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EB-2018-0165

Toronto-Hydro Electric System Limited

AMPCO Compendium Panel 3

Toronto Hydro-Electric System Limited EB-2018-0165 Exhibit 1B Tab 3 Schedule 1 ORIGINAL Page 1 of 13

1 CUSTOMER ENGAGEMENT

2

3 **1. OVERVIEW**

- 4 Toronto Hydro undertook extensive Customer Engagement in connection with and as
- 5 part of the development of this CIR Application. Following the OEB's policy guidance,
- 6 Toronto Hydro developed a genuine understanding of its customers' needs and
- 7 preferences and analyzed and used the results of Engagement to inform its plans.

8 Toronto Hydro relies on both "Planning-specific" and "Ongoing" Customer Engagement

- 9 activities, as detailed in this Schedule.
- 10

11 **2. CUSTOMER ENGAGEMENT: POLICY GUIDANCE**

- 12 In conducting Customer Engagement, Toronto Hydro considered the Renewed
- 13 Regulatory Framework for Electricity Distributors ("RRF"), Chapter 5 of the Filing
- 14 Requirements for Electricity Distribution Rate Applications ("Filing Requirements"), the
- 15 Handbook for Utility Rate Applications, the EB-2014-0116 decision in respect of Toronto
- 16 Hydro's 2015-2019 rate application, and OEB decisions in other utilities' rate
- applications.¹ A key theme of the OEB's guidance is that a utility's business plan be
- informed by and responsive to customer needs and preferences. This requires an
- 19 expectation that the utility develop a genuine understanding of its customers' needs
- and preferences, and is able to demonstrate how the development of its business plan
- 21 was informed by the results of Customer Engagement.
- 22

23 **3. PLANNING-SPECIFIC CUSTOMER ENGAGEMENT**

- 24 Toronto Hydro's Planning-specific Customer Engagement process was a multi-phased,
- iterative process that equipped the utility with a genuine understanding of its

¹ For example, EB-2017-0024, Decision and Order.

customers' needs, preferences, and priorities so as to inform the utility's business plan.
The process spanned over 18 months, between late 2016 and mid-2018, and involved
over 10,000 Toronto Hydro customers of all sizes.

4

5 Toronto Hydro engaged Innovative Research Group ("Innovative"), a national consulting

6 firm with expertise in public opinion research (and experience in energy policy in

7 particular), to execute the utility's Planning-specific Customer Engagement. The

8 resulting final report (the "Innovative Report") can be found in Appendix A to this

9 Schedule.

10

Innovative executed the Planning-specific Customer Engagement in two phases. Phase
provided input into the development of the business plan, including the penultimate
Distribution System Plan ("DSP"). Phase 2 helped to refine the business plan, including
the final DSP.

15

16 **3.1 Phase 1**

Phase 1 of the Planning-specific Customer Engagement focused on assessing customer
 needs and preferences in relation to outcomes relevant to Toronto Hydro's programs
 and services. Phase 1 was conducted to generate a comprehensive view of customers'
 priorities as a front-end input into Toronto Hydro's business plan.

21

Innovative used a range of techniques to assess customers' needs and preferences.

23 Quantitative methods provided statistically valid results (e.g. surveys directed at

residential and small business customers). Qualitative methods provided constructive

context to supplement the statistical results (e.g. focus groups directed at residential,

small business and mid-market customers).

- 1 The Innovative Report discusses in detail the Phase 1 process and results. For example,
- 2 initial focus group engagement identified six key customer priorities:
- 3 1) Delivering reasonable electricity prices;
- Ensuring reliable electrical service;
- 5 3) Ensuring the safety of electrical infrastructure;
- 6 4) Providing quality customer service;
- 7 5) Helping customers with electricity conservation and efficient usage;
- 8 6) Enabling the electrical system to support the reduction of greenhouse gases.
- 9

10 In the follow-up telephone survey, a majority of customers replied that each of these six

11 priorities were either "important" or "extremely important." When asked to rank them,

- 12 low-volume customers prioritized "delivering reasonable electricity prices" first,
- 13 followed by "ensuring reliable electrical service." By comparison, large customers with
- 14 average peak loads over 1 MW ("Key Accounts") prioritized "ensuring electrical service",
- ¹⁵ ahead of "delivering reasonable electricity prices".²
- 16

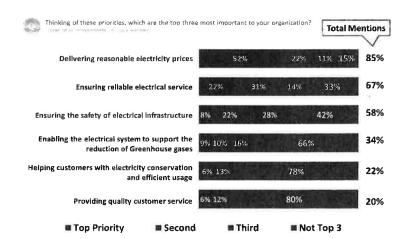




Figure 1: Low-volume Customer Priority Rankings, Phase 1.

² Innovative Report, Exhibit 1B, Tab 3, Schedule 1, Appendix A, Executive Summary pg. 11

Considering the entirety of the Phase 1 results, Innovative concluded that "customer 1 and stakeholder feedback from Phase 1 can be summarized by the following key points: 2 1) Keeping distribution price increases as low as possible; 3 2) Maintaining long-term performance for customers experiencing average or 4 better service; 5 3) Improve service levels for customers experiencing below average service or who 6 7 have special reliability needs (e.g. hospitals); and 4) Balancing other customer priorities (e.g. customer service) with the need to 8 contain rate increases."³ 9 10 The timing of Phase 1 allowed Toronto Hydro to leverage the results in a number of 11 ways. It informed the development of the Outcomes Framework (see Exhibit 1B, Tab 2, 12 Schedule 1), which became the lens through which the utility assessed the value to 13 customers of its program expenditure proposals. It informed the strategic parameters 14 established for the business plan, which included an upper limit of 3.5 percent as a cap 15 on the average annual increase to base distribution rates (see Exhibit 1B, Tab 1, 16 Schedule 1). Consequently, Phase 1 results informed the development of the 17 18 penultimate business plan that was taken back to customers during Phase 2 (see Exhibit 1B, Tab 1, Schedule 1; Exhibit 2B, Section E2). 19 20 21 Innovative developed a high-level, two-page "Placemat" summary of the findings of its work in support of Toronto Hydro's Phase 1 Customer Engagement activities. The 22 Customer Engagement Placemat provided an easily accessible version of the key results 23 of Phase 1 Customer Engagement. 24

