

IN THE MATTER OF the *Ontario Energy Board Act 1998*, S.O. 1998, c.15,
(Schedule B);

AND IN THE MATTER OF an application by Hydro One Networks Inc. for
an order approving just and reasonable rates and other charges for
electricity distribution to effective January 1, 2018 to December 31, 2022.

**CANADIAN MANUFACTURERS & EXPORTERS (“CME”)
COMPENDIUM FOR
HYDRO ONE NETWORKS INC. (“HONI”)
WITNESS PANEL 3**



DISTRIBUTION CUSTOMER ENGAGEMENT REPORT

DEVELOPMENT OF DISTRIBUTION INVESTMENT PLAN AUGUST 2016

Prepared for:
Hydro One Networks Inc.
483 Bay Street
Toronto, ON
M5G 2P5



GLOSSARY OF TERMS

The following terms are used throughout the report.

TERM	MEANING
Directional differences	Refers to comparisons between sub-groups of customers where the differences cannot be said to be statistically significant
'Informed' Customers	Refers to customers who were provided with additional information about Hydro One's network/business
Large Customer	Refers to the aggregate of the following Large Customer segments: Commercial and Industrial (which will be referred to as C&Is), Large Distribution Accounts (which will be referred to as LDAs), Local Distribution Companies (which will be referred to as LDCs), Connected Distributed Generators (which will be referred to as DGs)
Local Distribution Companies (LDCs) and Distributed Generators (DGs)	Throughout the report, the Local Distribution Companies (LDCs) and Connected Distributed Generators (DGs) (>10 kW) have been managed as one segment; both are supported by the same Key Account Executives
Residential and Small Business Customer (R&SB)	Refers to the aggregate of Residential, Seasonal and Small Business customer segments
Small Business Customer	Refers to General Service customers (<50 kW peak demand and 50 to <500 kW peak demand)
'Uninformed' Customers	These customers did not receive the additional information that 'Informed' Customers did

SUMMARY OF FINDINGS

The following summary is based on the collective feedback of 19,904 distribution customers who provided 20,062 responses through the various customer engagement activities. A full detailing of the customer engagement activities are provided in the Methodology section of this report. Detailed findings from each distribution customer segment are also provided in later sections of this report.

The findings of the engagement process are grouped thematically:

1. Costs
2. Customer priorities
3. Level of reliability customers expect
4. Types of reliability improvements customers value
5. Willingness to accept a rate increase to maintain and improve service levels

1. COSTS

Keeping costs as low as possible is customers' top priority. This was evident across most of Hydro One's distribution customer segments, with the exception of local distribution companies who place a greater priority on receiving reliable service, both in terms of the number and duration of interruptions.

"If there is a way to improve both [service and cost], obviously that is ideal, but if I'm going to weigh one over the other, then I'm going to choose the cost."

Among R&SB customers, the preference for keeping costs low is influenced by three factors:

1. The majority of customers indicate that the current level of reliability and service they receive from Hydro One is in line with their expectations, and therefore there is not a strong desire for improved service, particularly if it means raising rates.

"The service is consistent with very few outages."

"I would rather the company not worry about improving the other areas and instead concentrate on keeping costs low for customers."

2. The preference for keeping costs low, for some customers, is influenced by a desire to see Hydro One demonstrate greater fiscal management and operational efficiency before considering rate increases. There is a perception among some customers that Hydro One has not demonstrated this in the past, and thus some customers do not accept that rate increases are necessary.

"If Hydro [One] had ever been well-managed, they would have known years ago that the equipment needed to be dealt with and would have been looking towards that and doing that every year so that their equipment did not become outdated and go beyond its life expectancy. So, now they're saying all this needs to be done and dealt with and they're already in debt and they're already gouging us with hydro rates. And now they're saying this all has to get fixed. This is how they're trying to justify the extra increase so they can deal with this, but why wasn't this dealt with years ago?"

"I think it's unreasonable honestly because I know the company's net assets have increased 13% since 2012, and something like 4,000 employees have made the Sunshine List, earning over \$100,000 a year on the public dime. So, I think it's a little unreasonable to be dipping into the customer's pocket to sustain the level of outages that I personally feel is a little unreasonable."

3. The final factor is that for some customers, electricity costs represent a financial challenge, and are approaching being unaffordable. These customers feel that they simply can't afford an increase in rates. The reference to rates is in relation to the overall bill, rather than a specific comment about the distribution delivery rate charge. This was heard primarily in focus groups and in Workshop feedback from C&I customers, rather than arising from survey responses.

"...some months, I have problems paying my hydro bills. So, because of the rates of hydro and all the additional delivery charges and all of that other stuff that comes on your bill, I actually had to go to equal billing in order to be able to pay my hydro, and that's crazy."

"...electricity prices are certainly surpassing my wage [increases]. So, I always think of it that way that I'm definitely paying more out of pocket in proportion to my income."

2. CUSTOMER PRIORITIES

For those who identify cost as their top priority, maintaining reliable electricity service is consistently their second priority. Many Large Customers, particularly C&I businesses, are facing reliability challenges. For many of them, power quality events and unplanned momentary power interruptions of less than one minute, rather than sustained interruptions of one minute or more, is their primary concern and many express that improvements are needed for their businesses to remain competitive and grow. Other customers are facing capacity challenges and want more access to power in order to grow their enterprises.

