



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #1

Reference: Exhibit A, Tab 2, Schedule 1, page 15

Question #1:

In describing its approach to the productivity factor, HOL states that:

“To derive the productivity factor Hydro Ottawa has relied upon the empirical evidence submitted by expert witnesses in the OEB’s Report of the Board....Hydro Ottawa contends that this is the only empirical evidence of Ontario electricity distributors’ productivity trends over the last 10 years that is available to Hydro Ottawa. Hydro Ottawa has chosen to use the average productivity trend number from all of the studies. In this way, Hydro Ottawa has not endorsed any of the recommendations and has given each recommendation equal weight.”

- a. Did HOL consider commissioning or producing its own "empirical evidence" for productivity?
- b. Given that the OEB approved a productivity factor of 0 for all RRFE filers after having reviewed the exact four expert witness recommendations HOL is relying upon in this application, why does HOL believe that in the absence of new evidence it is appropriate to rely on a productivity factor other than 0?

Response:

- a. Hydro Ottawa commission evidence authored by econometrics expert Power System Engineering (PSE). PSE’s study can be found in Exhibit D-1(D) as updated and filed in response to interrogatory OEB Staff #7.



- 1 b. See Hydro Ottawa response to interrogatory IR OEB Staff # 7.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #2

Reference: Exhibit A, Tab 2, Schedule 1, page 14

Question #2:

HOL states that "For the inflation factor, Hydro Ottawa proposes to use the GDP-IPI forecast from the Conference Board of Canada ("CBoC") for the period of 2017 and 2018." However, in the RRFE Report the OEB determined that it would adopt a 2 Factor IPI methodology:

"The Board will adopt the 2 factor IPI methodology. The Board acknowledges stakeholders' concerns with excluding a capital sub index however the Board finds that the 2 factor IPI is the most appropriate approach at this time because of a lack of confidence in the proposed approaches for addressing the concerns which arise from introducing the capital sub index. The Board's concerns with other alternatives proposed by stakeholders outlined in its Draft Report are listed in Appendix A."¹

In rejecting the GDP-IPI measure, the OEB also explicitly noted its concern that using the GDP IPI is "Inconsistent with policy direction to better align inflation with more Ontario industry specific inflation".²

Given the OEB accepted the 2 factor IPI methodology, and expressly rejected the GDP-IPI, why does HOL believe that it is nonetheless appropriate to use the GDP-IPI as part of this application?



1 **Response:**

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3 Hydro Ottawa has opted to use the GDP-IPI as its inflation factor rather than the 2 factor

4 IPI methodology because pursuant to the OEB's directions set out in Table 1 on page 13

5 of the OEB's Report of the Board entitled *Renewed Regulatory Framework for Electricity*

6 *Distributors*, there is no mandated requirement for Custom IR filers to use the composite

7 index to derive the inflation factor. This is not the case for 4th Generation IRM and

8 Annual IRM rate application filers.

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Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #3

Reference: Exhibit A, Tab 2, Schedule 1, page 14

Question #3:

HOL explains its need for a CIR application largely on the basis of capital investment requirements: "Hydro Ottawa propose a custom IR framework on the grounds that it must undertake unprecedented infrastructure investments in the near to medium term to avoid risks to system and service reliability."

a) Does HOL also consider its OM&A requirements as a reason for the need to file a CIR application?

b) Please explain what unique challenges HOL faces in terms of OM&A spending drivers that would justify a departure from the standard I-X inflation productivity formula applicable to all other utilities filing applications under the 4th Generation IRM methodology. That is, why would a custom approach to capital investment but a standard approach to OM&A not be appropriate for HOL's circumstances?

Response:

a) Yes Hydro Ottawa considers its OM&A requirements are part of the reasons why it elected to file a Custom IR application, however, Hydro Ottawa's capital requirements and the pacing and prioritizing of capital investments to ensure system reliability and avoid rate shock were and remain the principle motivators.

b) Hydro Ottawa is proposing to apply an I-X formula to its OM&A expenditures. Hydro Ottawa did not opt to file for recovery of its capital and operational funding requirements under the 4th Generation IRM methodology because Hydro



1 Ottawa's capital requirements would not be met. Further, as noted in Exhibit A-
2 2-1 Hydro Ottawa's capital requirements exceed its depreciation expense by a
3 significant margin rendering the company's ability to manage under a pure I-X
4 methodology not feasible. SIA asks "why would a custom approach to capital
5 investment but a standard approach to OM&A not be appropriate for HOL's
6 circumstances". In response this is what Hydro Ottawa has proposed in its 2016-
7 2020 rate application, to treat capital differently from OM&A.

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Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #4

Reference: Exhibit A, Tab 2, Schedule 1, page 13

Question #4:

HOL states that its "proposal [is] to fix final rates for three years (2016-2018) then adjust the rates only to update for inflation and cost of capital variables. This is intended to build in rate protection for Hydro Ottawa's customers and to provide operating and business certainty to Hydro Ottawa and its shareholder."

a. Did HOL consider asking for final rates for all 5 years, or adjustment for certain elements for all 4 years following the rebasing year? If so, please comment as to why it decided that three years of final rates was the appropriate timeframe.

b. What concerns would HOL have if it were required to finalize its rates for each year following 2016? What factors that would normally be subject to adjustment does HOL believe would lead to unacceptable "operating and business" uncertainty?

Response:

a. Hydro Ottawa did not consider asking for final rates for all 5 years. Ultimately Hydro Ottawa decided that revisiting and adjusting certain parameters after three years provided an appropriate balance of risk and reward between Hydro Ottawa and its rate payers. Hydro Ottawa's proposal was designed to give the company some operating stability while at the same time avoiding the expense of annual adjustment proceedings for each year of the five year plan.

b. If rates were fixed for 2017-2020 Hydro Ottawa would be concerned with any changes to the cost of capital parameters that entail higher borrowing costs be



1 absorbed by the company. Similarly if the inflation rate dropped Hydro Ottawa
2 would be concerned that its inflationary escalator for its OM&A costs is above the
3 inflation rate in the market. Hydro Ottawa is not proposing to adjust rates
4 annually and as such is prepared to operate within the risk profile presented by
5 only making onetime adjustments for inflation, cost of capital parameters, any
6 required deferral account dispositions and y factor adjustments.
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Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #5

Reference: Exhibit A, Tab 3, Schedule 1, page 31

Question #5:

With regard to HOL's customer feedback, HOL notes that "while a majority of customers indicated that electricity costs have a major impact on their finances, a larger majority stated that they were willing to pay a bit more because investing in the system is money well spent." Please reconcile these and other similar customer engagement conclusions with the positions reflected in the sizeable number of letters of comment filed by individual HOL customers in this proceeding. To what factor(s) does HOL attribute the notably different positions and responses between the groups?

Response:

In INNOVATIVE's experience with Ontario-based rate applications, the Hydro Ottawa customer engagement was unique in that it garnered substantial media coverage shortly after the deployment of online workbook survey. There were negative stories in the media, which drew additional attention – specifically, negative attention – to the online survey. Analysis of the online workbook survey data showed that responses to the online survey that followed the media coverage were consistently more negative in nature than responses prior to the media coverage.

The comments filed with the OEB were likely from customers who were motivated to write to the OEB as a result of the media coverage. Unlike the telephone survey of 1,036 randomly selected customers, the comparatively small number of comments filed with the Board should not be considered a representative sample of Hydro Ottawa's



- 1 customers' opinion. The telephone survey provides a representative sample of customer
- 2 opinion that is generalizable (and is considered accurate to within ± 3.0 percentage
- 3 points, 19 times out of 20), whereas the comments filed with the OEB are likely reflective
- 4 of individual opinions and not that of the broader Hydro Ottawa customer base.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #6

Reference: Exhibit A, Tab 2, Schedule 1, Table 5, Page 16 of 29

Question #6:

- a. On what basis did HOL construct the Earnings Sharing Proposal table, specifically the thresholds and respective treatment (e.g. why 0-150 basis points, rather than 0-50 or 0-100? etc)?
- b. What is the corresponding incremental (dollar value) of earnings represented by each 50 basis points increase above approved rates?

Response:

- a. Hydro Ottawa's Earning Sharing Proposal (ESM) and the increments for each threshold were informed by the Union Gas's first and current ESM put forward in the proceeding initiated by EB-2013-0202 which provided for no sharing 0-200bps as adjusted to 0-100bps for the 2014-2018 period.
- b. The incremental dollar value of earnings represented by a 50 basis point increases above approved rates are set out below.