³ Ibid., pg. 5

1 3.2 Phase 2

- Phase 2 provided additional insight about customers' needs and preferences prior to the
 completion of the business plan. The purpose of Phase 2 was threefold:
- 4 To confirm customer needs, preferences, and priorities identified in Phase 1;
 - To solicit customer feedback on the content of Toronto Hydro's proposed plans
- and the subsequent rate impact including customer preferences toward
 particular capital programs where trade-offs on pacing existed; and
- To solicit customer feedback on Toronto Hydro's planning development process,
 including the customer engagement process.

10

5

The Phase 2 approach involved two different methods: a workbook and surveys. 11 Innovative developed an online workbook to gather input from any interested 12 residential, small business, or mid-market customer. Toronto Hydro took a number of 13 steps to increase the visibility of the workbook, including: emailing over 200,000 14 residential and small business customers notifying them about the workbook; 15 advertising the workbook in the utility's electronic newsletter delivered to nearly 16 200,000 customers; and promoting the workbook through social media posts, which 17 made over 40,000 impressions (Twitter and Facebook). 18 19

Innovative developed surveys based on the feedback from the online workbook. A
randomly recruited telephone survey was executed for residential, small business and
mid-market customers, and an online survey was done to gather input from Key
Account customers. All Key Account customers were notified by email about the survey
and reminder emails were sent to encourage its completion. Details about both surveys
are provided in the Innovative Report.

Based on the results, Innovative concluded that customers' needs and preferences
 identified in Phase 1 were consistent with customer feedback received in Phase 2.
 Customers were also strongly supportive of the customer engagement process used to
 collect and use customer needs and preferences.

5

Innovative further concluded that customers generally supported Toronto Hydro's 6 proposed plan, and that "majorities of residential, small business, mid-mark and key 7 account customers say [the utility] should stick with its proposed plan or do more."4 8 Innovative also found a range of customer support for the various investment pacing 9 trade-offs presented to customers. For example, a majority of customers favoured a 10 more limited involvement by Toronto Hydro in support of microgrids, in contrast to 11 strong support for increasing the pace of investments in monitoring and control 12 13 equipment and network units.

14

15 In response to the conclusion that customers generally supported the plan, Toronto Hydro made only modest refinements to its plan. Given the particularly strong support 16 across customer classes for programs that address the risk of network vault floods and 17 fires (i.e. Network Unit Renewal and Network Condition Monitoring & Control), Toronto 18 made minor adjustments to the pace of these programs to address these issues at an 19 accelerated pace over the 2020-2024 period. Exhibit 2B, Section E2.3 discusses in detail 20 21 how Customer Engagement results are reflected in the 2020-2024 Capital Expenditure Plan, including the final adjustments made in response to Phase 2 results. 22

⁴ Ibid. pg. 3.

1 3.2.1 Continuous Improvement

The Planning-specific Customer Engagement described in this evidence represents an evolution in the process used in connection with Toronto Hydro's 2015 CIR Application in a number of important ways. Phase 1 was introduced as an entirely new process and purposefully sequenced to inform the development of the business plan.

6

7 The Phase 2 process was changed in a number of ways. Customers were provided specific information about Toronto Hydro's planning process, how it solicited feedback 8 from customers, and information about Toronto Hydro's cost benchmarking 9 performance. The results of the Phase 1 engagement were summarized and customers 10 were again asked to rank priorities to evaluate if the needs and preferences that 11 informed the business plan had changed. Program-specific information, including 12 activities, outcomes, and bill impacts were shared in respect of trade-offs where 13 customer input was sought. And customers participating in the online workbook were 14 15 shown the estimated net bill impact of their trade-off choices and allowed to change their responses if desired. 16

17

18 3.2.2 Ongoing Customer Engagement

Ongoing Customer Engagement occurs and informs decision-making at Toronto Hydro
 through the range of interactions that are primarily intended to deliver valued customer
 services.

22

Toronto Hydro's customer services, outlined in the Customer Care program (Exhibit 4A, Tab 2, Schedule 14), respond to the needs of the utility's wide array of customers. The utility serves a large and diverse base of approximately 768,000 customers, ranging from individual residential consumers to large industrial and commercial businesses. Toronto Toronto Hydro-Electric System Limited EB-2018-0165 EAhibit 1B Tab 3 Schedule 1 Appendix B ORIGINAL Page 1 of 1

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OEB Appendix 2-AC Customer Engagement Activities Summary

