>
- Electricity costs are a significant component of retailers' business costs (at least 1% of operating budget)<sup>24</sup>
- Increases in electricity costs, such as those predicted in the Aegent model,<sup>25</sup> will have a dramatic,
   negative impact on retailer financial health and must be mitigated and controlled<sup>26</sup>
- Retailers do not generally require increases to current service levels; doing so would not justify increased rates<sup>27</sup>
- Retailers have limited options to respond to price shocks through behaviour change<sup>28</sup>

<sup>&</sup>lt;sup>22</sup> *Ibid* at p8.

<sup>23</sup> Ibid.

<sup>24</sup> Ihid

Aegent Price Forecast, *supra* note 7.

<sup>&</sup>lt;sup>26</sup> PB Report s*upra* note 13 at pp8-9.

<sup>27</sup> Ibid at p13.



- Sudden price increases can have a dramatic, negative impact on the financial health of retailers and do not result in "positive" conservation incentives because they cannot be responded to effectively<sup>29</sup>
- Retailers are very concerned with the efficient use of rates<sup>30</sup>
- Regardless of mitigation, retailers want utilities to demonstrate the economic efficiency and technical necessity of proposed investments<sup>31</sup>

Part III: Detailed RCC Recommendations

(a) Communication & Smart Grid

Retailers have strongly expressed their desire for better communication related to electricity use, investments and pricing. All of which can and should be improved through this RRFE consultation as a key component of improved customer service and engagement. Retailers want to be heard and to feel that their needs are being considered in decision-making. Customer-facing programs need to be better designed and communicated to effectively reach the desired target audience. To ensure the efficient use of resources, it is vital to get industry input on program design and implementation. Utilities should keep in mind that different economic sectors have distinct consumption profiles, exposure to electricity price fluctuations and background knowledge of electricity issues. Major customer groups should be consulted when designing these programs for maximum effectiveness.

# **Understanding Bills**

Retailers want clear, simple bills. They want to better understand bills and usage. They also want to understand which risks and opportunities can impact their bills.

The PB Report notes that retailers professed a lack of understanding regarding their electricity bills.

<sup>28</sup> Ibid at p9.

<sup>&</sup>lt;sup>29</sup> *Ibid* at pp8-10.

<sup>30</sup> *Ibid* at pp9-10.

<sup>&</sup>lt;sup>31</sup> *Ibid* at p23.



An opportunity exists to better "decode" bills to improve comprehension and ability to mitigate costs through information about electricity management. The Global Adjustment Rate was particularly confusing to some retailers; better explanation of what the Global Adjustment Rate is would be welcome.<sup>32</sup>

As explained above and in the PB Report, electricity costs are linked to profitability. Retailers have a legitimate interest in better understanding their bills and proposed bill changes, price fluctuations and mitigation options. However, they are generally frustrated with the level of communication from electricity providers and customer-facing entities.

**Detailed recommendation:** work with consumer groups and survey consumers to clarify key elements that should be included on electricity bills in Ontario.

# **Electricity Prices**

Because many retailers are particularly exposed to TOU pricing and because they have had very limited success with attempts to reduce electricity consumption without capital investment, retailers require clear, understandable price forecasts for their total bill over multiple years. This is the only source of information that will allow them to adequately investigate and plan out the capital investments necessary to thrive in light of increasing electricity costs. It is important to note that retailers can respond to price ranges, so pinpoint predictions are not necessarily required. As noted by CME, such a forecast should include at least 3 rate categories. This should include large consumers, residential consumers and customers that fall in between, particularly since this latter group, which includes many retailers, is prevented from accessing the Ontario Clean Energy Benefit and the reduced GA charge available to Class A Large Volume Consumers.<sup>33</sup>

**Detailed recommendation:** require the regular creation and wide publication of 1 to 5 year total bill electricity price predictions for various rate classes in a format that is easy for electricity consumers who have limited or no knowledge of the electricity sector - to understand, so they can make effective, efficient decisions about energy use and efficiency.

