



ADDRESSING AFFORDABILITY

JANUARY 30, 2017



INTRODUCTION

Transitioning from a Crown corporation to a publically traded company, the focus at Hydro One is on continuous improvement of all aspects of the business. While customer service is paramount at Hydro One, these improvements also include finding ways to drive further efficiencies in the utilization of transmission and distribution assets, reducing costs and improving reliability. This focus will invariably deliver value to customers, employees, communities and shareholders alike. There are, however, broader issues related to the affordability of electricity which need to be addressed in order to fully realize the benefits of this transition.

We know our customers are struggling; we have been visiting communities across the province and listening to their concerns face-to-face. As a Company that maintains a direct relationship with over 25% of electricity customers in Ontario, Hydro One continues to witness firsthand the effects of rising electricity rates. Initially, these concerns were predominately high bill complaints that were resolved by providing explanations and education. Today, an unfortunate trend has developed where electricity charges have exceeded customers' means of payment, and explanations and education cannot resolve issues of affordability. This is especially apparent within Hydro One's customer base wherein rural and Northern residential, including First Nations, customers and small businesses consume electricity at proportionally higher rates than in urban environments and, in many cases, use electricity for heating. Unfortunately, after exhausting all options, the Company is often required by regulation to make the difficult decision

to disconnect service. This "final" conclusion, however, is not final for Hydro One, as we must continue to adapt our business, and advocate for our customers until all have access to programs and rates that make our essential service affordable.

The most obvious sign of our commitment to serve and advocate for our customers was the introduction of our Winter Relief Program. Winter Relief got the lights back on in time for winter for those who had been disconnected. Our focus now turns towards determining what it would take to keep the lights on for those customers – in a sustainable and affordable manner. For these reasons, the Government of Ontario's intention to take bold measures to bring rate relief to our customers is highly supported by Hydro One.

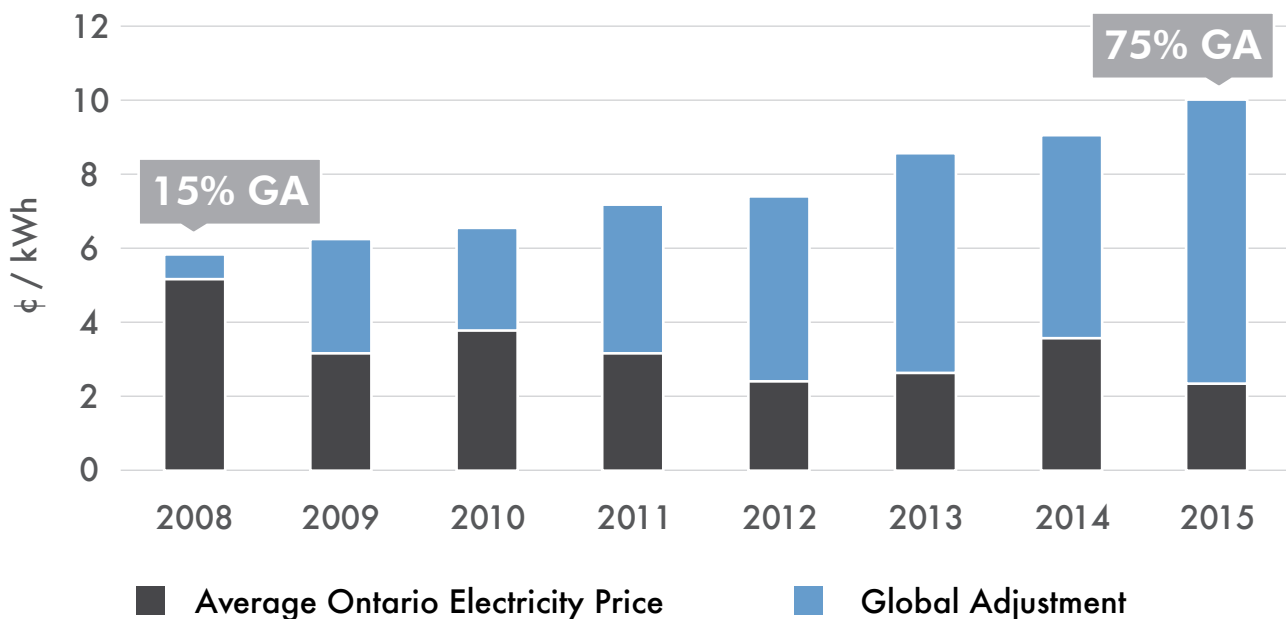
Hydro One recognizes that reducing rates is a highly complex matter especially within a system where most of the costs are determined through contracts and regulation. The affordability challenge resides with those who manage and participate in the electricity sector. This report contains Hydro One's recommendations to the Government of Ontario on how to reduce electricity costs, remove systemic inequities for rural and Northern customers, and provide additional measures to assist customers on an individual basis. These recommendations reflect the voices of many of our customers struggling to afford their monthly electricity bills, and who are often put in a position to make a decision between heat and food.