Provide a list of customer engagement activities	Provide a list of customer needs and preferences identified through each engagement activity	Actions taken to respond to identified needs and preferences. If no action was taken, explain why.
Planning-Specific Customer Engagement: Phase I - Low Volume Customer Focus Groups - Mid-Market Customer Focus Groups - Low-Volume Customer Needs and Preferences Survey - Key Account Needs and Preferences Survey - Stakeholder In-depth Interviews	Various, including identification and ranking of six key customer priorities. Please refer to: - Exhibit 18, Tab 3, Schedule 1 - Exhibit 18, Tab 3, Schedule 1. Appendix A (Innovative Report, Executive Summary and Phase I Appendices)	 Informed the development of the Outcomes Framework Informed the strategic parametres established for the business plan, which included an upper limit of 3.5% as a cap on the average annual increase to base distribution rates. Informed the development of the penultimate business plan that was taken back to customers during Phase 2 Customer Engagement. See also:
		- Exhibit 18, Tab 1, Schedule 1 - Exhibit 28, Section E2 - Exhibit 4A, Tab 1, Schedule 1
Planning-Specific Customer Engagement: Phase II - Online Customer Feedback Portal ("Workbook") - Residential Telephone Survey	Various, including general support for the business plan and strong support for doing more to address the risk of network vault floods and fires.	 Customers generally supported Toronto Hydro's proposed plan. Minor adjustments to the pace of two capital programs to address the risk of network vault floods and fires that received
- Small Business Telephone Survey - Mid-Market Telephone Survey - Key Account Online Survey	Please refer to: - Exhibit 18, Tab 3, Schedule 1 - Exhibit 18, Tab 3, Schedule 1. Appendix A (Innovative Report, Executive Summary and Phase 2 Appendices)	particularly strong support across customers classes. See also: - Exhibit 2B, Section E2
Ongoing Customer Engagement	Various Please refer to: - Exhibit 18, Tab 3, Schedule 1 - Exhibit 4A, Tab 2, Schedule 14	 Informs the continuous improvement of Toronto Hydro's customer services Informs the execution of Toronto Hydro's capital work Informs the development of Toronto Hydro's capital programs

÷.

THESL's proposed plans, and explore trade-offs in relation to specific programs and the associated bill impacts, as well as the pacing and prioritization of investments.

4. **Re-Examining the Business Plan and DSP**: In 2018, THESL revised the utility's business plan and DSP in response to **Phase II** customer engagement feedback as part of their OEB requirement to demonstrate how customer feedback has been considered in the development of their **2020 CIR Application** before filing with the OEB.

3.4.3 Consultation Process Overview

The diagram below provides an overview of INNOVATIVE's multi-phased customer engagement process, designed to support the consultation requirements of THESL's 2020 CIR application. This customer engagement program was designed as an iterative process where each subsequent phase of the consultation built on learnings from previous phases and the components within.

Identify customer needs and preferences as they relate to the outcomes that the utility should focus on and prioritize.

Phase I: Needs and Preferences

Priority outcomes help inform Toronto Hydro's plans.

Develop and evaluate customer engagement materials designed to solicit customer feedback on THESL's proposed plans, explore trade-offs

Phase II (A): Pre-Consultation

Refine customer engagement materials to ensure appropriate choi**ces and trade**-off are considered before executing the full *customer engagement*

Collecting Customer Feedback on THESL's Draft Plans

Phase II (B): Customer Engagement

Demonstrate how the Rate Application considers customer feedback

1. **Phase I (2016-2017)** set out to identify customer needs and preferences as they relate to the outcomes that the utility should focus on and prioritize. This was executed using a combination of both qualitative and quantitative research methodologies. In addition to engaging low-volume, mid-market and large use customers, INNOVATIVE also conducted a series of in-depth interviews with stakeholders who represent a cross-section of views from various customer groups.

This first phase of the customer engagement provided THESL's information to help inform Toronto Hydro's business planning, including the penultimate DSP.

2. **Phase II (A) – Consultation Materials Design and Evaluation.** The next phase of this process was to develop and evaluate customer engagement materials designed to solicit customer feedback on THESL's proposed plans, and explore trade-offs in relation to specific programs and the associated bill impacts, as well as the pacing and prioritization of investments.

Following the development of THESL's penultimate DSP, INNOVATIVE began the process of translating detailed financial and technical documents into customer-facing consultation materials. The developed customer consultation materials took the form of an online customer feedback portal.

Customer testing focus groups were conducted before the launch of the online customer feedback portal. These focus groups were intended to ensure the portal used language that was accessible to customers and that it provided an appropriate amount and substance of information, in order for customers to provide an informed opinions on THESL's proposed plan.

- 3. **Phase II (B) Customer Engagement**. The next phase of the customer engagement integrated research-based consultation tools, with traditional voluntary-based tools. The online customer feedback portal provided an opportunity for customers who wished to participate in the consultation to have their say. This process also provided a clear understanding of needs and preferences across the broader customer base. This final phase of the customer engagement was divided into two components:
 - **Qualitative Component**: An online workbook allowed us to determine the range of views held by THESL customers regarding the plan and trade-offs.
 - **Quantitative Component**: Randomly recruited telephone surveys of residential, small commercial (GS < 50 kW), and mid-market (GS > 50 kW) customers and an online survey of large use (Key Account) customers was the final step in the consultation process. Randomly recruited surveys allow for generalizable conclusions that can be applied to the broader population of THESL customers. The surveys were developed based on the feedback from the online customer feedback portal. Incentives were used to allow for a longer survey which allowed more topics to be covered.