Customer service improvements, while desired particularly among Large Customers, are not something for which customers are willing to pay higher rates. However, it is clear that customer service issues for C&I and Small Business customers need to be better addressed for these customers to feel heard. The customer service issues raised by these customers during the customer engagement range from those with relatively specific and potentially simple solutions,

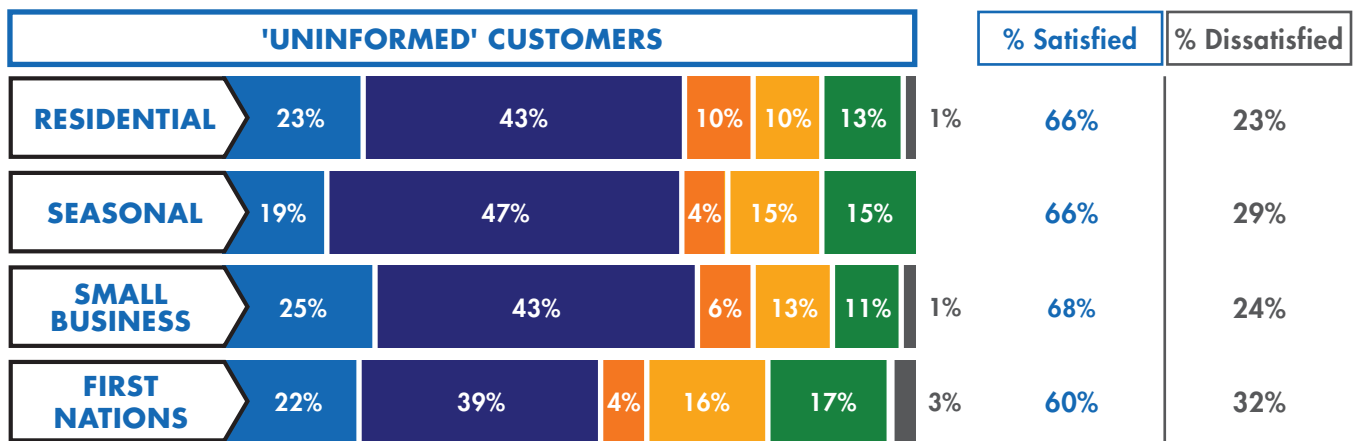
such as improving the way in which Hydro One communicates with Large Customers during outages/interruptions and doing a better job explaining the charges (such as Global Adjustment) on the bill, as well as correcting outstanding billing errors, to more complex issues such as the need for greater and more prompt support for capacity expansion applications, as well as for incentive programs.

The sentiments expressed by customers indicate that there is a significant opportunity for Hydro One to improve its communication and overall interaction with Large Customers, specifically C&I customers. The customer engagement activities also exposed several areas where customers, both large and small, lack a sufficient level of awareness or have misconceptions of what is within Hydro One's purview, what is mandated by the OEB, what is the responsibility of the Independent Electricity System Operator (IESO), and what is the role of government in setting policy and directing the IESO on the province's fuel mix, the price of electricity, and cost attribution.



Satisfaction with Hydro One does not vary significantly between 'uninformed' customer segments. There is more variation between the 'informed' customer segments including between Large Customer segments. 'Informed' Residential customers report lower satisfaction than 'uninformed' customers.