<sup>&</sup>lt;sup>33</sup> December 2, 2011 letter from Peter Thompson to the Board on behalf of Canadian Manufacturers & Exporters (found online at http://www.ontarioenergyboard.ca/OEB/ Documents/EB-2010-0377/CME Letter%20to%20Board%20Staff.pdf) at p2.



# **Understanding Energy Management Opportunities**

Energy management is outside the scope of most retailers' core competencies. Unless a retailer is a large chain with dedicated staff to address energy issues, it generally does not have the capacity to seek out information or to understand overly technical messages. To be effective, communications must be translated into simple and accessible language for industry. For instance, better communication of CDM and other programs that could help retailers reduce exposure to rate spikes should be prioritized.<sup>34</sup> Additionally, and as identified in the Staff Paper, increased and more centralized education on electricity use is required to better engage customers and encourage system efficiency and robustness.<sup>35</sup>

• **Detailed recommendation:** work with consumer groups and survey consumers to clarify key elements that should be included in communication about energy management opportunities in Ontario.

#### Smart Grid: Behind-the-Meter

Investments to support the implementation of the smart grid must keep the customer in mind, and should facilitate communication with and energy-literacy of the customer. To encourage better involvement of retailers going forward, all smart grid investments should have a customer focus. This supports the main policy objective communicated through the Minister's Directive of November 23, 2010 that the smart grid should provide benefits to electricity consumers.<sup>36</sup>

To date, those retailers that are aware of having smart meters have expressed frustration at their inability to access electricity consumption data in a timely fashion and often have to revert to privately purchased equipment to gain a better understanding of their energy profile, which is a large barrier to energy awareness and energy use reduction. Any investments in smart grid technologies going forward should ensure increased accessibility of timely usage information to the customer.

This is alluded to in: Ontario Energy Board. "Staff Discussion Paper in regard to the Establishment, Implementation and Promotion of a Smart Grid in Ontario. EB-2011-0004. November 8, 2011.

<sup>35</sup> Ibid.

<sup>36</sup> Ihid



BTM displays must, at a minimum, show real-time usage and real-time cost data. Retailers see value in the ability to benchmark energy use with various locations and surrounding outlets. Retailers told us that data output standardization from smart meters is important. This will allow for greater economies of scale when purchasing BTM systems and afford customers the flexibility to purchase tools that help them save money. RCC suggests the Board explore subsidies for BTM devices if a business case can be made that they will assist customers in achieving cost-savings and engage or promote customer-focused campaigns to understand usage data and respond to price signals. There are examples of utilities in the United States that have gathered BTM information, linked to cost savings with positive effects.<sup>37</sup>

Detailed recommendation: encourage the provision of, or subsidies for standardized customer-centric
 BTM equipment.

#### **Increased Coordination**

The Board has identified the importance of attempting regional consistency, coordinated response and interoperability through the smart use of standard setting.<sup>38</sup> The need for greater regional consistency and increased coordination goes beyond smart grid investments to the entire regulatory framework. Retailers often have outlets in various jurisdictions and have to deal with multiple LDCs and customer-facing entities. Retailers greatly desire (and the Board should facilitate) increased standardization, centralization and coordination of communication about key issues to protect the customer from a confusing barrage of disjointed and potentially inconsistent information. Additionally, programs should be communicated with a clear business case to receive warranted attention.

#### **Data Sharing**

Lastly, economic and cost benefits from smart metering should be visibly passed down to the customer. The PB Team could not determine whether the benefits from smart metering (such as reduced labour in meter

<sup>&</sup>lt;sup>37</sup> For example, Southern California Edison has gathered extensive information and made it publically available through its website: <a href="www.sce.com">www.sce.com</a>. Edison has a specific site aimed at helping businesses address high electricity bills linked to metered data. For more information see: <a href="http://www.sce.com/business/highbill/default.htm">http://www.sce.com/business/highbill/default.htm</a>.