Phase I Customer Engagement Summary

	Methodology	Dates	Quan	tity
Oualitative Research				
Residential	Focus Groups	Dec. 5 & 6, 2016	2 gro	ups
Small Business (G5 < 50 kW)	Focus Groups	Dec. 5 & 6, 2016	2 gro	ups
Mid-Market (GS > 50 kW)	Facus Groups	Feb. 28 - Mar. 1, 2017	4 gro	ups
Stakeholders (NGOs, Industry Associations)	In-depth Interviews	June 12-30, 2017	10 intei	rviews
	Methodology	Field Dates	Targeted Sample Size	Final Completes
tow-Volume Telephone Survey				
Residential			n≈400	n=416
Small Business (GS < 50 kW)	Telephone	Dec. 7-14, 2016	n≠200	n=211
Total Low-Volume Customer Completes			n=600	n=627
Rey Accounts				
Large Use Customers (2MW+)	Online	Feb. 23 - Mar. 24, 2017	N/A	n=63

Summary of Customer Priorities

Priorities	Residential*	GS < 50 kW*	GS > 50 kW**	Key Accounts ^B
1 st	Prices	Prices	Price	Reliability
2 nd	Reliability	Reliability	Reliability	Price
3 rd	Safety	Safety	ETOR / Communications	Environmental Risk Mitigation (Reliability)

* Feedback from residential and GS < 50 kW customers obtained through both focus groups and telephone surveys.

** Feedback from GS > 50 kW customers obtained through focus groups.

 $^{\beta}$ Feedback from Key Account customers obtained through an online survey.

Customer and stakeholder feedback from Phase I can be summarized by the following key points:

- 1. Keeping distribution price increases as low as possible;
- 2. Maintaining long-term performance for customers experiencing average or better service;
- 3. Improve service levels for customers experiencing below average service or who have special reliability needs (e.g. hospitals); and,
- 4. Balancing other customer priorities (e.g. customer service) with the need to contain rate increases.

Phase I customer feedback informed THESL's business planning, including the penultimate DSP. THESL's plans were later refined based on feedback from the Phase II customer engagement.

An overview of customer priorities can be found below in the *Phase I: Toronto Hydro Customer Priorities* table. At the conclusion of Phase I, INNOVATIVE provided a two-page summary with the overview table and the key results of the low volume and Key Accounts surveys for reference

2.2 Phase II Customer Engagement

In 2017, THESL planners used customer and stakeholder feedback, collected throughout the Phase I customer engagement program, to help align the 2020 CIR DSP and operational programs with customer expectations.

Phase II of the engagement took place in the spring of 2018 and focused on three goals:

- confirming the customer needs, preferences and priorities identified in Phase I;
- soliciting customer feedback on the content of its proposed plans and subsequent rate impact including customer preferences towards particular capital projects where trade-offs on pacing exist,
- soliciting customer feedback on THESL's planning development process, including the customer engagement process.

INNOVATIVE worked with THESL staff to translate the penultimate business plan and DSP into consultation materials that a typical customer could understand. Consultation materials were designed to provide meaningful feedback.

The following section summarizes customer feedback from an online feedback portal among low-volume customers, telephone surveys among low-volume and mid-market customers, and an online survey among Key Account customers.

	Methodology	Field Dates	Targeted Sample Size	Final Completes
Online Feedback Portal				
Residential	a and south	States States	N/A	n=10,165
Small Business (GS < 50 kW)	Online	April 26 - May 28, 2018	N/A	n=181
Total Online Feedback Portal Completes	A CHARTER OF THE		N/A	n=10,346
Surveys				
Residential	Telephone	May 1 – 10, 2018	n≂600	n=600
Small Business (GS < 50 kW)	Telephone	May 2 – 14, 2018	n=200	n=215
Mid-Market (GS > 50 kW)	Telephone	May 3 – 11, 2018	n=200	n=202
Key Accounts	Online	June 7 – 15, 2018	N/A	n=XX

Phase II Customer Engagement Summary

2.2.1 Customer Needs

A strong majority of Toronto Hydro customers are both familiar with the utility and satisfied with the services they receive. When asked if there is anything in particular that Toronto Hydro could do to improve services, customers respond with either "*nothing*" or "*reduce the price*" – this is consistent with all rate classes.

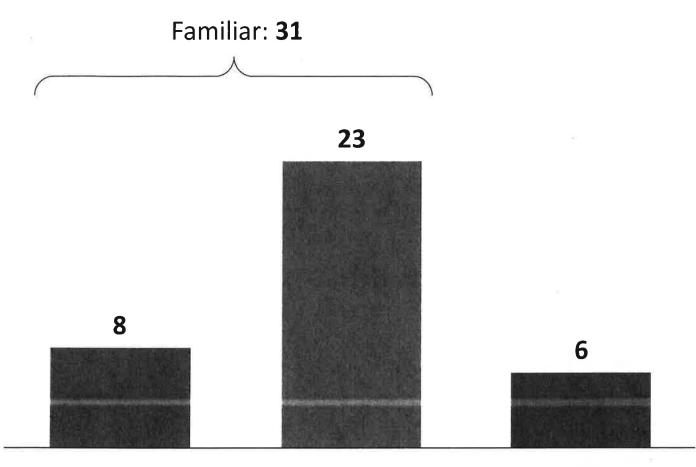
tario's	y Familiar ":		26%	11%	40%	20%	1 7	15%	33%	14%	1 3	18%	25%	risdictions	34%	12%
iliar with On iar	Segmentation ▶▶ Respondents who say " <u>Very Familiar</u> ":	Customer Type	Commercial	MASH	MURB	Industrial	Respondent Type	Executive	Senior Manager	Operations	# of Electricity Bills	Single Bill	Multiple Bills	Toronto vs. Multiple Jurisdictions	Multiple Jurisdictions	Toronto Only
Familiarity: Nine-in-10 (92%) are familiar with Ontario's electricity system; 22% are <i>very familiar</i>	How familiar are you with the various parts of Ontario's S electricity system, how they work together and which parts <i>R</i> Toronto Hydro is resonsible for?	[asked of all respondents; n=63]		92% Familiar			20%			22%	6%		ain Somewhat familiar,	the details of Ontario's cannot explain all the details from Toronto Hydro, I know electricity system to others of Ontario's electricity very little about Ontario's	system to others electricity system	

Familiarity with Electricity System



How familiar are you with the various parts of Ontario's electricity system, how they work together and which parts Toronto Hydro is responsible for?