Table 1 – Value of 50bps of ROE

(\$000s)	2016	2017	2018	2019	2020
Rate Base	\$923,306	\$970,582	\$1,020,297	\$1,050,724	\$1,094,270
Equity – 40%	\$369,322	\$388,233	\$408,119	\$420,290	\$437,708
50 bps of Equity (pre-tax)*	\$2,512	\$2,641	\$2,776	\$2,859	\$2,978
50 bps of Equity (after-tax)	\$1,847	\$1,941	\$2,041	\$2,101	\$2,189

*tax rate: 26.50%



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #7

Reference: Exhibit B, Tab 1, Schedule 2, page 42

Question #7:

Does HOL have annual targets attached to all its Key Performance Indicators? If so, please provide the targets and results for each of 2011-2014, and the current targets for 2015. If the KPIs do not have targets, please explain how HOL determines the degree to which the results are positive or negative.

Response:

HOL's Key Performance Indicators (KPIs) are defined in Exhibit B-1-2, Page 43 - Performance Measurement for Continuous Improvement of the Distribution System Plan. Results and targets of HOL's KPIs are listed below:

Table SIA #17 – 1: Customer Satisfaction

Annual Overall Customer Satisfaction Survey	2011	2012	2013	2014	2015
Pre Survey Satisfaction	87%	88%	90%	83%	87%
Post Survey Satisfaction	88%	90%	90%	79%	TBD
Ontario Average	84%	86%	90%	83%	86%
Target	>86% and 2% better than Ontario Avg	>86% and 2% better than Ontario Avg	>88% and 2% better than Ontario Avg	>91%	>91%

Table SIA #17 – 2: Touchlogic Customer Survey Results

Touchlogic Customer Survey Results	2011	2012	2013	2014	2015
Overall Satisfaction	85%	89%	89%	88%	90%
Target	85%	85%	89%	89%	89%

A year-to-year increase of customer satisfaction percentages indicates a positive result.



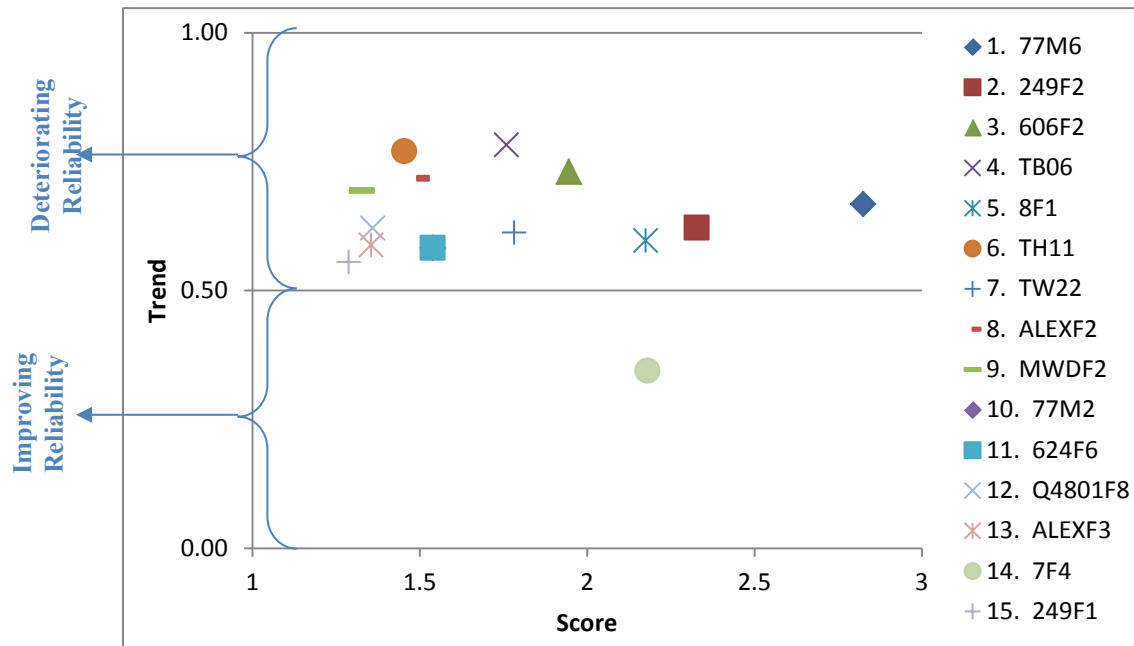
1 **Table SIA #17 – 3: System Reliability Performance Indicator**

KPI	Target	2011	2012	2013	2014
Annual SAIFI	0.8	1.68	1.81	1.53	1.08
SAIFI Excl LoS	0.8	1.40	1.13	1.36	0.86
3-Yr Average SAIFI	0.8	1.41	1.63	1.67	1.47
Annual SAIDI	1.0	2.60	1.64	1.67	1.66
SAIDI Excl LoS	1.0	2.43	1.31	1.64	1.59
3-Yr Average SAIDI	1.0	1.82	1.86	1.96	1.66
Annual CAIDI	1.25	1.54	0.90	1.09	1.53
CAIDI Excl LoS	1.25	1.74	1.15	1.21	1.85
3-Yr Average CAIDI	1.25	1.29	1.14	1.17	1.13
FEMI ₁₀	<12	12	13	13	8

2 The 2015 targets for the System Reliability Performance Indicators remain the same. A
3 year-to-year reduction of these KPIs indicates a positive result.

4 *Worst Feeder Analysis*

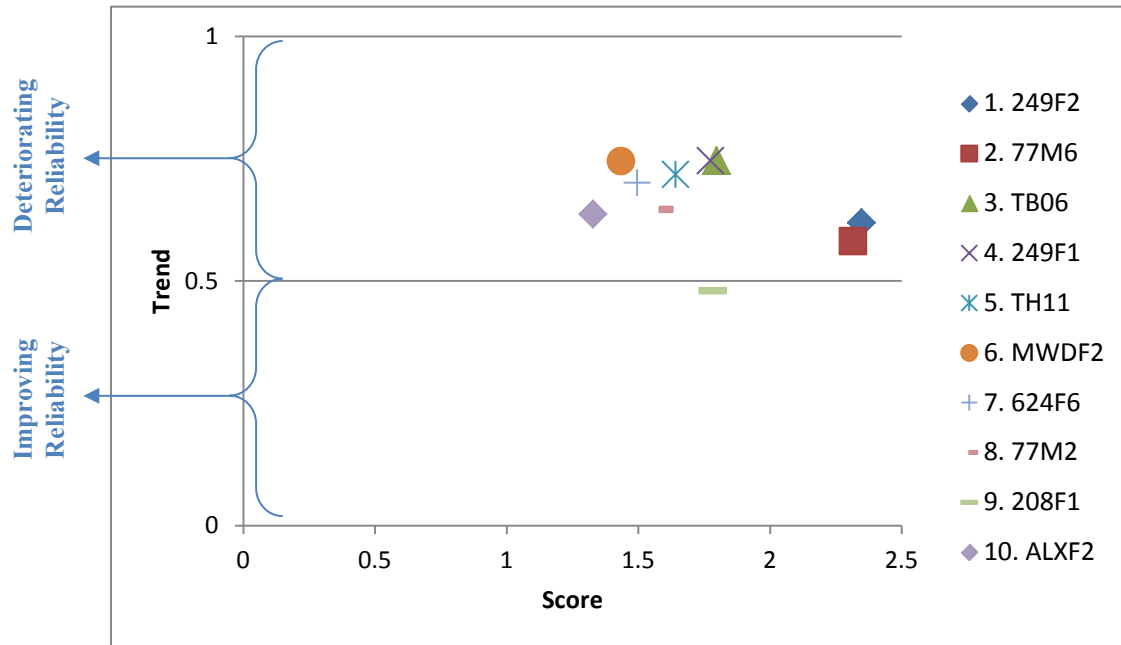
5 **Figure SIA #17 – 1: 2011 Top 15 Worst Feeders Score Vs. Trend**