<sup>&</sup>lt;sup>88</sup> "Staff Discussion Paper in regard to the Establishment, Implementation and Promotion of a Smart Grid in Ontario", supra note 34 at pp9-10, 17.



reading) are being passed on to consumers in the form of lower rates<sup>39</sup> and RCC would like to know that this is being done. The Staff Paper on Smart Grid specifically asks about ownership of customer data and access to meter data.<sup>40</sup> As mentioned above,<sup>41</sup> retailers are concerned about sharing this data, as energy management is increasingly becoming a competitive advantage. However, RCC members have consistently stated that they would be more willing to share data if there were clear benefits flowing to them. Therefore, in order provide their customer data freely, retailers will expect benefits from the collection and response to such data.

- **Detailed recommendation:** require utilities to share a consumer's full consumption data with the consumer in real time in a format that the consumer will understand.
- **Detailed recommendation**: require utilities to share anonymized consumption data from neighbouring consumers for benchmarking purposes with consumers who are willing to share their own data (also on an anonymized basis).

# (b) Approach to Rate Setting

As discussed above, RCC supports the proposal of CME to create a forecasting model that can be regularly updated and used to provide evidence that should be considered to assess affordability and sustainability of electricity price changes.<sup>42</sup> This includes collecting data through an agreed upon survey of customers to collect data on customer tolerance for price increases.

The electricity system does not exist in an economic vacuum. Decisions must be made within the context of the broader economy. A failure to do so could lead to significant economic and political disruption, severely limiting the ability of the Board to fulfill its mandate with respect to reliability and cost-control for customers. It is most appropriate to balance electricity rates with the broader economy explicitly and transparently, rather than taking these vital factors into account implicitly.

<sup>&</sup>lt;sup>39</sup>PB Report, *supra* note 13 at p18.

<sup>40</sup> Staff Discussion Paper in regard to the Establishment, Implementation and Promotion of a Smart Grid in Ontario *supra* note 34 at p45-47.

<sup>41</sup> See section II(c) above

<sup>&</sup>lt;sup>42</sup> December 2, 2011 letter from Peter Thompson, *supra* note 33.



Being explicit about customer tolerance for price increases will help regulated entities prioritize and plan investments. This approach most closely resembles a competitive market: in competitive markets, companies are very aware of trends in demand and consumer tolerance and factor these considerations into their pricing accordingly.

Detailed recommendation: require regular sensitivity studies to understand the economic capacity of
residential and business consumers (including those in the retail sector) to absorb year-over-year
electricity price increases and price shocks as proposed by CME.

RCC supports steps that will ensure that critical peak pricing is developed, so long as it is very well explained to consumers in advance and consumers are consulted on how long they will need to adapt to such a change. This will allow for a discussion/exploration of ways to reduce demand on consumers (thereby also likely reducing the need for new build based on peak demand). Understanding of Conservation and Demand Management is still in its infancy. RCC's experts indicated that many important conservation techniques, such as putting doors on refrigerators and reducing lighting/cooling are difficult to adopt because of entrenched consumer preference. Changing these preferences will require significant informational campaigns that will take time. Sudden price increases will not adequately incent these kinds of changes.

#### **Increased Options for Retailers with Multiple Store Locations**

In the Staff Paper on Approaches to Mitigation, the Board stated it is willing to look at the whole rate-setting framework.<sup>43</sup> This includes definitions of rate-classes and customer choice. Customer choice and control over purchasing of electricity should be encouraged. Some retailers significant electricity consumption spread over multiple locations have expressed an interest in purchasing electricity as large consumers, rather than being subject to the more restrictive rates for small and medium consumers. For many retailers with stores across Ontario, this is not currently possible: even though a retailer may consume more than enough electricity to be considered a "large user" in aggregate, its individual locations are below the threshold. The Board should

Retail Council of Canada - Stakeholder Submission

<sup>&</sup>lt;sup>43</sup> "Staff Discussion Paper on Approaches to Mitigation for Electricity Transmitters and Distributors." supra note 20 at p7.



consider the ability of corporate entities with multiple locations across jurisdictions to purchase power in bulk directly from the Independent Electricity Systems Operator (or future equivalent body).

#### (c) Performance Standards and Incentives

# **Recommendations for a Comprehensive Performance Incentive System**

Customers need distributors to be as efficient as possible in O&M and capital prioritization and building. RCC believes in the ability of regulated entities to make efficient decisions if faced with the right incentive structure. The current structure, however, does not properly incent distributors.