[asked all respondents, n=37]



Very familiar and can explain the details of Ontario's electricity system to others

Somewhat familiar, but Aside from receiving a bill cannot explain all the details of Ontario's electricity system to others

from Toronto Hydro, I know very little about Ontario's electricity system



8 14

Customer Priorities



In response to customer engagement efforts over the past year, Toronto Hydro customers identified a diverse range of customer stated priorities, ranging from price and reliability to customer service, outages and helping customers conserve electricity.

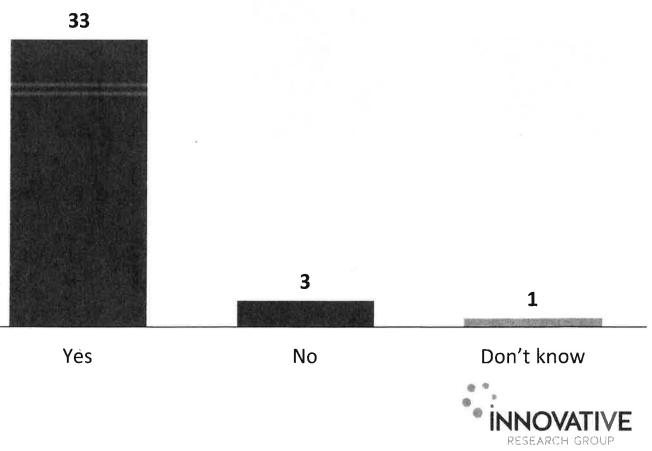
Understanding that not all customers value and prioritize the same things, Toronto Hydro is working to find a balance that works for all customers.

In February and March of 2017, Key Account customers told Toronto Hydro that the three most important priorities were:

- 1. Ensuring reliable electrical service;
- 2. Delivering reasonable electricity prices, and;
- 3. Preventing or reducing the length of prolonged power outages caused by extreme weather (e.g. high winds, floods and ice storms)

Are these three customer identified priorities aligned with what you expect Toronto Hydro to focus on?

[asked all respondents, n=37]

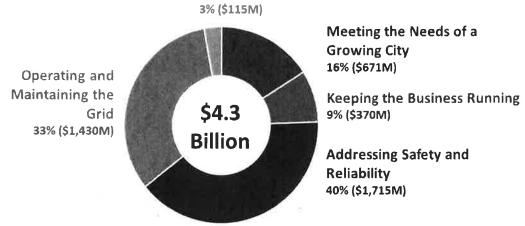


H. INVESTMENT ALTERNATIVES SUMMARY

To learn more about each category, simply hover over the title.

industrial customers, and financial centres.

H18. **Toronto Hydro** has drafted a plan totaling approximately \$4.3B over five years. The plan considered Toronto Hydro's legal obligations, engineering expertise and customers' needs and preferences when developing the plan. **There are five key budget categories.**



Innovation and Planning for the Future

Toronto Hydro's proposed plan focuses on delivering current levels of reliability and customer service for most customers and targeted improvements for customers experiencing below average service or who have special reliability needs, such as hospitals,

This proposed plan could translate into an annual average increase in your distribution rates of between 2.3% and 3.9% from 2020 to 2024.

H19. With regards to Toronto Hydro's proposed plan, which of the following statements best represents your view? [READ LIST; ROTATE 01 and 03]

01	Toronto Hydro should improve service even if that means an annual increase that exceeds
	the proposed plan.
02	Toronto Hydro should stick with the proposed plan to deliver current levels of reliability
	and customer service for most customers and targeted improvement for customers
	experiencing below average service or who have special reliability needs.
03	Toronto Hydro should keep increases below the proposed plan, even if that could mean
	reductions in service.
88	Other [Please specify]
98	Don't know

H20. And why do you say that? [OPEN]

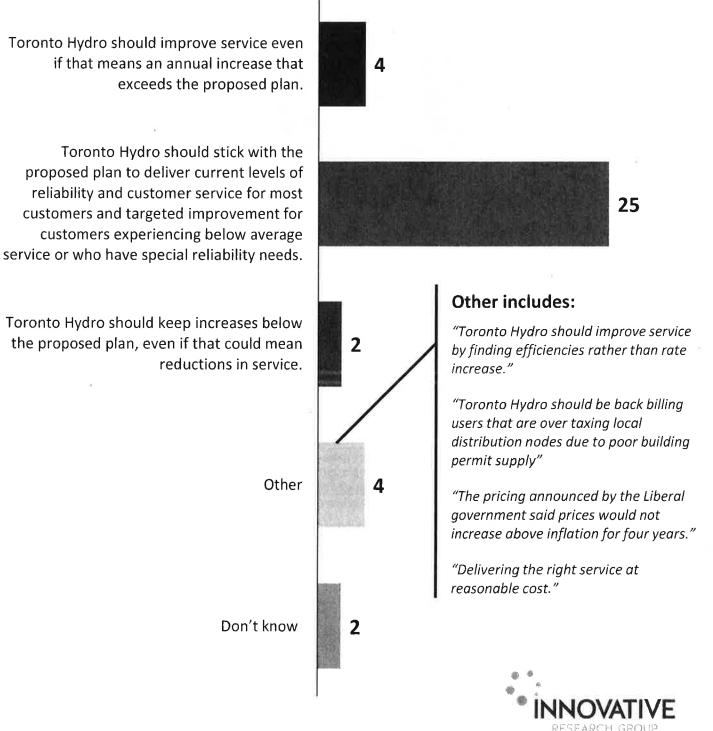
THESL08 – Key Account Online Survey Final Questionnaire

Opinion of Toronto Hydro's Proposed Plan



With regards to Toronto Hydro's proposed plan, which of the following statements best represents your view?