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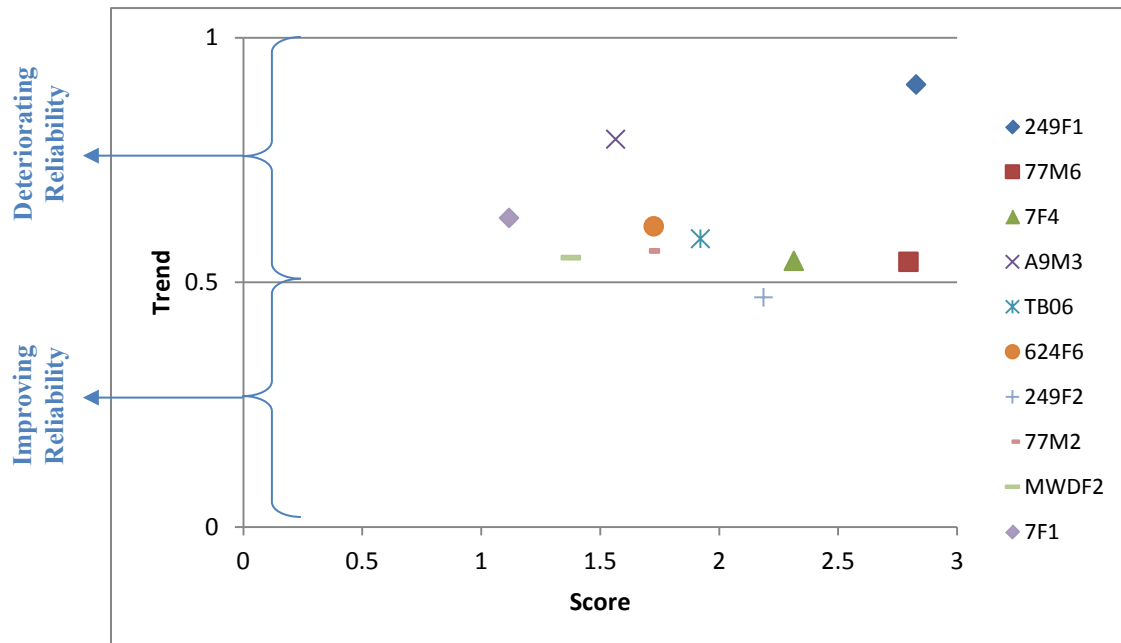


1 **Figure SIA #17 – 2: 2012 Top 10 Worst Feeders Score Vs. 3-Year Trend**



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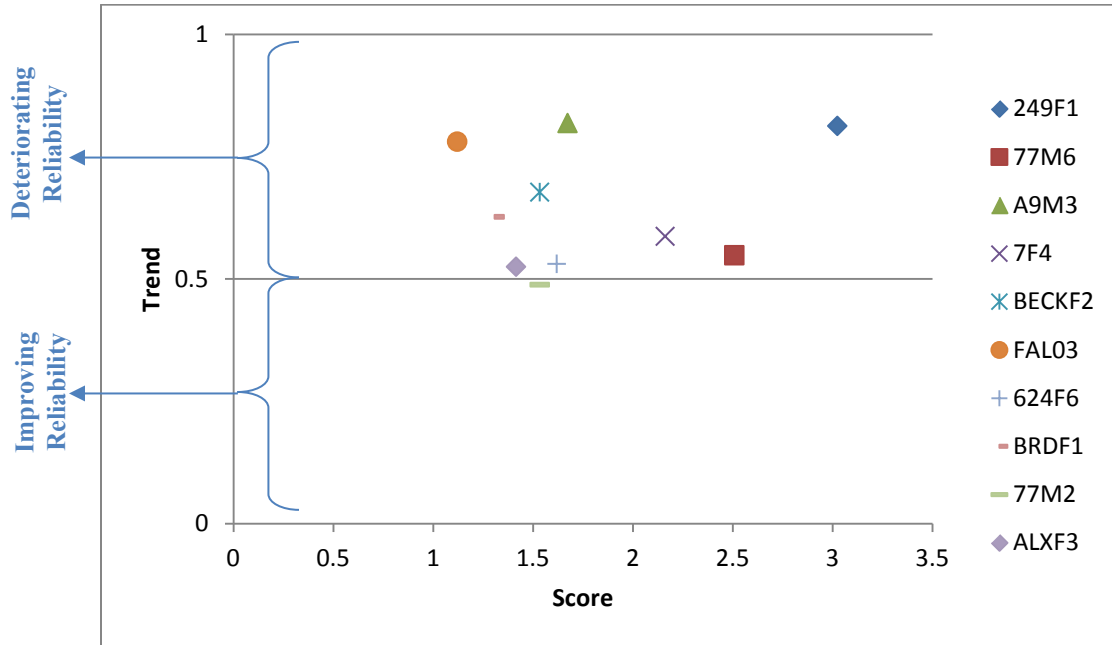
4 **Figure SIA #17 – 3: 2013 Top 10 Worst Feeders Score Vs. 3-Year Trend**



5



1 **Figure SIA #17 – 4: 2014 Top 10 Worst Feeders Score vs. 3-Year Trend**



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3 The annual target and 2015 target of the Worst Feeder Analysis is to have all 10 feeder

4 indicators below the 0.5 trend line; indicating that the feeders are showing improvement

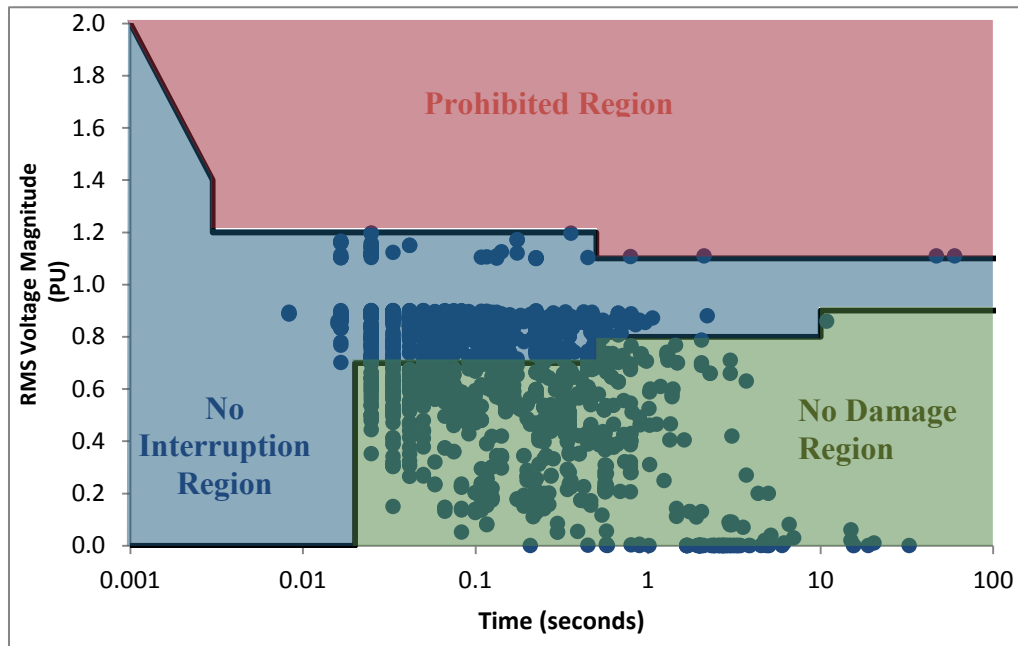
5 in reliability over the three year trend. A year-to-year reduction in the number of feeders

6 above the 0.5 trend line indicates a positive result.