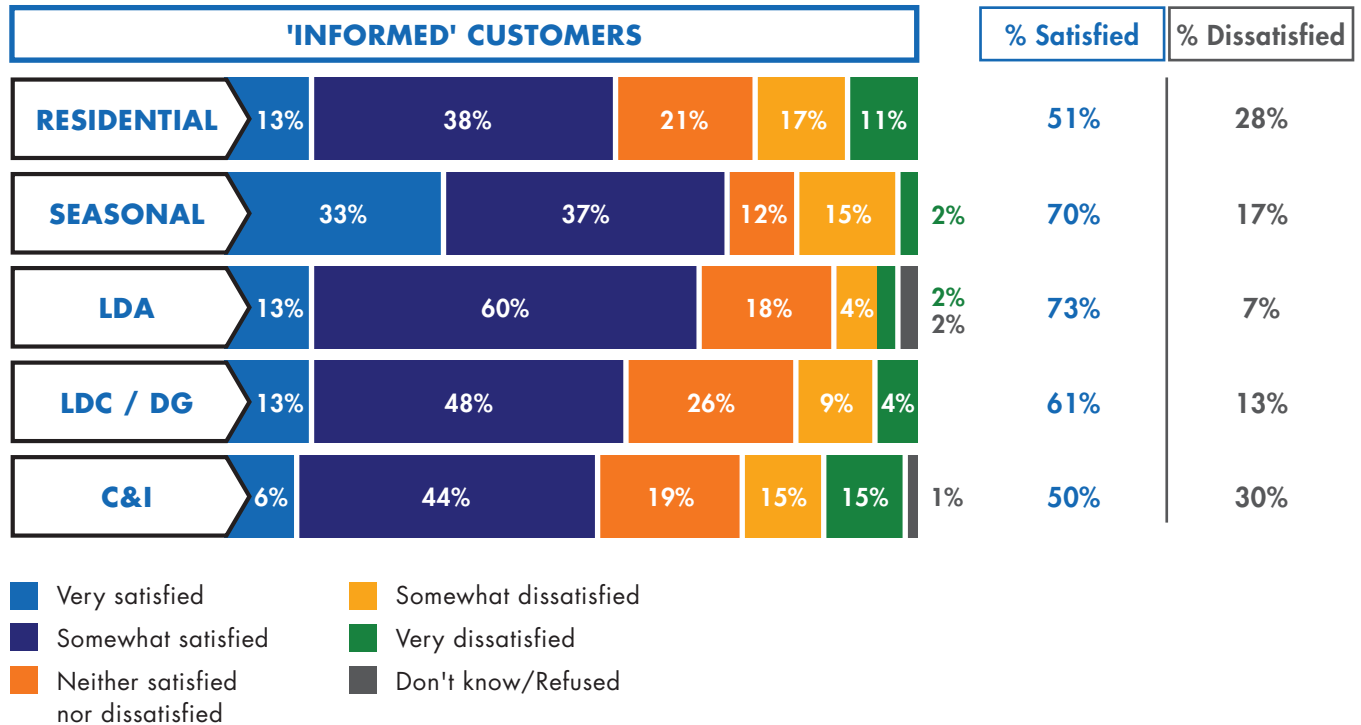
ALL CUSTOMER SEGMENTS OVERALL SATISFACTION WITH HYDRO ONE



As you may know, Hydro One builds and maintains power lines, towers and poles, safely delivers electricity, reads meters, calculates your charges, answers your calls, responds during outages, and clears trees and brush from power lines. Hydro One does not generate electricity or set electricity prices. Q1. How satisfied are you with Hydro One overall? Note: During the first week of fielding the response scale was changed from 1 to 5 to a word scale to be consistent with the Annual Customer Satisfaction survey. Base: All Respondents Post Q change; Telephone Survey: Residential (n=243), Seasonal (n=68), Small Business (n=159), First Nations (n=204)

ALL CUSTOMER SEGMENTS

OVERALL SATISFACTION WITH HYDRO ONE

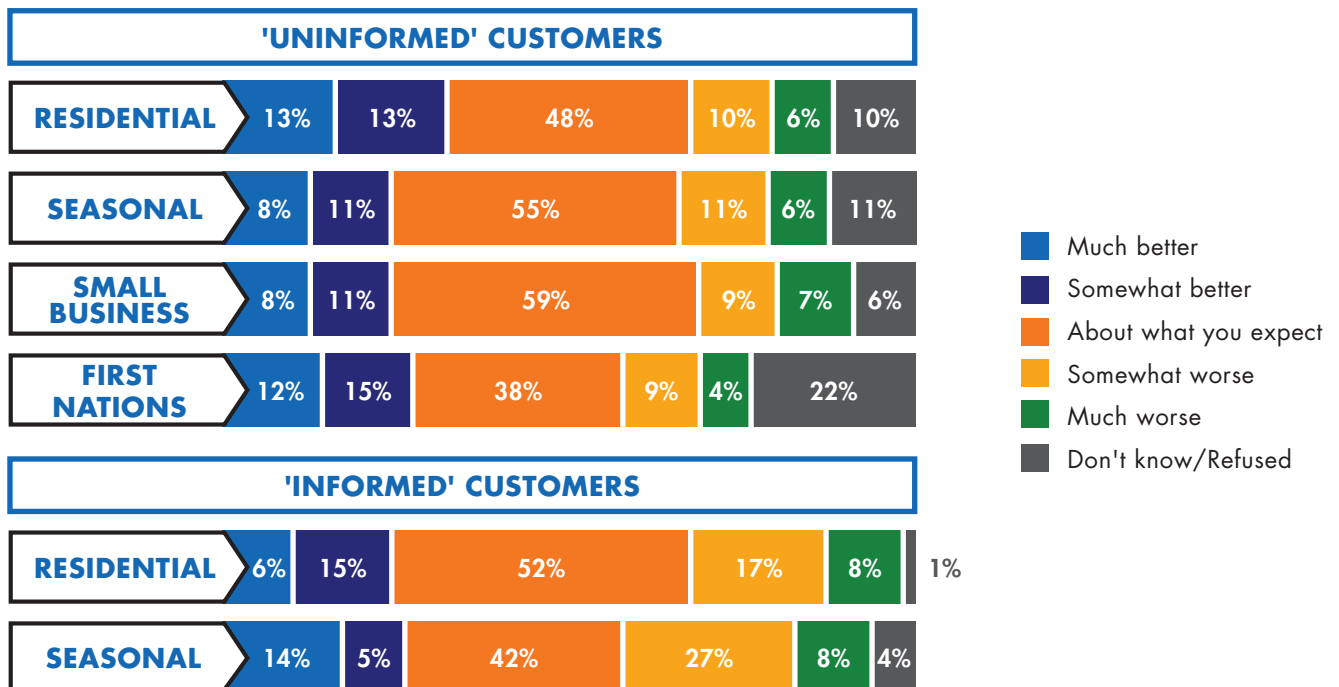


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The largest share of 'uninformed' customers indicate that the current number and average length of outages they experience is about what they expect. 'Informed' customers are directionally more likely to indicate it is worse than they expect.