[asked all respondents, n=37]



Opinion of Toronto Hydro's Proposed Plan

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200	2	10	8			8

And why do you say that?

[asked all respondents, n=37]

Improve Service (n=4)

Reliability:

- "This will prevent occasional brief outages that affect our operation"
- "Reliability is the most important aspect of the system"
- "Reliability is Key prices will increase regardless"

Maintain Service (n=25)

Increase is reasonable as long as the service quality can be maintained:

- "The increase of 3.9 percent over four years is appropriate as long as service and reliability is not reduced"
- "I agree that the service should be at least maintained or even improved even we have to pay the related cost with an increase in distribution charges of maximum up to 4%"
- "New customer accounts should not impact existing rates but it is important to maintain the grid and ensure reliability"

Can't Afford More:

- "We don't need another price increase as cost of living is already high. So maintaining is key"
- "We have paid enough for the hydro"

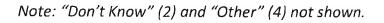
Generally Positive:

- "That would be in our best interest"
- "It's consistent with the objectives from its customers"
- "The right thing to do"

Reduce Cost (n=2)

No comment:

- "No comment"
- "No further comments"



RESEARCH GROUP

Toronto Hydro Electric System Limited Ele 20196 155 Electronerore Schedule TIC46 Approxia A Approxia A Page 1 of 1