1 System Average RMS Variation Frequency Index (SARFI)

2 **Figure SIA #17 – 5: 2011 Power Quality Events ITIC Curve**



4 **Figure SIA #17 – 6: 2012 Power Quality Events ITIC Curve**

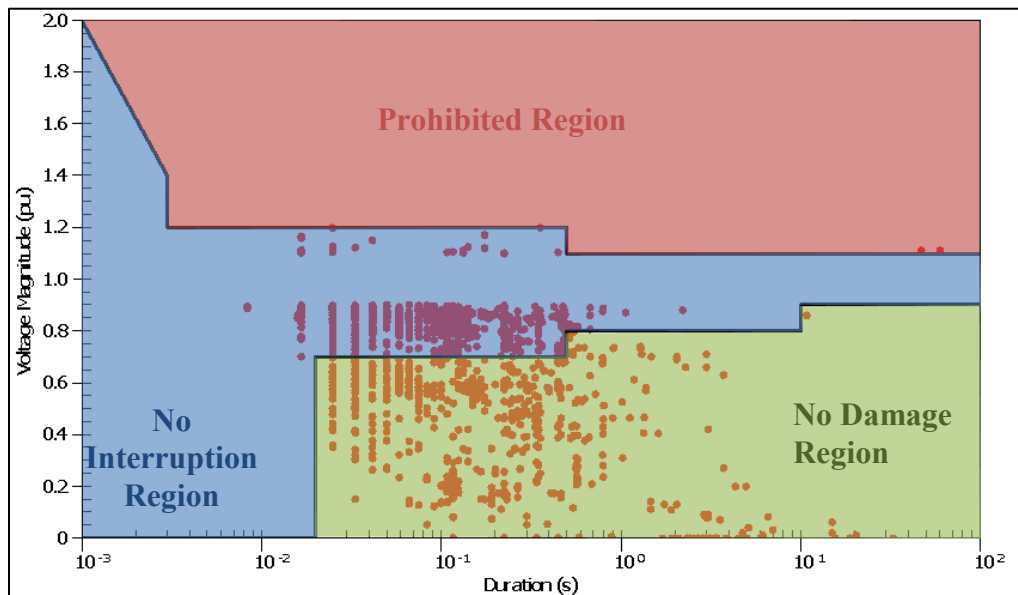




Figure SIA #17 – 7: 2013 Power Quality Events ITIC Curve

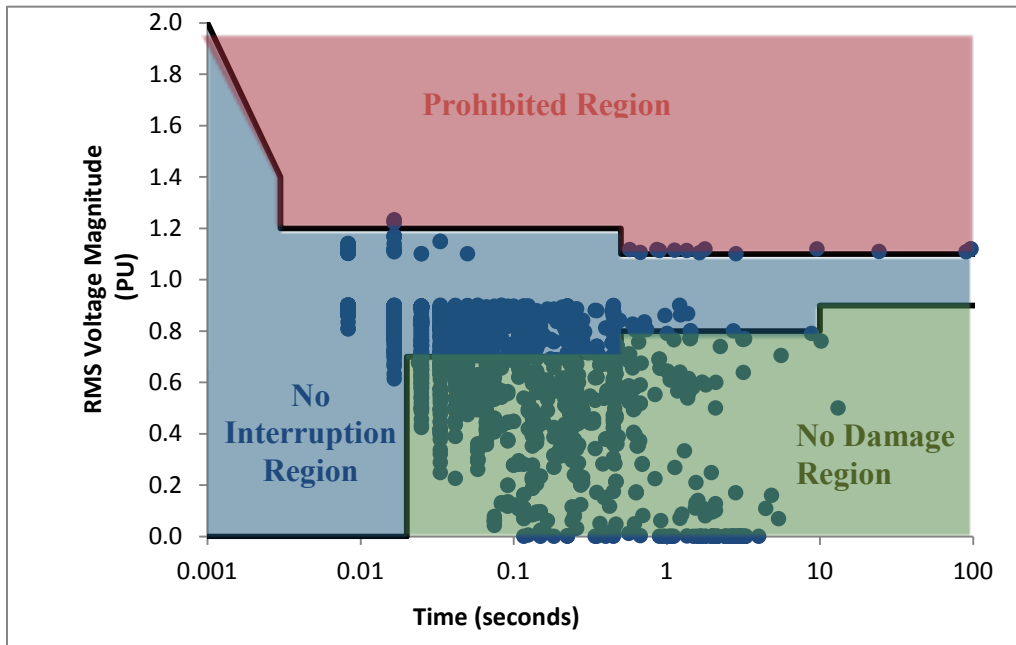
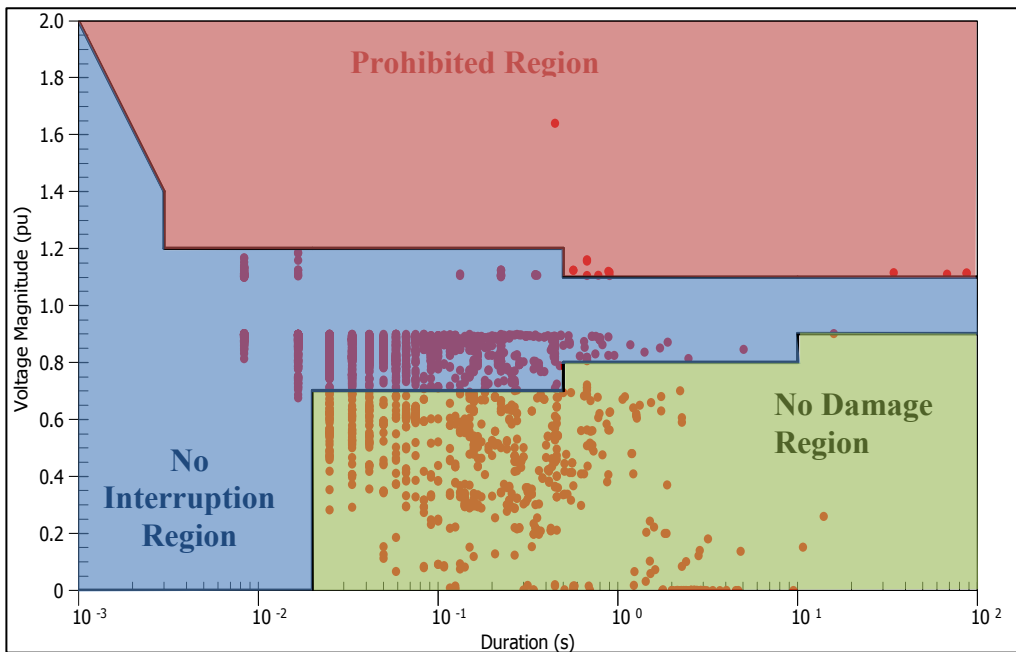


Figure SIA #17 – 8: 2014 Power Quality Events ITIC Curve



The annual target and 2015 target of SARFI is to have zero power quality events occur which classify in either the No Damage Region or the Prohibited Region. A year-to-year



reduction in the number of events which classify in either the No Damage Region or the Prohibited Region indicates a positive result.

Table SIA #17 – 4: Cost Efficiency

KPI	Target	2011	2012	2013	2014
Cost Efficiency	100%	94%	94%	105%	94%

The annual target and 2015 target is to achieve 100% completion of the annual planned work within the approved budget. It is noted that Cost Efficiency only includes System Service and System Renewal excluding plant failure costs and associated work.

Table SIA #17 – 5: Productive Time

KPI	2011	2012	2013	2014
Productive Time	70%	71%	69%	69%

The annual target and 2015 target of the productive time indicator is to maximize this index. A year-to-year increase of this KPI indicates a positive result.

Table SIA #17 – 6: Labour Allocation

KPI	2011	2012	2013	2014
Labour Allocation	61%	55%	56%	59%

The annual target and 2015 target of the labour allocation indicator is to maximize this index. A year-to-year increase of this KPI indicates a positive result.

Table SIA #17 – 7: Defective Equipment Contribution to SAIFI

Asset	2011	2012	2013	2014
U/G Cable - Polymer	10	4	2	2
Insulator	7	0.3	0.1	5
Station Switchgear	5	0	3	0.2
O/H Switchgear	4	3	6	6
U/G Cable Attachment	3	2	5	9



Station Transformer	1.2	2	0	0.2
U/G Switchgear	1	7	0.1	0.2
U/G Cable - PILC	0.6	0.6	1.5	2
O/H Transformer	0	1	2	1
Pole	0	1	4	0.1
U/G Transformer	0	3	3	0.6
Other	9	6	5	8
Total	41	30	32	35

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2 The annual target and 2015 target is to reduce the number of interruptions caused by
3 defective equipment from year to year. A year-to-year decrease of this KPI indicates a
4 positive result.

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Table SIA #17 – 8: Health Safety and Environment

		2011	2012	2013	2014
Public Safety	Number of Public Safety Concern (PSCs)	4	2	10	8
Oil Spills	Annual Oil Spilled (L)	1,225	3,249	5,828	1138
	Annual Oil Clean up (\$'000)	\$563	\$465	\$792	\$546

6 The annual target and 2015 target is to reduce the number public safety concerns,
7 annual oil spilled and cost of annual oil clean up from year to year. A year-to-year
8 decrease of these KPIs indicates a positive result.

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Table SIA #17 – 9: System Operation Performance Indicators

KPI	Target	2011	2012	2013
Stations Exceeding Planning Capacity	≤ 5%	24% (22)	20% (18)	15% (14)
Feeders Exceeding Planning Capacity	≤ 10%	3.4% (27)	3.3% (26)	3.2% (22)
Stations Approaching Rated Capacity	zero	2.2% (2)	2.2% (2)	3.3% (3)
Feeders Approaching Rated Capacity	zero	0.5% (4)	0.5% (4)	0.3% (2)
System Losses	≤ 4.00%	3.13%	3.60%	2.63%

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- 1 *Note that 2014 System Operations Performance Indicators are not yet available
- 2 The 2015 targets for the System Operations Performance Indicators remain the same. A
- 3 year-to-year reduction of these KPIs indicates a positive result.