Regulated entities will have an incentive to adopt the most efficient means of delivering required services if their allowed rates or revenues are set externally and are comprehensive, meaning that they cover both O&M and capital expenditures. An external capital envelope will also incent distributors to prioritize investments based on what "must" be built, vs. what would be "nice" to build. A distributor with a clear capital envelope and the certainty of a multi-year incentive period (over which to obtain gains from its investments) is likely to be in the best position to decide on investment prioritization.

Adopting a comprehensive incentive-based system is all the more urgent in the context of potential ownership changes in the electricity distribution sector<sup>44</sup> and should not be delayed. If distributors are sold under a sub-optimal incentive framework, it may dramatically increase the difficulty of converting to a more efficient framework at a later date.

RCC is very supportive of the Board's efforts to move to a more efficient system. Because of Ontario's large number of distributors and the limited capacity of the Board to adjudicate rates, returning to a system involving frequent cost of service ("COS") reviews, as proposed by some participants at the Stakeholder Conference, will not further economic efficiency or protect consumers. It is extremely challenging to asses the

1/

<sup>&</sup>lt;sup>44</sup> See "Ontario's hydro: Debate over hydro ownership reignited" *supra* note 9.



economic efficiency of a utility's operations in COS reviews, even under ideal conditions, because of the problems inherent in understanding a complex business from limited documentary evidence. Under time pressure and with varying levels of information quality provided, the chances for effective regulation using COS are extremely slim.

#### Furthermore, COS reviews

- Reduce incentives to find operational and investment efficiencies
- Work at counter-purposes to attempts to reduce the amount of time and money regulated entities
   spend on regulatory hearings and applications
- Create incentives to ask for as many investments as possible, as immediately as possible, inhibiting
  effective prioritization of investments

Until comprehensive performance incentives are applied, regulated utilities will be handcuffed in their ability to find the best cost saving opportunities, which are likely to be distributor specific and may come from a combination of changes to management or investment in new, efficiency-driven capital.

RCC supports comprehensive regulation that provides incentives for distributors to provide service at the lowest cost possible, considering both O&M and capital costs. External data should be used to set a limit on the amount distributors may earn, via indexed rate caps or indexed revenue caps. Such a system would encourage distributors to operate more efficiently.<sup>45</sup> It would have the additional benefit of encouraging appropriate prioritization of capital investments, if paired with appropriate minimum performance standards. Of great importance to consumers, it could also be set to explicitly consider caps based on consumer tolerance for electricity prices, requiring utilities to keep this important upper limit on rates in mind when planning investments.

Retail Council of Canada - Stakeholder Submission

These tools are discussed by Lawrence Kaufmann in "Defining, Measuring and Evaluating the Performance of Ontario Electricity Networks: a Concept Paper" April 2011 found at <a href="http://www.ontarioenergyboard.ca/OEB/">http://www.ontarioenergyboard.ca/OEB/</a> Documents/EB-2010-0379/EB-2010-0379 PEG Concept Report to OEB.pdf at p. 9.



A comprehensive benchmarking plan could also provide appropriate incentives; however it appears that such a plan would lead to fairly large design, implementation and oversight costs. <sup>46</sup> Given the large number of distributors in Ontario, a simpler system based on indexed rate caps or indexed revenue caps, is preferable.

# **Earnings-Sharing Mechanism**

A comprehensive performance incentive system should be paired with an Earnings-Sharing Mechanism ("ESM") as a guard against windfall profits. While an ESM is "not inherently" an incentive regulation mechanism,<sup>47</sup> it should come into effect at a pre-set profit level (based on consultations with industry, economic experts and customers). This would have the effect of limiting the ESM's drag effect on productivity (because it would not apply except in cases of large profits), while ensuring that a particularly successful efficiency campaign (for example after the sale of an underperforming utility) does not jeopardize public confidence in Ontario's electricity regulation framework and leads to immediate benefit for consumers.

Detailed recommendation: adopt a comprehensive performance incentive system that requires
distributors to prioritize investment and incentivizes superior investment and performance through
comprehensive rate or revenue caps based on external factors, including customer ability to pay and
industry productivity.