CONTRACT NO.	2010	2011	2012	2013	2014	2015	2016	2017	2018	Expected	Proposed	Proposed	Proposed	Proposed	Proposed	Z010-14	Average Annual Increase 0-14 2015-19 2020-24	2020-24
Residential - 750 kWh																		
Sub-Yotal A including Rate Riders	31.26	30.60	15:01	31.74	32.18	30.25	36.81	39.23	40.98	43.63	41.92	42.68	52.55	45.64	47.47			
annual change = \$	3.31	-0,66	-0.03	117	0,44	-1.93	6 56	2,42	1.75	2.65	2.32	1.37	1.07	1.89	183	0.85	2.29	0.77
annual change - %	11.8%	-2.1%	-0.1%	「古田市	1.4%	-6,0%	21.7%	6.6%	4.5%	6.5%	5.3%	3.3%	2.5%	4.3%	4 DW	2.9%	6.3%	17
Sub-Total A excluding Rate Riders	30.04	25,65	29.65	29,84	30.17	30.17	36.88	39,03	40.60	41.60	42.14	43.51	44.58	45.47	48.30			
annual change - S	2,45	-0.39	000	0,19	033	80	6.71	2.15	157	1.00	0.54	1.37	107	1.89	1.83	0.52	2.29	1.34
annual change - %	8.9%	1.3%	0.0%	0.6%	1.1%	0.0%	22.2%	5.8%	4.0%	2.5%	13%	3,35%	2.5%	4.2%	is:	1.8%	6.6%	3.0%
Competitive Sector Multi-Unit Residential - 300 kWh	D KWh ¹																	
Sub-Total A including Rate Ritlers				26.63	26.26	25.20	27.36	29.63	31.62	33.61	32.72	33.81	34.65	36,16	37,61			
annual change - \$					-0.37	-1.06	2.16	2.27	1.99	1.99	-0.89	1.09	0.65	18	1.45	150	1.47	0.80
annual change - %					1.4%	4,0%	8.6%	8.3%	6.7%	6.3%	2.6%	3.31	2.5M	4.3%	4.0%	#VALUE!	361.5	2.3%
II Sub-Total A excluding Rate Riders	•		2	24.93	25,20	25.20	27.70	29.89	31.68	33,10	33,40	24.49	35.34	36.84	38.29			
annual change - 5					0.27	000	2,50	2.19	1.79	1.42	0.50	1.03	0.65	1.50	1.45	0 27	1.58	1.04
annual change - %					2.1%	100	3.5%	7.9%	6.C%	45%	55.0	3.3%	2.5%	4,2%	3 9%	#VALUE!	5 6%	3'0%
General Service < 50 kW - 2,000 kWb	1000																	
I Sub-Total A Including Rate Riders	70.78	70.61	70.61	13,45	82.90	76.25	94.64	101.93	95.66	107.87	103.25	106.70	109.38	114,12	128.71			
annual change - 5	950	-017	000	2.84	3,45	-5.64	12.38	7.29	-2.37	B.31	-4.62	3.45	2.68	474	4 59	432	4.99	2.17
annual change - %	15,5%	-0.2%	%0 0	4,0%	12.9%	-8.0%	24.1%	11.11	-2.3M	8.3%	「「「「「「」」	3,3%	167	4.3%	4.0%	6.2%	1475	1.9%
= Sub-rotal A excluping Kate Aders	07.69	53.24	09.24	63.25	70 66	70.64	86.63	95.14	61.85	101.98	105.65	109.10	111.78	116.52	121.11			
annual change - 2	0/0	0.00	000	0.63	0.17	0.00	16:17	6.31	g,	3.79	1.67	3.45	2.68	4.74	4.53	1 94	6.26	5.83
General Service 50.000 kW - 200 kVA	deur	R.A	100	250	27.1	1000	45.21	1.3%	20%	265.0	3,45%	武大王	2.3%	4.2%	3.9%	3.0%	7.6%	3,5%
Sub-Total A Including Rate Ridere	115675	1 164.62	10,825.1	1212.04	1 367 63	1107 41	1 042 40	* 564 Ch	1 629 04	1 720 17	10,000	1 936 64	11.001.0	1 00.0 03	1 111 23			
annual change - S	93.37	7.88	0.00	50.16	43.64	60.13	256.06	111.14	56.36	110.23	59.87	56.26	01.85	17 65	74 80	18.81	96.32	28.44
annusi change - %	0.5%	0.7%	-0.1%	43%	3.6%	-4.8%	21.4%	7.6%	41%	6.8%	NA E	3.4%	252	4.4%	4.0%	3.4%	22	2.1%
ii Sub-Total A excluding Rate Riders	1,152 29	1,154,68	1,154,68	1,165,80	1,178,61	1,178.61	1,423,22	1,526.54	1,609.29	1,671.24	1,725.73	1,781,99	1,825.84	1,903.26	1,978.06			
annual change - 5	39.42	2.39	80	12.12	12.81	000	244.61	103.32	82.75	51.95	54,49	S6.26	43.65	77.42	74.80	BIE	98.53	6136
annuai change - %	8.4%	10.0	0.0%	1.0%	1.156	0.0%	20.8%	7.3%	S.4%	NS.E	3.3%	3,35%	167	42%	39%	2.1%	7,2%	3.4%
General Service 1,000-4,999 kW - 2,000 kVA			000000000000000000000000000000000000000		- H													
1540-Total A Including Rate Roofs	8,789.08	9,963.73	9,656.35	10,072.37	ä	9,784.48	11,483,66	12,555.45	13,378.69	14,211.33	13,815.49	14,278.14	14,637.83	15,273,21	15,887.16			
annual change - >	-466./5	11/465	307.55	415.02	4	406.83	1699.18	10.1101	823.26	832,64	394,84	461.65	359.69	515.16	613.95	187 10	804 00	335+17
in Sub-Total & evolution Rate Riders	0V 171 0	D FOS DC	D 585 85	4678.06	# 70X 40	0.701.40	11 600 40	11 520 44	10 10 10	97.0 T	1012101	10 01 0 10	11 101 11	10 010 01	AUR IN TO	9K.5-T	2/n a	7.3%
annual change - S	603.95	838.46	0.00	92.20	105.42	0.00	1905.01	÷	679.46	508.84	EL SED	461.65	859.69	10:010:01	613.95	86.63	788.3.8	501.48
annual change - 56	. R. Cut.	9.64	200	10%	1 166	0.0%	10.001	t	C. AV	1 242	Pat 1	CO TOP	2 64	10 min	1 ON	20.00	7 100	Why P
Large Use - 9,700 kVA	-	220	200	2.2.4		2000	No. At	622	200	2004	444	0.010	100	20.0	44.1	RC D	1 0/20	8t n
Sub-Total A including Rate Riders	44,587.52	50.904.48 49.298.23	49.298.23	51.478.37	52 CB8 26		59.065.92	65.062.02	-	H	F	h	-	78 705 26	81 872 75			
annual change - S	4258.54	6216.95	-1606.25	218014	66.603	-2080.43	9058.09		5519.74	2614.95	t	2383.03	1856.68	3278.51	3167,49	2,331,86	4.221.69	1,735.21
annual change - %	10.5%	13.9%	-3.2%	4.4%	1.2%		18.1%		-	-	-	 -	-	「「「「	4.0%	5.2%	7.0%	2.3%
ii Sub-Total A excluding Rate Riders	44,440.45	48,992.93	48,992.93	49,464.19	\$0,007.83	\$0,007.83	60,158.67	54,526,14	68,023.43	70,642.26	73,067.27	75,470.30	77,326.98	80,605,49	83,772,98			
annual change - S	3633.86	4552.47	00/0	471.26	543.64	88	10150.84	-+	3497.29	+	2445.03	2383.03	1856,68	3278.51	3167,49	1,840 25	4,126 B9	2,626 14
annual change - %	8.9%	%Z 01	200	1.0%	1.1%	100	20.3%	7,3%	5.4%	3.8%	3.5%	3.3%	5.5%	777	76 E	4.2%	7 2%	3 5%
- Sub-Total A including Rate Riders	114 725 63	36 366 86 05 501 511 19 352 511	98 996 96	-	105 358 20	100 382 33	00 101 00	-32 C85 CU1	21 123 511	30.000.000	90 202 CC1	31 735 361	I DE DED OEL	136 522 93	141-056.36			ł
annual change - S	47138.75	1616.33	-14112-14	4205 84			OC ERET.			+	+-	4051.07	173 14	5593.63	5442 43	7 354 28	1944.33	1 397 28
annual change - %	W/ 69	.1.4%	-12.5%	4.2%	1	-3.9%	1.1%	85%	5.6%	9 2%	-1 0%	%E E	2.5%	43%	4.0%	9.1%	3.5%	2.6%
ii Sub-Total A excluding Rate Riders	100,005.63	98.356.96	38,356,96	39,262.97		100,284.27	106,116.37			-		+			144,547,47			
annust change - 5	32.418.76	-1548.67	00:0	906.01	1021 30	0.00	3832.10	7567.5a	6058.46	4538.31	4006.52	4051.07	\$173.14	5593.63	5442 43	6,539,46	4,399.28	4,453 36
annual change - %	48.0%	-1.6%	0.0%	0.9%	_	0.0%	3.8%			-	_	-	-	-	3,9%	8.2%	4.0%	3.4%
USL - 285 kWh																		
Sub-Total A including Rate Riders	24,00	23.50	22.72	23.79	24.07	23.1	28.55	30.77	32.42	14.77	33.82	34.95	18.25	37.38	38.87			
annual change + 5	0.62	0.50	+0.76	101	0,28	16.0-	2,45	2.22	1.65	515	-0.95	101	0.66	135	149	1/6	2.14	0.57
annum change - 29 10 Sub-Total & such signs 2 star 0.06sec	et oc	19.62	%F F-	9/ 5	1.2%	-4.0%	23.5%	1.5%	5.4%	1.2%	-7-1-7-	%T T	12.20	20.4	20.63	27.5	1.02	40.7
annual change - S	114	24.00	10.0				10.00	200			11111		000					4 5.2
			0000		0.26	0.000	1 30 C	2.02	182			1 1 2	0.58	001	100		2.08	