Response to Sustainable Infrastructure Alliance of Ontario Question #8

Reference: Exhibit B, Tab 1 Schedule 2, page 248, Table 3.5.3

Question #8:

Please explain why the vast majority of System Renewal spending in 2011-2015 is classified as driven by “substandard performance”, while a vast majority of spending in this category over 2016-2020 is expected to be driven by “failure risk”. What factors led to such a drastic shift in categorization of the majority of investments in this category from 2015 into 2016?

Response:

This is an error in the original version of Exhibit B-1-2 released April 29th. Please see Exhibit B-1-2 Table 3.5.3 on page 252 of the updated June 29th version.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #9

Reference: Exhibit B, Attachment B1(A), page 43

Question #9:

HOL notes that its “pole replacement program replaces wood poles, and pole fixtures, on the overhead distribution system that are aged or in poor condition. Existing composite, concrete and metal poles, in general, are in good condition and will not require replacement. Poles and fixtures will be replaced with an equivalent pole on a like-for-like basis.”

- a. What are the reasons for why composite, concrete, and metal poles are in better condition than wood poles? (i.e. inherent material qualities? more recent installation dates? etc.)
- b. Did HOL consider exploring the cost lifecycle effectiveness of a non-like-for-like replacement? (replacing wood with concrete, for example) Why or why not?

Response:

- a. Alternative material poles including composite, concrete and metal make up approximately 1% of the total pole population. The Pole Replacement Program focuses on the replacement of wood poles due to the age and quantity of these assets. Composite poles have only been installed in recent years.
- b. Hydro Ottawa has been increasing the installation of composite poles in wood-pecker prone areas as well as in areas where treated wood-poles cannot be used due to standing water. Please refer to section 6.1.4 Use of Composite Poles in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question #10

Reference: Exhibit B, Attachment B1(A), page 154

Question #10:

HOL proposes to install remote disconnect meters for approximately 36,000 customers, noting that "Remote disconnect meters reduce the expense requirements associated with travelling to the premise for disconnect and reconnect requirements."

a. Please detail the cost savings per disconnection associated with remote vs. onsite disconnection. What are the projected total cost savings over the 2016-2020 period if all 36,000 meters are installed?

b. How will the operational process for remote disconnection differ from regular disconnections? What measures will HOL put in place to ensure that the timing of remote reconnections do not result in safety hazards? (e.g. stove left on without customer present, etc).

Response:

a. There are both cost avoidance and efficiency gains when a meter is disconnected or reconnected remotely from our office. Onsite disconnects and reconnects require a field agent to drive to the premise and physically perform the disconnection/reconnection of the service.

We estimate that by 2020, we will have cumulative cost avoidance of \$352 thousand and efficiency gains of 24 thousand person/hours.



1 b. These types of meters are equipped with a load break switch that turns the
2 meters on or off. When the meter is turned off, the flow of electricity is broken at
3 the meter and does not flow through to the customer's electricity distribution
4 panel. When the meter is turned on, the customer receives electricity. The switch
5 is operated remotely at our office through our advanced metering infrastructure
6 system.

7 The meters that are not equipped with these switches require a field agent to
8 drive to the premise and physically isolate the flow of electricity between our
9 meter and the customer's electric panel.

10 The notification process leading to the disconnection of the service will remain
11 the same as we now have in place, such as the mailed Disconnection Notice and
12 the onsite delivery of the 48 hours disconnection notice or phone call.

13 When a service gets remotely reconnected, we actually speak to the customer
14 over the telephone and go over a set of questions to ensure that they are
15 physically home when we turn the power back on. This process is a safety
16 measure Hydro Ottawa has put in place to work with our customer when service
17 is being reconnected remotely.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#11

Reference: Exhibit B, Attachment B1(A), page 352

Question #11:

HOL notes that its “vision of '2-way, proactive, personalized, and premise-based Outage Communications' is totally consistent with industry thought leaders.” Please provide sources for this statement, specifically identifying the referenced “thought leaders” and the description of the communication system that they advocate or support.

Response:

Hydro Ottawa’s vision of a two-way, proactive, personalized, and premise-based Outage Communications solution has been derived from significant experience in building and managing our 2010 North American Chartwell Award winning solution. Although leading edge at that time, the industry along with service providers is now extending solutions to end customers where they can report and receive outage information through the channel and device of their choice – be it text, email or telephone. This approach has been substantiated by studies conducted by organizations such as Chartwell (www.chartwellinc.com) and Kaihen (<http://kaihen.ca/>). iFactor (www.ifactorinc.com) is one example, among others, of a company that has provided the types of services contemplated above to a number of US utilities. Four Canadian utilities are now using iFactor services including Hydro One, Sask Power, Nova Scotia Power and Newfoundland Power.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#12

Reference: Exhibit B, Attachment B1(A), page 363-364

Question #12:

For each vehicle type, please breakdown HOL's current vehicle fleet by asset condition as determined by age and km (e.g. via scatter graphs with age and km on the x and y axis respectively).

Response:

Please see four scatter graphs below that displays HOL's current vehicle fleet by asset condition as determined by age and km, grouped into four categories of vehicle types.