GLOBAL ADJUSTMENT

Since 2008, the market price for electricity has dramatically declined due to a drop in demand, but also an increase in supply through new generation contracts. The effect of the low market price has, consequently, resulted in a dramatic increase of Global Adjustment (GA), which is now the dominant and fastest-growing component of electricity rates. The GA has risen from

\$3.8 billion in 2010 to nearly \$11 billion in 2016. Today, the GA accounts for 76% of the average residential customer's electricity charges. Figure 1 illustrates this escalation in the GA.

FIGURE 1: CURRENT ELECTRICITY PRICING TRENDS



Source: IESO

With respect to the affordability of electricity, the Global Adjustment cannot be ignored in terms of cost drivers, appropriation of costs and government policy.

Power purchase agreements, or generation contracts, are the primary cost driver for the GA. The vast majority of these contracts were signed for a 20 year period, which means that prices should not begin to decline for at least another 15 years. Amortizing these costs over a longer period of time, 30 or 40 years, would create a rate smoothing effect. While renegotiating contracts is not advisable, other financial instruments could be created to facilitate this amortization.

Another important consideration is the composition of expenses in the GA, and the question of whether or not some of these expenses are more appropriately funded by tax payers. For example, the strategy to transition Ontario's electricity supply mix to more carbon neutral alternatives, such as wind and solar, had many benefits to all Ontarians beyond the supply of electricity – notably, environmental, social and economic development. As such, an argument could reasonably be made that tax payers should fund elements of the GA related to green energy contracts. There are other similar broadly beneficial initiatives that are being funded by electricity consumers, such as conservation and demand management, and it is recommended that the Government consider re-appropriating these costs through other means, such as through general accounts and the proceeds of cap and trade.

The final consideration with respect to the GA relates to government policy; specifically the Industrial Conservation Initiative (ICI) that is placing substantial upward pressure on residential and small business electricity prices. The ICI is a program that allows large power consumers to reduce their GA payments by conserving electricity. The ICI program measures a participant's

level of consumption at five peak hours throughout the year. The IESO determines the five peak hours based on system demand and the participants are not informed of the system peak until after it has been declared. A participant's average consumption during the five peak periods determines the amount of GA they will pay the following year. Companies that are able to predict the peaks and either curtail their consumption, or generate their own electricity during a peak time can save millions in GA payments. While Hydro One fully supports our largest customers and the significant role they play as the economic engine of Ontario, we have observed many ICI participants substantially reducing their GA contributions by an average of 40%, and some by as much as 97%. The direct results of these ICI GA savings result in further costs being absorbed by residential and small business customers through rates increases. In 2010, prior to the ICI program, Regulated Rate Plan consumers (predominately residential and small business) were funding 39% of the total GA. Today, RPP consumers are funding 46% of the total GA, which is equivalent to an additional \$800M annually.

Due to increasing active participation by industry in the ICI program, and a recent expansion of program eligibility by the government, **Hydro One's ICI-eligible customers will climb from 50 to 200.** It is anticipated there will be an increasing trend in GA cost shifting from industry that will place a higher burden on residential customers and small businesses. We recommend that the Government of Ontario re-examine the ICI program and consider placing reasonable limits on how much residential and small business consumers contribute to this program.