TELEPHONE SURVEY + ONLINE WORKBOOK REPRESENTATIVE SAMPLE RELIABILITY EXPECTATIONS

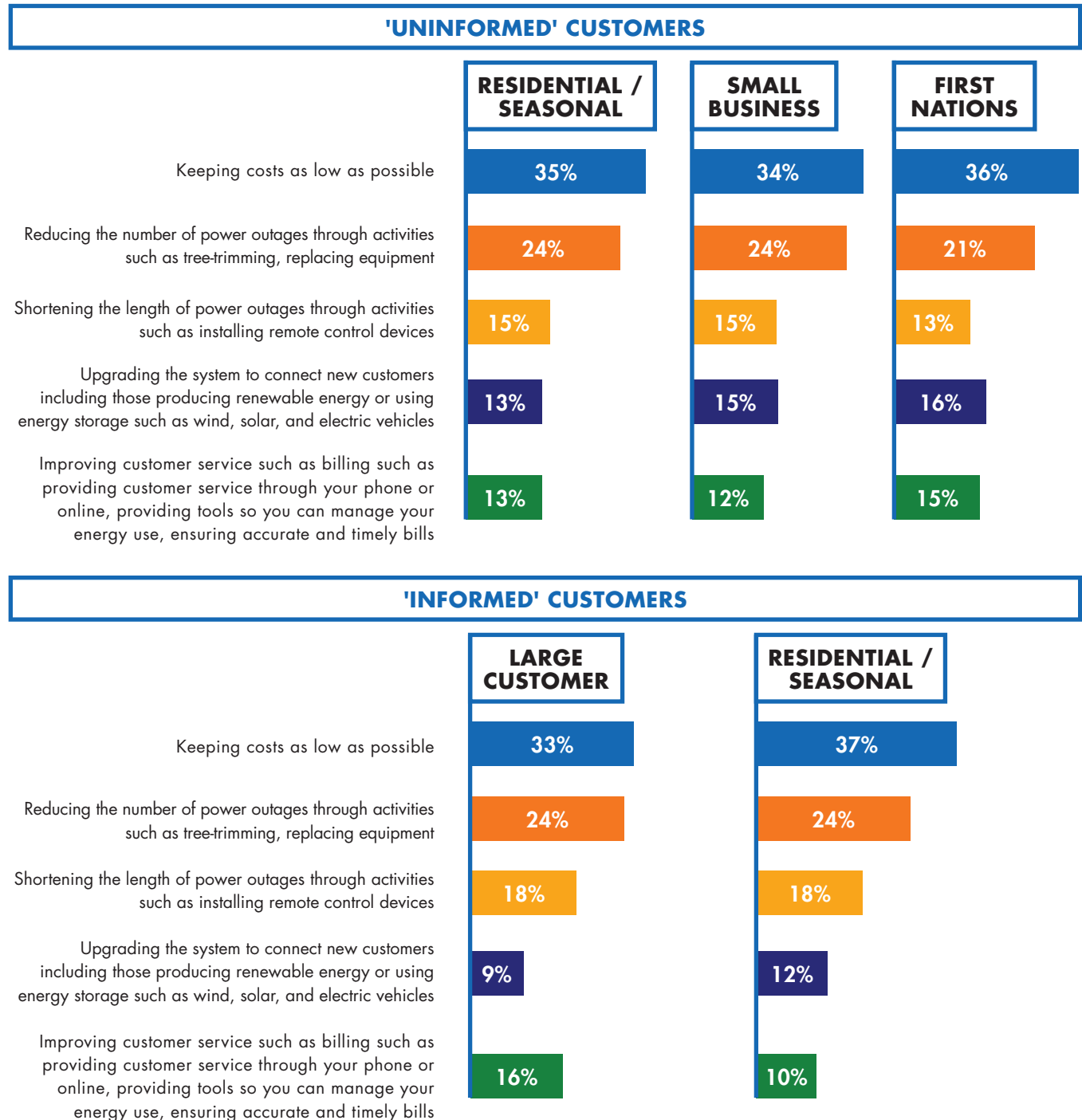
NUMBER OF OUTAGES



Q8. In general, when you think about how many power outages you experienced over the last 12 months how did it compare to your expectations [READ LIST]?
Base: One or more sustained power outages in the past 12 months; Residential (n=314), Seasonal (n=66) Small Business (n=144), First Nation (n=217). Informed: Residential (n=977), Seasonal (n=52)

All customer segments prioritize keeping costs as low as possible over improvements in other areas. Reducing the number of power outages is consistently the second priority among customers.