Figure 1.1: Scatter Graph depicting Automobile Condition

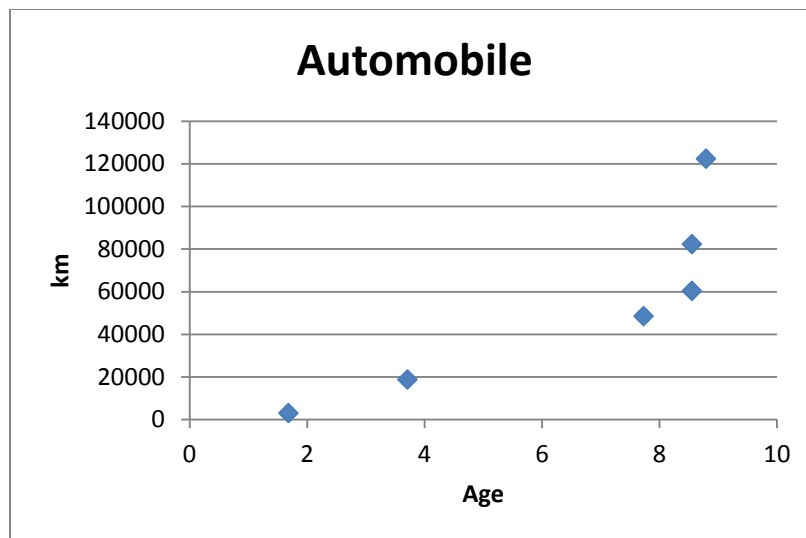




Figure 1.2: Scatter Graph depicting Vans Condition

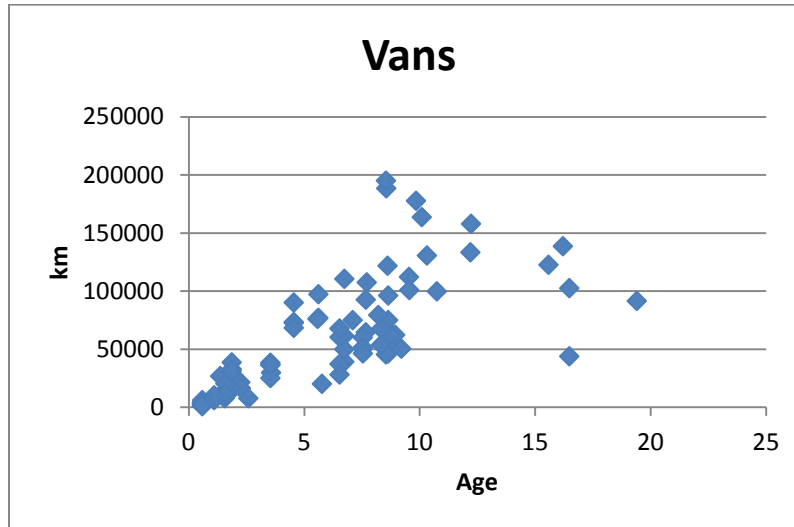
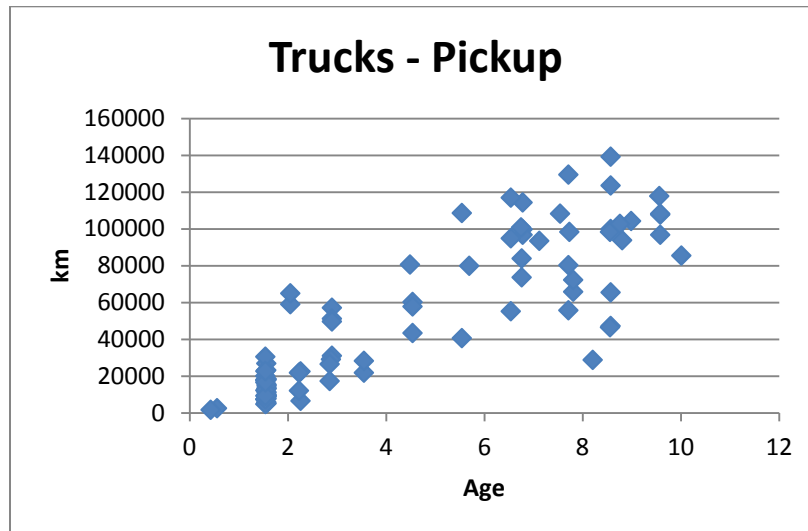
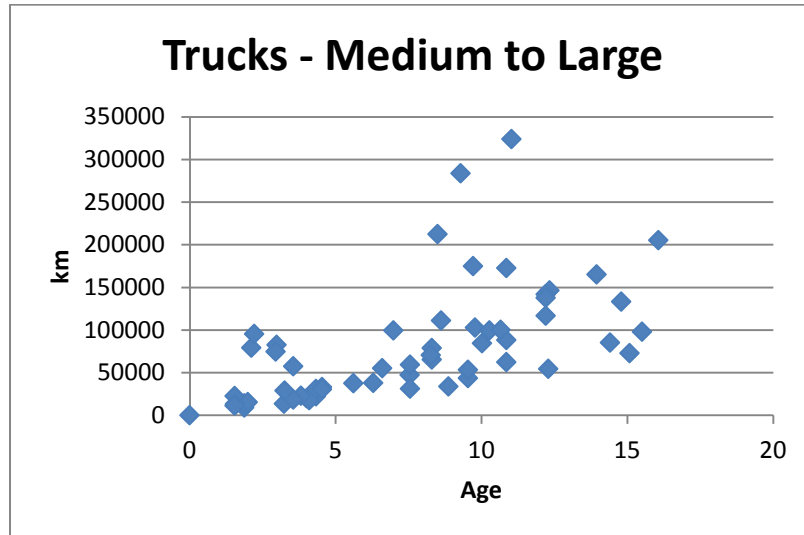


Figure 1.3: Scatter Graph depicting Trucks - Pickup Condition





1 **Figure 1.4: Scatter Graph depicting Trucks – Medium to Large Condition**



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Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#13

Reference: Exhibit B, Attachment B1(A), page 363-364

Question #13:

- a. How many vehicles by vehicle type are currently beyond their life cycle (as defined in Table 122)?
- b. How many additional vehicles by vehicle type are expected to be beyond their life cycle (as defined in Table 122) by the end of 2020?
- c. For each vehicle type, please provide the estimated numbers of vehicles planned to be replaced over 2016-2020

Response:

- a. Please see table below that shows the number of vehicles by type that are currently beyond their life cycle as defined in Table 122 of Exhibit B-1-A.



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Table 1.1 – Number of Vehicles currently beyond Life Cycle

Unit Type	Number of Vehicles currently beyond Life Cycle
Automobile	0
Vans - Compact	11
Vans - Cargo	6
Vans - Step / Cube	7
Trucks - Pickup (Compact)	9
Trucks - Pickup (Conventional)	8
Trucks - Dump	0
Trucks - Stake	1
Trucks - Knuckle Boom	1
Trucks - Buckets	17
Trucks - Line / RBD	1
Forklifts	5
Trailers	13
Grand Total	79

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- 3 b. Please see table below that shows the number of vehicles by type that are expected
4 to be beyond their life cycle by the end of 2020 as defined in Table 122 of Exhibit B-
5 1-A.

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**Table 1.2 – Number of Vehicles expected to be beyond Life Cycle
by end of 2020**

Unit Type	Number of Vehicles expected to be beyond Life Cycle by end of 2020
Automobile	4
Vans - Compact	10
Vans - Cargo	8
Vans - Step / Cube	20
Trucks - Pickup (Compact)	9
Trucks - Pickup (Conventional)	8
Trucks - Dump	2
Trucks - Stake	0
Trucks - Knuckle Boom	0
Trucks - Buckets	8
Trucks - Line / RBD	3
Forklifts	2
Trailers	14
Grand Total	88



c. Please see table below that shows the estimated numbers of vehicles planned to be replaced over 2016-2020.

Table 1.3 – Number of Vehicles expected to be replaced over 2016- 2020

Unit Type	Number of Vehicles to Replace 2016-2020
Automobile	2
Vans - Compact	15
Vans - Cargo	14
Vans - Step / Cube	4
Trucks - Pickup (Compact)	0
Trucks - Pickup (Conventional)	28
Trucks - Dump	0
Trucks - Stake	0
Trucks - Knuckle Boom	1
Trucks - Buckets	22
Trucks - Line / RBD	3
Forklifts	3
Trailers	8
Grand Total	100



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#14

Reference: Exhibit B, Tab 3, Schedule 1, page 2

Question #14:

HOL notes that “The new lead lag study will be submitted in September 2015 to be incorporated into final rates. Until the lead lag study is complete, Hydro Ottawa is using its 2012 Board approved rate of 14.2.” Please confirm that the 14.2 value is a temporary placeholder, and that it is HOL’s intention to use the new rate resulting from its Lead Lag Study for rates for 2016-2020.

Response:

Hydro Ottawa Limited (“Hydro Ottawa”) confirms that the 14.2 value for the working capital percentage is a temporary placeholder and that Hydro Ottawa intends to use the new working capital percentage resulting from Hydro Ottawa’s lead lag study for the calculation of rates for 2016-2020.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#15

Reference: Exhibit B, Tab 5, Schedule 4

Question #15:

For 2010 to 2014, please provide historical SAIFI and SAIDI broken down by cause code (loss of supply, defective equipment, etc). Please provide this breakdown both including and excluding major event days.

Response:

Table Headings

U – Unknown/Other

SO – Scheduled Outage

LOS – Loss of Supply

TC – Tree Contacts

L – Lightning

DE – Defective Equipment

AW – Adverse Weather

AE – Adverse Environment

HE – Human Element

FI – Foreign Interference



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Table SIA #15 – 1: SAIDI

	U	SO	LOS	TC	L	DE	AW	AE	HE	FI
2010	0.1	0.1	0.3	0.0	0.0	0.4	0.2	0.0	0.0	0.1
2011	0.1	0.2	0.2	0.4	0.1	0.5	1.0	0.1	0.0	0.1
2012	0.0	0.2	0.3	0.1	0.0	0.4	0.3	0.1	0.0	0.2
2013	0.0	0.2	0.0	0.2	0.2	0.5	0.3	0.0	0.0	0.1
2014	0.1	0.2	0.1	0.1	0.2	0.4	0.4	0.0	0.1	0.1

2

Table SIA #15 – 2: SAIDI – Excluding Major Event Days as Defined by IEEE

	U	SO	LOS	TC	L	DE	AW	AE	HE	FI
2010	0.1	0.1	0.2	0.0	0.0	0.4	0.1	0.0	0.0	0.1
2011	0.1	0.2	0.1	0.1	0.1	0.4	0.2	0.1	0.0	0.1
2012	0.0	0.2	0.1	0.1	0.0	0.3	0.2	0.1	0.0	0.2
2013	0.0	0.2	0.0	0.1	0.1	0.4	0.1	0.0	0.0	0.1
2014	0.1	0.2	0.1	0.1	0.0	0.4	0.1	0.0	0.1	0.1

3

Table SIA #15 – 3: SAIFI

	U	SO	LOS	TC	L	DE	AW	AE	HE	FI
2010	0.2	0.1	0.6	0.0	0.0	0.2	0.1	0.1	0.0	0.1
2011	0.2	0.1	0.3	0.1	0.1	0.4	0.4	0.0	0.0	0.1
2012	0.1	0.1	0.7	0.0	0.1	0.3	0.2	0.1	0.1	0.2
2013	0.1	0.1	0.2	0.1	0.3	0.4	0.1	0.0	0.1	0.1
2014	0.0	0.1	0.2	0.0	0.1	0.3	0.1	0.0	0.1	0.1

4

Table SIA #15 – 4: SAIFI – Excluding Major Event Days as Defined by IEEE

	U	SO	LOS	TC	L	DE	AW	AE	HE	FI
2010	0.2	0.1	0.5	0.0	0.0	0.2	0.1	0.1	0.0	0.1
2011	0.2	0.1	0.2	0.1	0.1	0.4	0.2	0.0	0.0	0.1
2012	0.1	0.1	0.4	0.0	0.1	0.3	0.2	0.1	0.1	0.2
2013	0.1	0.1	0.1	0.1	0.2	0.4	0.1	0.0	0.1	0.1
2014	0.0	0.1	0.2	0.0	0.0	0.3	0.1	0.0	0.1	0.1

5



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#16

Reference: Exhibit B, Tab 5, Schedule 4

Question #16:

Does HOL have a forecast of its projected SAIFI and SAIDI over the 2016-2020 period? If so, please provide it. If not, please explain why such a projection has not been considered, particularly in light of the significant system renewal investments planned over the 2016-2020 period.