SUMMARY OF SOLUTIONS TO REDUCE THE GLOBAL ADJUSTMENT INCLUDE:

- Increasing the amortization of generation contract payments by way of financial instruments;
- Conducting a detailed analysis of rate-payer funded policies that benefit the province as a whole and appropriate a portion of those costs back to the tax base; and
- Placing reasonable limits on Regulated Price Plan consumers' contribution toward the Industrial Conservation Initiative.

Depending on the type of tactics employed, potential savings are illustrated in Figure 2.

FIGURE 2: TRANSLATING GLOBAL ADJUSTMENT SAVINGS INTO POTENTIAL BILL SAVINGS FOR AVERAGE RPP CONSUMERS

Reduction in Global Adjustment	Monthly Savings for Residential Customers	Reduction in Monthly Bill For Hydro One R2 Customer
15%	\$9.45	5.7%
30%	\$18.97	11.5%
50%	\$31.68	19.2%
100%	\$63.37	38.4%

Note: The Regulated Price Plan (residential and small business consumers) share of the total Global Adjustment is estimated to cost \$5 billion, or \$84.50/MWH. The monthly savings for residential and small business customers is based on an average usage of 750kWh/month.

SYSTEM COSTS

Electricity rates are designed and set with the purpose of recovering system costs. System costs are largely fixed either by contract or regulation. For instance, Hydro One is regulated by the Ontario Energy Board (OEB) and our delivery charges are set according to their cost-to-serve model. The dominating factor in the cost-to-serve model is ratebase, which represents an accumulation of capital investments in the system over time and cannot be changed if the system is to operate reliably. As a result, the existing regulatory model leaves little flexibility to reduce delivery charges, however, it does provide a significant level of oversight to ensure the rates represent the cost to serve.

The broader electricity system, however, does have great opportunities for cost savings through the consolidation of local distribution companies (LDCs). In the 2012 Report of the Ontario Distribution Sector Review Panel, *“Renewing Ontario’s Electricity Distribution Sector: Putting the Consumer First”*, the Panel recommended that Ontario’s 73 LDCs “should be consolidated into 8-12 larger regional distributors that are large enough to deliver improved efficiency and enhanced customer focus, while at the same time maintaining a strong connection with their local communities”. In the first ten years after consolidation, the Panel estimated that \$1.7 billion in costs could be removed from the electricity

distribution sector which would be equivalent to approximately \$70/annum for every electricity customer by the end of the tenth year.

A similar report in 2012, the *Commission on the Reform of Ontario’s Public Services*, authored by Don Drummond, also recommended that the government “Consolidate Ontario’s 80 local distribution companies (LDCs) along regional lines to create economies of scale. Reducing the \$1.35 billion spent on operations, maintenance and administrative costs for Ontario’s LDCs would result in direct savings on the delivery portion of the electricity bill”.

Unfortunately, voluntary consolidation has been limited since 2012 and these potential savings remain locked up by municipally-owned utilities. It is likely that these savings can only be unlocked for consumers with the help of government. It is our recommendation that the Government of Ontario revisit options at its disposal to facilitate further consolidation to achieve maximum savings for electricity consumers.

CUSTOMER CONCERNS

RURAL DELIVERY RATES

Hydro One's customers pay considerably higher delivery charges as a result of the OEB's cost allocation principles. The principles have created an obvious urban-rural divide over delivery charges. The delivery charge is predominately comprised of two components, transmission charges and distribution charges. The distribution charges vary between LDCs and are the driver of the rate inequity between urban and rural consumers. For example, some LDCs can charge their customers \$15/month for distribution charges, while Hydro One must charge its average residential customer \$58/month based on the cost-to-serve model. Hydro One's costs are driven by servicing rural and remote Ontario, where our customer density is very low compared to other LDCs, which serve regions with higher customer densities. If distribution charges were applied equally among all consumers in Ontario, the average charge would be approximately \$38/month, which would require many consumers to pay more; clearly not the intent of the Government of Ontario at this time. Recognizing that \$38/month is the average distribution charge, Hydro One recommends providing additional rate relief to rural and Northern customers to bring their distribution charges in line with the average in Ontario. This would require an additional \$200M in rate subsidy for Hydro One's rural non-seasonal customers.