# The Proposed Straw Man Approach to Rate Setting (PBR)

The Performance Standards and Incentives and Approach to Rate Setting rows in the Straw Man (the "PBR System") represent an improvement over the current COS/IRM system, but they do not go far enough toward incorporating comprehensive incentive regulation for distributors.

Rather than retaining experts to assess utility plans and to audit utility planning processes, the Board should focus on setting an appropriate comprehensive incentive-based system for regular distributor costs (including the repair and replacement of already-existing and planned capital equipment) and limit assessment of

<sup>&</sup>lt;sup>46</sup> *Ibid* at p. 11.

<sup>&</sup>lt;sup>47</sup> *Ibid* at p. 10.



distributors to extraordinary capital requirements, such as new investments required by regulation (if they impact only a few distributors, and are not easily reflected in the comprehensive incentive regulatory framework).

If the Board chooses to proceed with a PBR system, then it is appropriate to create an incentive structure that relies on external total cost benchmarking and total factor productivity ("TFP") to determine incentives for utilities. An increase in the use of COS review, as proposed by some participants at the Stakeholder Conference, would provide improper incentives to distributors, would increase amounts spent on regulatory hearings and would not be in the best interest of consumers. More frequent COS review would also work at counter purposes to more efficient network planning and prioritization because it would not require utilities to operate within an externally grounded capital envelope.

The PB Report indicates that in a partial incentive regulation system there is a risk that applicants may, in some cases, shift investment between reliability, capacity and network to be able to more easily pass costs onto customers. 48 This suggests a more efficient, comprehensive incentives-based approach to allocating capital may be required.

**Detailed recommendation**: if the Board elects to proceed with a PBR system it should measure performance and provide incentives based on external productivity measures for O&M and capital investment, along with setting lengthened periods between any rebasing to improve productivity gains.

In cases where investments are proposed to service future load, there should be incentives to further encourage CDM that are equal to or greater than incentives associated with new build, otherwise, LDCs have a perverse disincentive to forgo the lowest hanging fruit.

<sup>&</sup>lt;sup>48</sup> PB Report, *supra* note 13 at p27.



 Detailed recommendation: incorporate strong incentives to evaluate the economic effectiveness of aggressive conservation and demand management as an alternative to new build as a central component investment prioritization.

# (d) Period of COS/IRM Review under Partial PBR

Although a comprehensive incentive based system (as discussed in Section III(c) above) is preferable, in the event that the Board elects to proceed with PBR, it is appropriate to extend the period of COS/IRM review to conform to a utility's investment plan, as approved. In this case, the Board should set a minimum period between COS/IRM reviews to increase the potential for efficiency and cost savings.

Under such a system, capital investment should be made based on pre-approved multi-year capital plans. A "bottom down" envelope that encourages and considers general industry productivity and economic conditions should be used.

#### (e) Total Bill Mitigation

In the retail sector, operating costs can make or break a company's profitability and survival. Electricity represents a significant operating cost for most retailers and can have an important effect on profitability.<sup>49</sup> As a result, significant and/or rapid increases in electricity costs may force retailers to reduce other operating costs, such as employment.<sup>50</sup> It is RCC's position that all possible steps should be taken to avoid electricity price increases because of the risk such increases pose to Ontario's economy.

To the extent that prices must rise (for example because of investments related to increased renewable energy generation or equipment that has reached the end of its usable life and is inefficient or unsafe to operate) increases in prices should be governed by consumers' capacity to pay. In situations of unavoidable price increases, retailers require better information about cost projections over time. Price certainty for consumers should be a keystone of this regulated sector, which provides extremely healthy returns on capital

<sup>&</sup>lt;sup>49</sup> See section II(c) and II(d) above.

<sup>&</sup>lt;sup>50</sup> See section II(d) above.



to regulated participants. The regulated nature of the sector provides the ideal environment to mandate such certainty over time through rate or revenue caps based on consumer capacity to pay and mitigation tools, among others. It bears repeating that the basis for cost predictability is not just preserving jobs, it is also providing businesses the opportunity to effectively invest in capital and training that will allow them to meaningfully reduce their electricity use, which requires predictable price ranges to develop a business case for new investment.