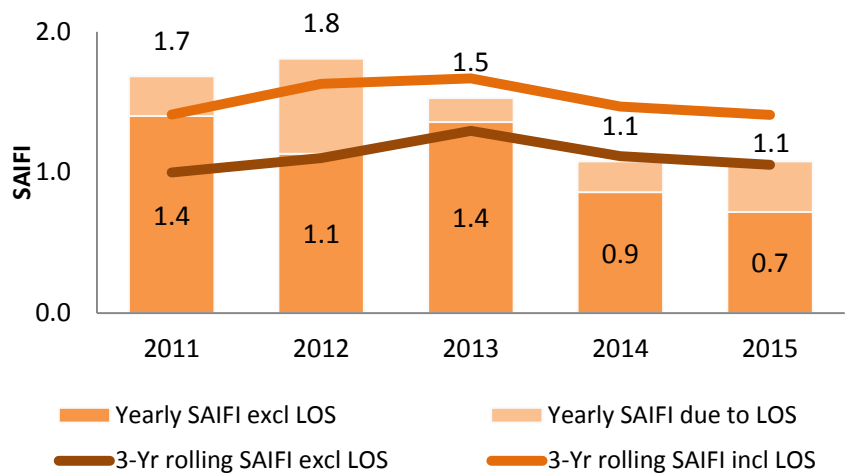
Response:

For information regarding the impact of System Renewal investments please see Interrogatory Response to CCC #26.

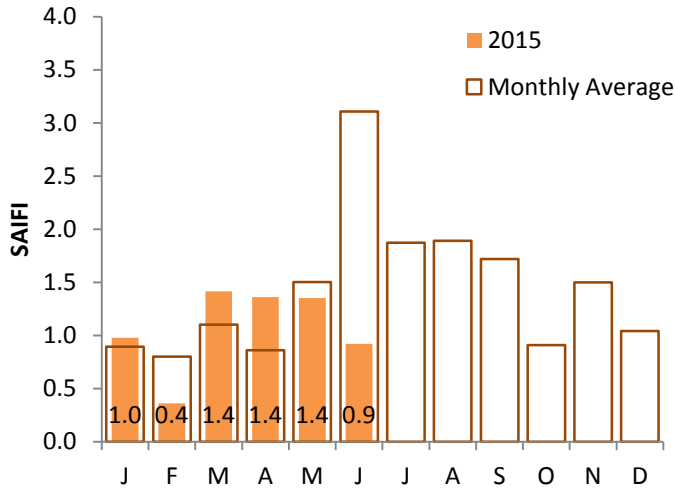
Hydro Ottawa has not done a five year forecast of reliability. However reliability is forecasted annually for each month of the year at the start of each year based on historical values and tracked monthly. This information is shared across the company as well as reviewed monthly by the Chief Executive Officer and Chairman of the Board. Please see attachment Att-SIA-Q16-A – Monthly Reliability Report.

System Reliability Report - Assets and Planning

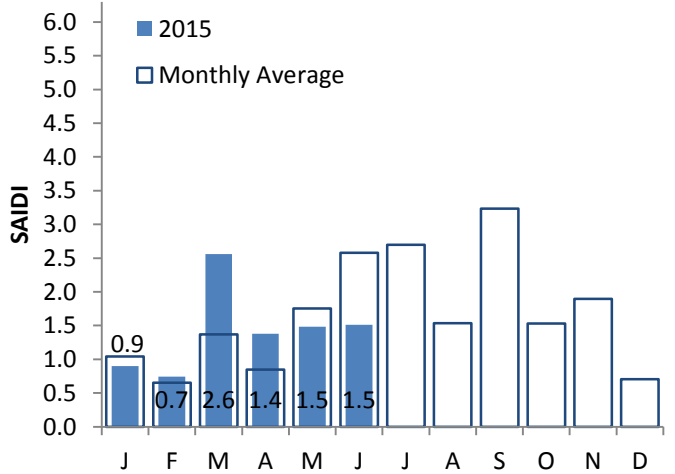
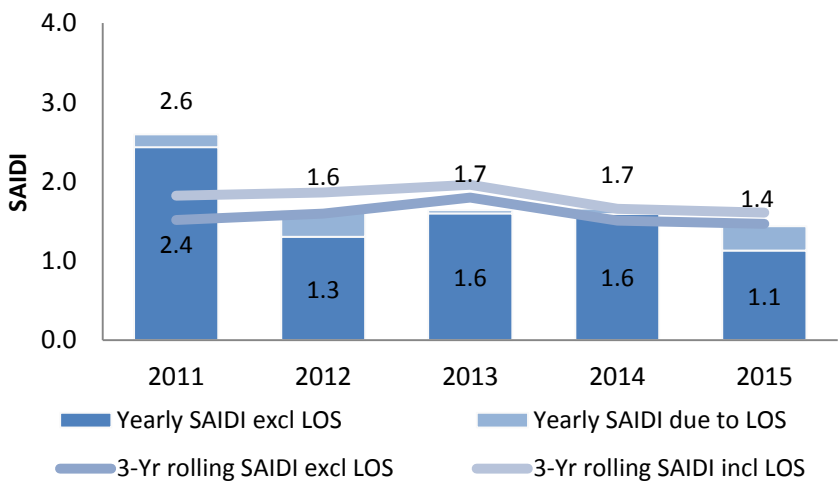
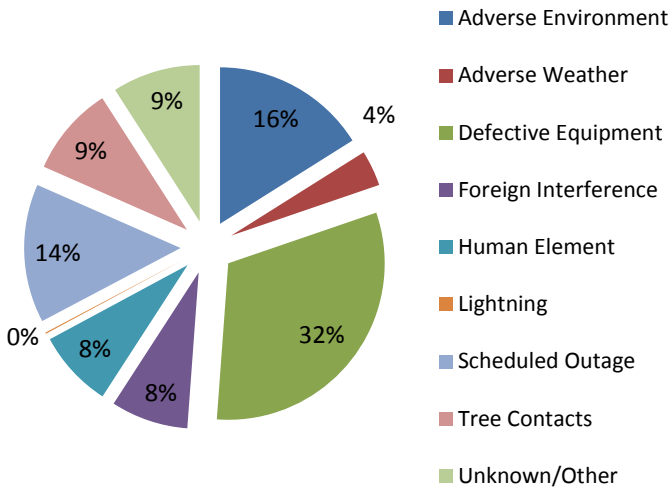
Annual Performance