In addition to introducing fair and reasonable rates for rural customers, it is also recommended that Hydro One expedite the transition to fixed distribution charges. The OEB has mandated that all LDCs remove the variable (volumetric) components of the distribution charge and transition to a fixed distribution charge. Fixed charges will benefit higher energy consumers, such as those who heat with electricity; however, it will also cause lower volume consumers to pay more. The transition to a fixed rate will occur incrementally until 2023 in order to avoid rate shock for the many consumers who will end up paying more. Hydro One proposes that additional rate relief could be provided to allow higher consumers to have their distribution charges 100% fixed immediately. We know that many low income families heat with electricity and would greatly benefit from this early transition. The estimated cost of advancing fixed rates would be approximately \$90M/year and ultimately decline to \$0 by 2023.

In total, Hydro One proposes that approximately \$290M in rate relief from the Government of Ontario would not only make delivery rates more affordable, but also introduce rate fairness to rural consumers.

STRUGGLING CUSTOMERS

Electricity bills for low-density customers can represent up to 18% of household net income. Similar to other LDCs, Hydro One is limited in its ability to offer relief to customers who cannot afford to pay their electricity bills. The Company is able to waive security deposits and allow longer payment times but due to regulatory limitations we cannot forgive overdue accounts until a disconnection has taken place. Hydro One proposes that it be given the flexibility and autonomy to quickly respond to these customers' needs for support ahead of taking the drastic step of disconnection, which is itself a costly measure for the Company. Disconnection and reconnection, which can cost upward of \$2000, can be avoided.

Hydro One has several highly effective conservation programs that are only available to customers who meet the mandated definition of "low income consumers". Allowing Hydro One to offer these programs at its discretion to struggling consumers who do not or cannot qualify as low income would allow the Company to resolve acute cases of hardship and in many cases avoid disconnection. Examples of programs to

be offered include whole home weatherization and appliance replacement ranging from \$3,500-5,500/customer or installing cold climate air source heat pump for homes heated with electricity ranging from \$7,000-\$13,000/customer. It is recommended that the Government of Ontario consider establishing an Affordability Fund for LDCs to access as a means to help struggling consumers who cannot qualify for low income programs and cannot upgrade their homes without financial assistance. Over time this program would save on disconnection costs, and help struggling customers get back on track.

A final consideration for struggling consumers relates to opportunities for the Ontario Electricity Support Program (OESP). Presently the OESP is undersubscribed with approximately 30% of eligible families participating. Hydro One recommends changes to the program requirements such as removing the number of occupants, to allow more consumers to qualify. Alternatively, surpluses could be directed to the Affordability Fund described above.

RECOMMENDATIONS

1

The Government of Ontario should aggressively reduce the GA and give consideration to applying reductions to residential and small business consumers' portion of the GA. It should also consider re-appropriating GA costs to the tax base for programs which have broader social benefit. Finally, it should consider limiting the funding of the ICI program by residential and small business consumers.

2

After four years of facilitating voluntary consolidation, the Government of Ontario should eliminate barriers and stimulate consolidation of LDCs to remove \$1.7 billion costs from the distribution sector.