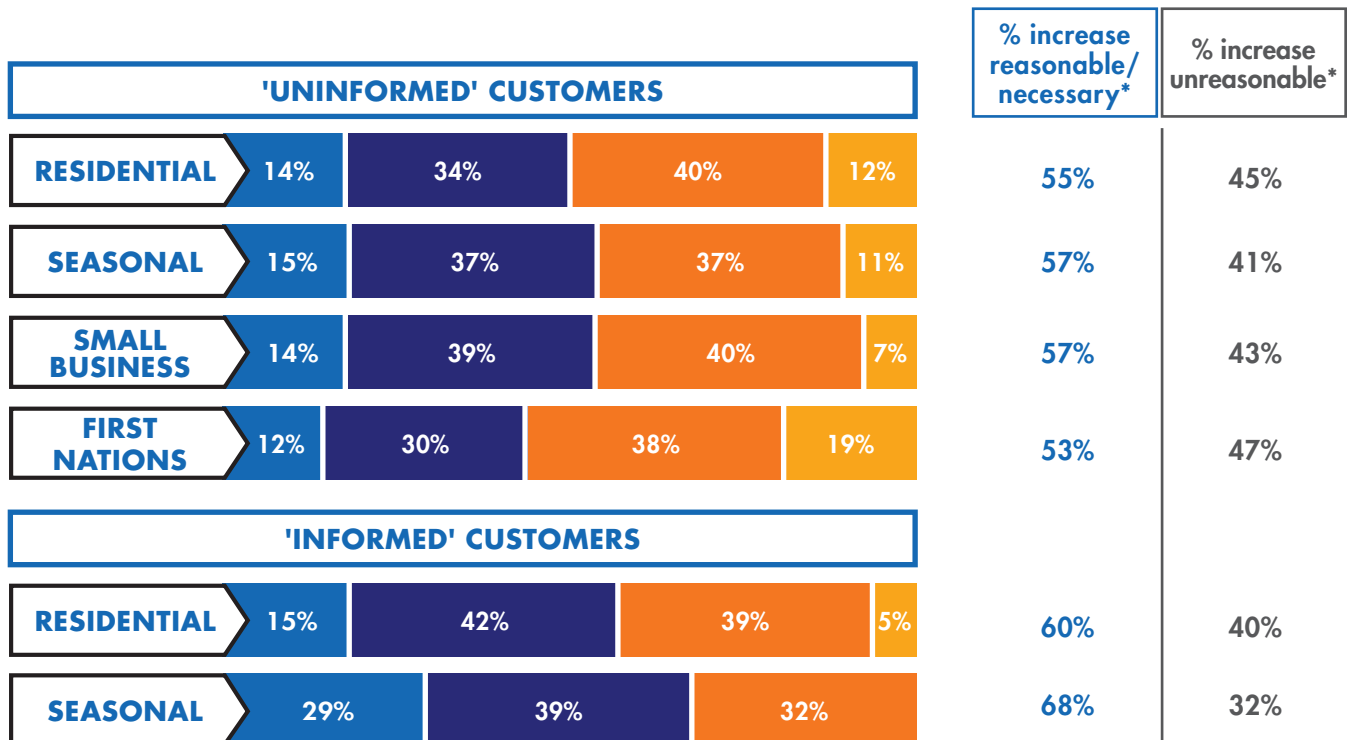
ALL CUSTOMER SEGMENTS CUSTOMER PRIORITIES



Q5. Hydro One would like to better understand what is important to you as a [insert] customer. [Below is /I am going to read] Hydro One's major expenditures in pairs and for each pair please tell me which one is more important to you. Paired choice preferences relative to other options. Base: Uninformed - Residential/Seasonal (n=499). One respondent opted not to answer, Small Business (n=199). One respondent opted not to answer Q5., First Nations (n=300). Informed - Large Customers (n=87). Base: Residential/Seasonal (n=1604).

When posed with a roughly 1% rate increase on the total monthly bill, per year for five years, acceptance varies from 53% to 57% among 'uninformed' customers who had an opinion (i.e., excluding don't know/refused) and from 60% to 68% among 'informed' customers.

TELEPHONE SURVEY + ONLINE WORKBOOK REPRESENTATIVE SAMPLE ACCEPTABILITY OF RATE INCREASE TO MAINTAIN LEVELS



- The increase is reasonable and I would support it
- I don't like it, but I think the increase is necessary
- The increase is unreasonable and I would oppose it
- Don't know/Refused

* re-based to exclude don't know/refused

Q17. Hydro One has determined that in order to at least maintain the level of reliability and customer service it currently provides, a typical [residential or seasonal / small business] customer's total monthly bill will need to increase by [IF residential or seasonal 1.1% or the equivalent of \$2.00 / IF small business 1% of the equivalent of \$5.20]. The increase will be applied each year for the next 5 years. By the fifth year, a typical monthly bill will be roughly [IF residential or seasonal \$10.00 / IF small business \$26.00] higher than it is now. Please note that this increase reflects the cost to maintain the current level of reliability and service to customers. The monthly bill could still increase for other reasons which are outside the control of Hydro One. Would you be willing to accept this increase to maintain the current level reliability and customer service across the electricity system? Note that for the Telephone Survey, this question was posed as Which of the following is closest to your point of view? Base: Uninformed - Residential (n=400), Seasonal (n=100), Small Business (n=200), First Nations (n=300). Informed - Residential (n=1502), Seasonal (n=102)