# **Predictability**

Retailers have low tolerance for rate shocks. Dramatic rate increases can affect profitability and employment. <sup>51</sup> Rate shocks should be avoided by requiring regulated sector participants to prioritize investments within fixed capital envelopes. In situations where sudden large rate increases are possible and cannot be avoided, they must be smoothed (ex-ante and ex-post if necessary) via mitigation tools. This supports the primary objectives of the Board, as evidenced in previous Board decisions, to protect the interest of consumers with respect to prices and the reliability and quality of electricity service. <sup>52</sup>

#### **Mitigation: Tools to Manage Cost Increases**

RCC acknowledges that Ontario's regulatory framework for electricity is complicated and that an electricity bill has a significant generation component, in addition to transmission and distribution components.<sup>53</sup> While this may be the case, for most consumers, the total bill price is all that matters to the bottom-line. As such, if the RRFE is to "protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service" mitigation must be based on the total bill paid by consumers.

<sup>&</sup>lt;sup>51</sup> See section II(d) above.

<sup>52 &</sup>quot;Staff Discussion Paper on Approaches to Mitigation for Electricity Transmitters and Distributors." supra note 20 at pp21-22.

<sup>53</sup> Ihid



The mitigation trigger should be a yearly price increase ceiling that will assist customers in having some price predictability. This ceiling should be developed based on the economic capacity of consumers to pay for increases.

Detailed recommendation: Set a yearly price-ceiling mitigation threshold based on total bill price
increases in consultation with consumer groups and in light of the sensitivity study mentioned
above that protects business and consumers from damaging electricity price increases and price
shocks.

A note of caution: mitigation should be a tool to avoid rate shock, not one to hide inappropriate investment. As alluded to in the Staff Paper on mitigation, mitigation cannot be used as a tool to "lull" ratepayers into accepting excess investment or inefficient investments because they are inappropriately hidden by mitigation policies. <sup>54</sup> Mitigation should be seen as a an important secondary tool to support the important role of an effectively designed comprehensive incentive regulation system discussed above, not as a substitute for creating more cost certainty by fixing capital envelopes based on industry productivity and consumer ability to pay.

Additionally, mitigation should take into account the particular situation of those consumers who cannot easily shift their demand to non-peak times. Regulated entities should provide special incentives for CDM to assist those consumers, many of whom are small businesses who cannot take advantage of the Ontario Clean Energy Benefit or the Class A Large Volume Customer benefits relating to the GA.

# (f) Integration of Planning

There is an obvious need for better planning at various levels in the electricity sector. The PB Team has indicated they believe increased harmonization of planning and data sharing will increase efficiency as "the larger the planning study, the more accurate is the load growth forecast, and consequently the better the

<sup>54</sup> Ibid.



decision making."<sup>55</sup> The PB Report goes on to say that improved data sharing for a larger-area planning study, and more coordinated planning effort, as presented by the RRFE, should resolve many of the historical complaints about questionable reliability of plans.<sup>56</sup>

RCC supports regional planning but has the following concerns:

- One of the risks of long term planning is that agencies become wedded to their plan, such that the "tail wags the dog". For example: if significant funds are expended in anticipation of growth in a particular area, inefficient steps may continue to be taken even if the anticipated growth does not appear for fear of losing sunk costs. This can lead to inefficient development and overbuild. As such, regional planning should be a continuous exercise that takes into account accurate and up-to-date growth modeling.
- Formal opportunities with intervener funding, where customers can review and submit comments on long-term plans, are required. In particular, customer groups want to be able to test plans for:
  - Economic efficiency
  - Correct growth assumptions
  - Evaluation and consideration of all cost-effective alternatives, including aggressive CDM
- Likewise, if the first-come-first-serve principle is abandoned in favour of greater pooling for some network assets, it is important that strong measures are in place to ensure that network investments are being planned and made efficiently. Otherwise, RCC believes there are significant risks of overbuild as costs are transferred from individual regulated utilities or customers to pooled network utilities and all customers.