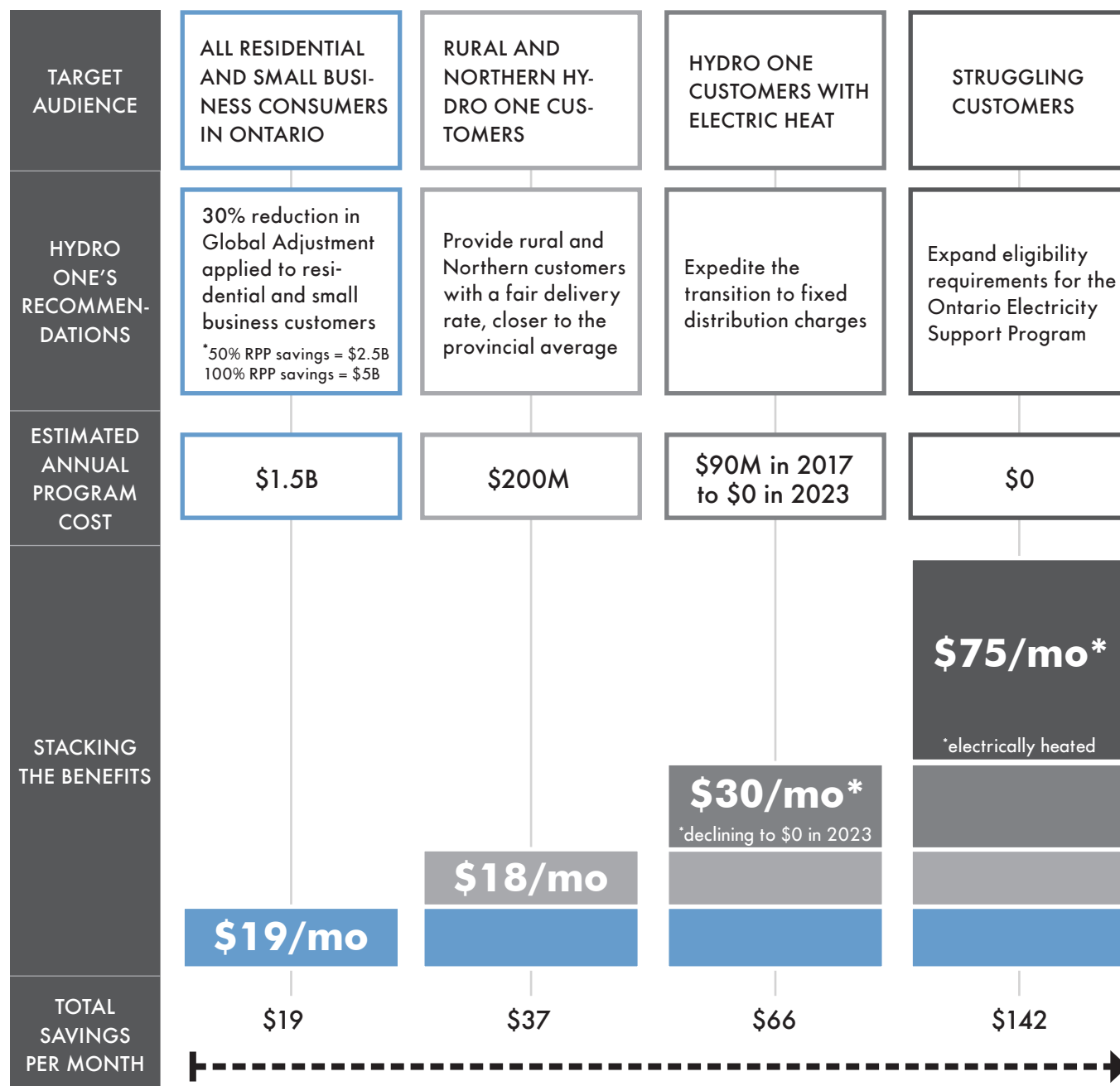
3

The Government of Ontario should remove delivery charge rate inequity by providing additional rate relief to rural customers by bringing their distribution charges in line with the provincial average.

4

The Government of Ontario should establish an Affordability Fund (potentially funded from surpluses collected under the OESP) for LDCs to access so that Hydro One can provide relief to customers suffering from acute hardship who do not qualify as low income assistance.

STACKING THE BENEFITS OF PROPOSED RATE RELIEF MEASURES



CONCLUSION

Taken as a whole, the recommendations provided by Hydro One will increase affordability both over the short and long term for consumers, meaningfully addressing affordability of electricity. By putting our customers first and advocating on their behalf, the Company presents compelling advice, backed with evidence and rationale to make a difference for our customers. From addressing the inequities associated with the GA and delivery charges, to identifying potential cost savings in the distribution system and providing additional targeted support for struggling customers, these realistic and tangible recommendations address customer concerns and, if implemented, will ensure that no one in Ontario has to choose between heat and food.