Customer Experience

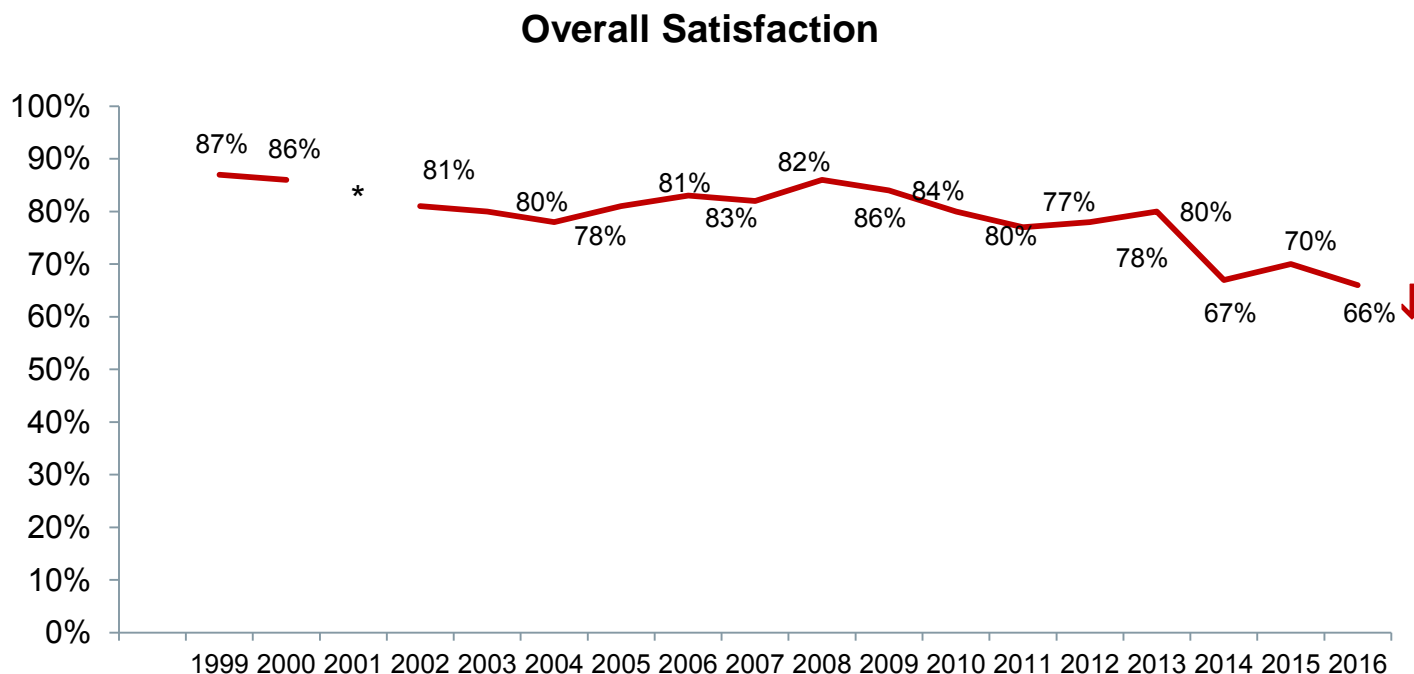
Residential and Small Business Customer Satisfaction Study

December 2016 (Revised February, 2017)