In response to the issues for comment posed in Attachment A of the Board's April 5<sup>th</sup> letter, RCC submits that optimized planning requires a sector-wide approach to investment decisions. It is necessary to consider the interconnected nature of the grid and overall impact of investment decisions to customers through the whole

 $<sup>^{55}</sup>$  PB Report supra note 13 at p 20.

<sup>&</sup>lt;sup>56</sup> *Ibid* at p 21.



process – from the first stages of planning through to enforcement actions (if any). This must consider ways of maximizing efficiencies and preventing unnecessary overbuild. Consumers must be integrated into the planning process; they should not be an afterthought. One important way to do this is to create a systematic framework for integrated regional planning that keeps all stakeholders aware of steps and deadlines (as opposed to an ad-hoc method that may miss out on key stakeholder input).

Demand should not be assumed without consultation with consumers and attempts to uncover ways to reduce demand through CDM activities. This corresponds with the Board's mission to promote a sustainable and efficient energy sector. Consumers should have increased choice and franchise in the process. It is important that municipalities and other third parties be involved in regional planning as well. Relevant stakeholders must be "on board" to ensure efficiencies in the system. Much time can be saved by early consultation and engagement with relevant actors. Problems and concerns can be voiced early and facilitate efficient use of resources. This will decrease the likelihood of delays in the process based on stakeholder objections down the road. RCC supports, for example the heavy involvement of a municipality from the beginning of project planning if transmission lines need to go through its territory to facilitate the most effective, efficient and fair use of resources. A systematic regional planning process with clear deadlines and contact points would provide an ideal framework so that all municipal and other stakeholders know when and how to submit updated growth information.

- Detailed recommendation: improve regional planning coordination between all relevant sector
  participants to avoid inefficient expenditures, while ensuring that consumer representatives have a
  meaningful opportunity (including participant funding) to test and provide input on plans.
- **Detailed recommendation:** set up a clear, systematic regional planning process with well-advertised steps, deadlines and contact points.

<sup>&</sup>lt;sup>57</sup> Supra note 1.



Detailed recommendation: incorporate strong requirements to evaluate the economic
effectiveness of aggressive conservation and demand management as an alternative to new build
as a central component of any capital investment driven by electricity demand.

# (g) Reliability

Reliability of electricity supply is crucially important to retailers but must be balanced with cost control.

Retailers require a safe and reliable electricity supply to keep products fresh and prevent spoilage, to process payments and to ensure security systems are working correctly. These services are vital to ensuring that stores remain pleasant places for customers to spend time and money.<sup>58</sup>

Reliability matters, but retailers have been very clear that current service levels are generally satisfactory and improving reliability above current service levels should not be used as a basis for increasing rates.<sup>59</sup>

# (h) Streamlining Regulatory Processes

Distributors' groups raised the issue of regulatory overlap on numerous occasions. RCC is sympathetic to arguments for reducing O&M costs through harmonizing regulatory reporting requirements so long as the Board and consumer groups are still provided with the information they need to ensure the prudence of capital investments and the efficient use of rates. Reforms to the treatment of capital and incentives based on comprehensive rate or revenue caps could provide an ideal opportunity to reduce and streamline regulatory filings. However, since limited examples of overlapping data requirements were provided during the Stakeholder Conference, RCC looks forward to examining specific instances of data being collected twice or data being collected that is not necessary from a consumer or regulator's perspective.

 $<sup>^{58}</sup>$  PB Report supra note 13 at p12.

<sup>59</sup> Ihid



# Appendix 1 – "Ontario's hydro: Debate over hydro ownership reignited"

J. Spears. "Ontario's hydro: Debate over hydro ownership reignited", Toronto Star (April 16, 2012)



# Appendix 2 – Retail Electricity Use and Implications of Proposed Regulatory Changes. "PB Report"

Submission to Retail Council of Canada:

Feedback on Ontario Energy Board Consultation on a Renewed Regulatory Framework for Electricity

April 3, 2012

By Parsons Brinkerhoff, Loop Initiatives and Halsall Associates