ampetritive Sector Multi-Unit Residential rates were first approved as part of 2013 Toronto Hydro Decision and Order (E8-2012-0054)

Note 3

73

Toronto Hydro-Electric System Limited EB-2018-0165 Interrogatory Responses **U-BOMA-121** FILED: June 11, 2019 Page 1 of 2

1	F	RESPONS	ES TO BUILDING OWNERS AND MANAGERS ASSOCIATION
2			INTERROGATORIES
3			
4	INTER	ROGATOR	Y 121:
5	Refere	ence(s):	Exhibit U, Tab 1A, Schedule 2, p. 5
6			
7	a)	Table 3 p	rovides bill increases for each rate class for each year of the 2020-2024
8		plan. Ple	ase provide a similar table which shows the updated distribution charge
9		increase	or each rate case for each year of the plan. Please do not include the
10		impact o	any rate riders in the table.
11			
12	b)	Please pr	ovide a similar table to the one requested in (a) above, but inclusive of
13		the impa	ts of any rate riders anticipated over the plan term.
14			
15			
16	RESPO	NSE:	
17	a) Tab	ole 1 belov	r provides a summary for 2020-2024 base distribution bill changes for al
18	rat	e classes.	
19			

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Table 1: Base Distribution Bill Change

	Change in bill	2020 Proposed	2021 Proposed	2022 Proposed	2023 Proposed	2024 Proposed
Residential	\$/30 days	0.54	1.37	1.07	1.89	1.83
Residential	%	1.3	3.3	2.5	4.2	3.9
Competitive Sector Multi-	\$/30 days	0.20	1.09	0.85	1.50	1.44
Unit Residential	%	0.6	3.3	2.5	4.3	3.9
General Service	\$/30 days	4.07	3.45	2.69	4.75	4.59
<50 kW	%	4.0	3.3	2.5	4.2	3.9
General Service	\$/30 days	54.13	56.28	43.87	77.46	74.84
50-999 kW	%	3.2	3.3	2.5	4.2	3.9

Panel: CIR Framework & DVAs

Toronto Hydro-Electric System Limited EB-2018-0165 Interrogatory Responses **U-BOMA-121** FILED: June 11, 2019 Page 2 of 2

	Change in bill	2020 Proposed	2021 Proposed	2022 Proposed	2023 Proposed	2024 Proposed
General Service	\$/30 days	485.15	463.58	361.18	637.95	616.32
1,000-4,999 kW	%	3.5	3.3	2.5	4.2	3.9
	\$/30 days	2569.34	2,388.19	1,860.80	3,286.69	3,175.65
Large Use	%	3.6	3.3	2.5	4.2	3.9
Chan an Minhaim a	\$/30 days	3,986.27	4,052.96	3,174.76	637.95 4.2 3,286.69 4.2 5,596.06 4.2 1.35	5,444.86
Street Lighting	%	3.3	3.2	2.4	4.2	3.9
Unmedicated Constant of Long	\$/30 days	-3.34	0.98	0.76	1.35	1.31
Unmetered Scattered Load	%	-10.0	3.3	2.5	4.2	3.9

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2 b) Table 2 below provides summary for 2020-2024 distribution bill changes including

3 Rate Riders for all rate classes.

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Table 2: Distribution Bill Change including Rate Riders

	Change in bill	2020 Proposed	2021 Proposed	2022 Proposed	2023 Proposed	2024 Proposed
Residential	\$/30 days	-3.28	0.94	1.07	1.33	1.83
Residential	%	-7.0	2.2	2.4	2.9	3.9
Competitive Sector Multi-	\$/30 days	-1.63	0.96	0.85	0.94	1.44
Unit Residential	%	-4.6	2.9	2.5	2.6	3.9
General Service	\$/30 days	-4.87	2.11	2.69	4.19	4.59
<50 kW	%	-4.3	1.9	2.4	3.7	3.9
General Service	\$/30 days	-391.69	232.00	43.87	77.46	74.84
50-999 kW	%	-18.3	13.3	2.2	3.8	3.6
General Service	\$/30 days	-3,829.18	2,462.58	361.18	637.95	616.32
1,000-4,999 kW	%	-20.6	16.7	2.1	3.6	3.4
	\$/30 days	-483.69	-933.09	1,860.80	3,286.69	3,175.65
Large Use	%	-0.6	-1.1	2.3	4.0	3.7
	\$/30 days	-6,410.20	6,161.23	3,174.76	5,596.06	5,444.86
Street Lighting	%	-5.0	5.0	2.5	4.3	4.0
Unmotored Continued Lond	\$/30 days	-5.73	0.78	0.76	1.35	1.31
Unmetered Scattered Load	%	-16.2	2.6	2.5	4.3	4.0

Panel: CIR Framework & DVAs