Prepared by: Ipsos



Overall Satisfaction – Survey Results

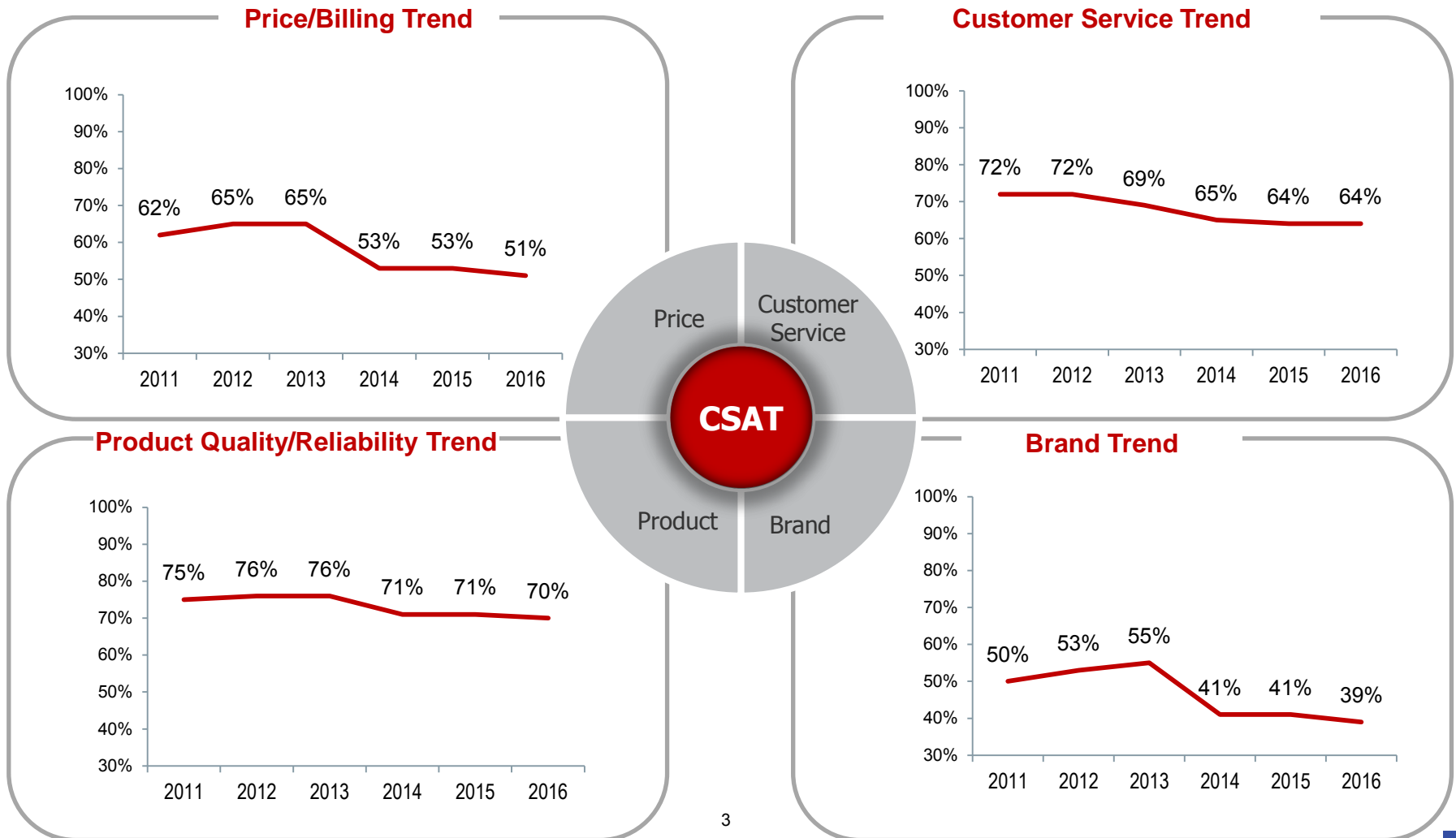


Key Insights

- Overall Satisfaction is significantly lower in 2016 compared to 2015.
- Rates/Price continues to be the issue mentioned most often by those not satisfied overall with Hydro One. The incidence of mentions has increased significantly to 76% from the 61% found in 2015 – following a steep increase from 2014 to 2015.

Survey Findings: Drivers of Satisfaction

Despite significant changes in individual metrics in Brand and Price/Billing, the aggregate scores for all groups have remained stable compared to 2015.



Electricity Distributor Scorecard

Performance Outcomes	Performance Categories	Measures	ACTUALS							TARGETS				
			2011	2012	2013	2014	2015	2016	2017	2017	2018	2019	2020	2021
Service Quality	Service Quality	New Residential/Small Business Services Connected on Time	92.00%	93.76%	97.40%	97.40%	97.50%	98.60%	98.00%	98.0%	98.0%	98.0%	98.0%	98.0%
		Scheduled Appointment Met On Time	99.90%	98.60%	98.40%	99.30%	98.50%	99.50%	99.94%	99.0%	99.0%	99.0%	99.0%	99.0%
	Customer Satisfaction	Telephone Calls Answered On Time	81.40%	83.40%	85.80%	89.60%	78.40%	74.20%	82.00%	80.0%	80.0%	80.0%	80.0%	80.0%
		First Contact Resolution*			78.00%	79.00%	82.00%	82.00%	85.00%	85.0%	85.0%	87.0%	87.0%	88.0%
System Reliability	System Reliability	Billing Accuracy					94.59%	98.59%	99.00%	99.30%	99.0%	99.0%	99.0%	99.0%
		Customer Satisfaction Survey Results**			87.00%	85.00%	85.00%	84.00%	84.90%	85.0%	87.0%	87.5%	88.0%	88.5%
	System Reliability	Level of Public Awareness					81.0%	N/A	TBD	N/A	N/A	N/A	N/A	N/A
		Level of Compliance with Ontario Regulation 22/04,†	N	N	N	N	C	N	TBD	C	C	C	C	C
	System Reliability	Serious Electrical Incidents - Number of General Public Incidents	6	5	7	4	5	13	TBD	N/A	N/A	N/A	N/A	N/A
		Incident Index - Rate per 10, 100, 1000 miles of line	0.001	0.001	0.009	0.003	0.042	0.051	TBD	N/A	N/A	N/A	N/A	N/A
	System Reliability	Average Number of hours that Power to a Customer is Interrupted ‡		6.98	6.85	7.43	7.55	7.83	7.90	7.3	7.0	6.7	6.4	6.1
		Average Number of Times that Power to a Customer is Interrupted ‡		2.68	2.49	2.70	2.63	2.47	2.30	2.6	2.4	2.3	2.2	2.1
	Asset Management	Distribution System Plan Implementation Progress**			Under Review	97%	116%	105%	TBD	100.0%	100.0%	100.0%	100.0%	100.0%
	Cost Control	Efficiency Assessment		\$	\$	\$	\$	\$	TBD	\$	\$	\$	\$	\$
Public Policy Requirements	Renewable Generation	Total Cost per Customer†	\$1,072	\$1,043	\$1,048	\$1,063	\$	\$97	TBD	N/A, PEG	N/A, PEG	N/A, PEG	N/A, PEG	N/A, PEG
		Total Cost per km of Line‡	\$11,064	\$10,741	\$10,621	\$10,916	\$	\$10,199	TBD	N/A, PEG	N/A, PEG	N/A, PEG	N/A, PEG	N/A, PEG
	Renewable Generation	Net Cumulative Energy Savings†					37.27%	42.50%	60.50%***	60.5%	75.3%	86.0%	101.0%	N/A, See Footnote
		Renewable Generation Connection Impact Assessments Completed On Time	95.79%	99.39%	100.00%	100.00%	100.00%	100.00%	99.51%	99.0%	99.0%	99.0%	99.0%	99.0%
Financial Health	Financial Health	New/Micro-embedded Generation Facilities Connected On Time			89.71%	100.00%	99.78%	99.22%	99.77%	99.0%	99.0%	99.0%	99.0%	99.0%
		Liquidity - Current Ratio (Current Assets/Current Liabilities)	0.99	0.99	1.02	0.99	0.97	0.88	TBD	N/A	N/A	N/A	N/A	N/A
	Financial Health	Leverage - Total Debt (including short-term and long-term debt) to Equity Ratio	1.34	1.30	1.35	1.31	1.30	1.40	TBD	N/A	N/A	N/A	N/A	N/A
		Profitability - Regulatory Return on Equity	9.66%	9.66%	9.66%	9.66%	9.30%	9.35%	TBD	N/A	N/A	N/A	N/A	N/A

Notes:

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).
 2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the likes 5-year (2010 to 2014) average distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
 3. A benchmarking analysis determines the total cost figures from the distributors' reported information. These figures were generated by the Board based on the total cost benchmarking analysis conducted by Pacific Economics Group Research, LLC and based on the distributors' annual reported information.
 4. The CDM measures are based on the new 2015-2020 Conservation First Framework. This measure is under review and subject to change in the future. Since the framework ends in 2020, the target for this application aligns with the end year of 2020.
- *Self-defined metric; no common industry standard.
**System Reliability Measures were restated under the direction of the DEB to evaluate both Loss of Supply and Force Majeure results prior to 2012 were not reported.
***To be verified by the ESD.

Witness: KIRALY Gregory

17

Dx OEB Scorecard

		Historical Results						Actual	Target					
RRFE Outcomes	Measure	2011	2012	2013	2014	2015	2016	2017	2017	2018	2019	2020	2021	2022
Customer Satisfaction	Customer Satisfaction - Perception Survey %	77%	78%	80%	87%	70%	68%	71%	72%	74%	75%	75%	76%	79%
	Handling of Unplanned Outages Satisfaction %	81%	79%	78%	75%	76%	75%	76%	76%	77%	78%	78%	79%	79%
	Call Centre Customer Satisfaction %	85%	84%	82%	81%	85%	86%	90%	86%	87%	88%	88%	89%	89%
	My Account Customer Satisfaction %	81%	84%	84%	75%	78%	79%	78%	81%	83%	84%	84%	85%	83%
Cost Control	Pole Replacement - Gross Cost Per Unit in \$	8,541	8,441	7,824	8,928	8,392	8,350	TBD	8,640	8,733	8,908	9,080	9,256	9,437
	Vegetation Management - Gross Cyclical Cost per km \$**	New Program						TBD	New Program					
	Station Refurbishments - Net Cost per MVA in \$*	386,000	-	318,000	348,000	500,000	557,000	TBD	451,000	454,000	447,000	440,000	434,000	427,000
	DM&A dollars per customer	456	451	498	551	453	455	TBD	449	455	TBD	TBD	TBD	TBD
	DM&A dollars per km of line**	4,723	4,676	5,109	5,634	4,719	4,773	TBD	4,712	4,773	TBD	TBD	TBD	TBD
	Number of Line Equipment Caused Interruptions	7,681	7,316	7,266	8,311	8,164	7,674	8,786	8,200	8,200	TBD	TBD	TBD	TBD
	Number of Vegetation Caused Interruptions	6,113	6,953	5,791	6,540	6,944	7,439	7,800	6,900	6,500	TBD	TBD	TBD	TBD
	Number of Substation Caused Interruptions	159	144	129	158	141	103	123	145	145	TBD	TBD	TBD	TBD
	System SAIDI - Rural - duration in hours	8.2	8.2	8.1	8.6	9.1	9.1	9.4	9.1	9.0	TBD	TBD	TBD	TBD
	Reliability SAIFI - Rural - frequency of outages	3.3	3.3	3.0	3.4	3.4	3.1	3.0	3.4	3.4	TBD	TBD	TBD	TBD
	SAIDI - Urban - duration in hours	2.7	3.2	2.2	2.8	2.8	2.4	2.4	2.8	2.8	TBD	TBD	TBD	TBD
	SAIFI - Urban - frequency of outages	1.6	1.7	1.6	2.3	2.4	1.6	1.4	1.7	1.7	TBD	TBD	TBD	TBD
	Large Customer Interruption Frequency (LDA's) - frequency of outages	New Measure		118	147	228	136	162	143	143	TBD	TBD	TBD	TBD

*There were no station refurbishment units matching the criteria completed in 2012

**Number of line kms are based on the annual OEB Yearbook of Electricity Distributors' report, with 2017 and 2018 targets based on 2015 line km actuals.

Witness: KIRALY Gregory

18