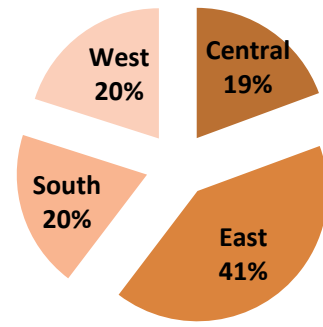
2015 Monthly Performance



2015 YTD SAIFI by Cause excluding LoS

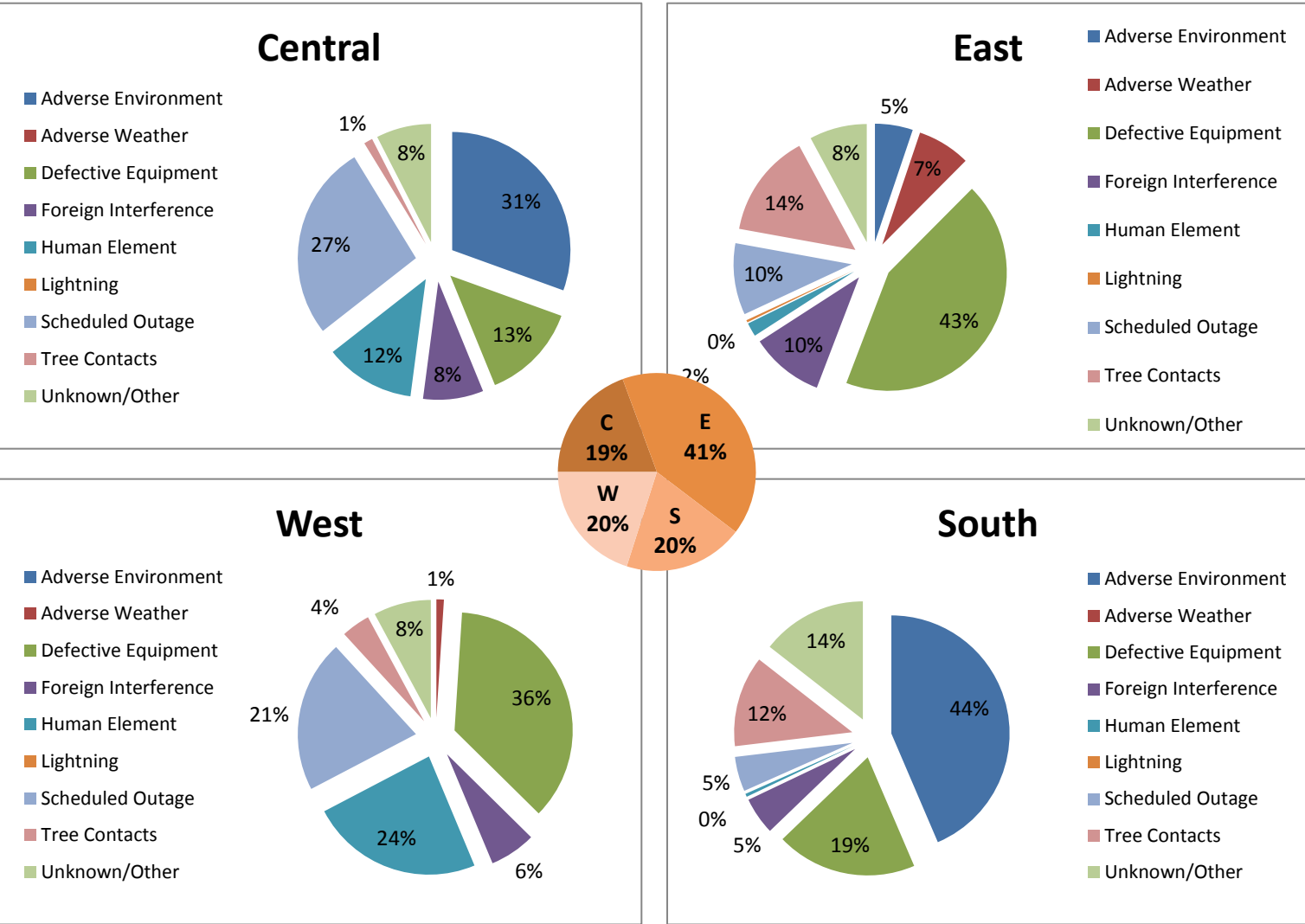


2015 YTD SAIFI by Region excluding LoS



System Reliability Report - Assets and Planning

2015 YTD Customer Interruptions by Cause excluding LoS



Highest Outage Feeders Excl LoS and Scheduled Outages (Twelve Month Rolling Window)

Rank	Station Name	Region	Feeder	# Outages
1	Leitrim MS	East	249F1	23
2	Beckwith DS	West	BECKF2	22
3	Bilberry Creek TS	East	77M6	16
4	Moulton MS	East	8F1	15
5	Kanata MTS	West	624F6	13
6	Russell TB	East	TB14	12
7	Woodroffe TW	Central	TW22	12
8	Bilberry Creek TS	East	77M2	10
9	Lincoln Heights TD	Central	TD05	10
10	Lincoln Heights TD	Central	TD12	10
11	Bayshore DS	South	49F6	8
12	Blackburn MS	East	4F5	8
13	Lincoln Heights TD	Central	TD06	8
14	Parkwood Hills DS	South	190F5	8
15	Rideau Heights DS	South	180F4	8

2015 Major Event Days

March 14, 2015, was a Major Event Day due to fires on both Hydro One (LOS) and Hydro Ottawa poles. High humidity, salt, and temperatures near 0°C.

Year	Number of MEDs
2015	1
2014	2
2013	2
2012	2



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#17

Reference: Exhibit B, Tab 5, Schedule 4

Question #17:

HOL notes that “Overall, since 2009, Hydro Ottawa’s system SAIDI and SAIFI has been steadily increasing, due to the increase of storms with severe wind and rain as well as an increase in equipment failures.”

a. With the assumption that all investments will to some limited extent incrementally improve system reliability and restoration time, please list and summarize or provide references to all planned investments that specifically aim to mitigate the reliability impact to customers of severe weather (storms, severe wind and rain, etc).

b. Given severe storms are an identified and substantial risk, is mitigation against the impacts of severe storms an explicit part of HOL's capital investment strategy? If yes, please explain how. If not, please explain why.

Response:

a. While no one project is only specifically aimed to mitigate the reliability impact to customers due to severe weather, Table SIA #17 – 1 provided below indicates the planned investments which have specific outcomes which are designed to reduce customer reliability impact during weather events. The investment details can be found in Attachment B-1(A) – Material Investments.



1 **Table SIA #17 – 1: Planned Investments to reduce customer reliability impact**
2 **during weather events**

Project Name	Page	Reliability Impact
Merivale DS Rebuild	19	Increased Capacity
Longfields XFRM Base Rpl- Including CS/CB	22	Lightning Mast Protection
Borden Farms Switchgear Replacement	39	Increased Capacity/ Lightning Mast Protection
Startup Protection Upgrade	42	Increased Capacity
Centretown East Pole Replacement	58	Renewed Infrastructure to Current HOL Standards
64A3A – South East Kilborn Area	60	Renewed Infrastructure to Current HOL Standards
54B4A - Riverside Park South Pole Replacement	61	Renewed Infrastructure to Current HOL Standards
45B4 – Grandview Road Pole Replacement	62	Renewed Infrastructure to Current HOL Standards
54A4C4 Pole Replacement	63	Renewed Infrastructure to Current HOL Standards
Centretown West Pole Replacement	64	Renewed Infrastructure to Current HOL Standards
Alphabet Ave Phase 1 Pole Replacement	65	Renewed Infrastructure to Current HOL Standards
Prince of Wales & Greenbank South of Barnsdale	66	Renewed Infrastructure to Current HOL Standards
Trans-Canada Trail Pole Line (Eagleson to Terry Fox)	67	Renewed Infrastructure to Current HOL Standards
Fernbank Reclosers	152	Use of New Technology
TFXF1 Huntmar Recloser	153	Use of New Technology
New South 27.6kV Substation	156	Increased Capacity
Hinchey New Switchgear Lineup	165	Increased Capacity/ Alternate Supply Point
Lisgar Transformation Upgrade	173	Increased Capacity
Limebank Transformer Upgrade	179	Increased Capacity
Leitrim T1	188	Alternate Supply Point
Casselman T1	196	Increased Capacity/ Alternate Supply Point
Richmond South DS	203	Increased Capacity/ Alternate Supply Point
Orleans TS Feeder	228	Increased Capacity/ Alternate Supply Point
Fernbank Road Line Extension	233	Increased Capacity/ Alternate Supply Point
West 44kV Line Extension	239	Increased Capacity/ Alternate Supply Point
Springbrook Drive Trunk	247	Increased Capacity/ Alternate Supply Point
Abbott Street Trunk	254	Increased Capacity/ Alternate Supply Point



Project Name	Page	Reliability Impact
Prince of Wales Voltage Conversion	267	Increased Capacity/ Alternate Supply Point
Rideau Valley Voltage Conversion	277	Increased Capacity/ Alternate Supply Point
Richmond Voltage Conversion	286	Increased Capacity/ Alternate Supply Point
Telecommunications Master Plan	316	Use of New Technology
SCADA Upgrade Project	327	Use of New Technology
Outage Communications Systems	352	Use of New Technology
Mobile Workforce Management	379	Use of New Technology

1
2 b. In general, the Capital work Hydro Ottawa Limited performs on the distribution
3 system has a positive impact on managing severe weather events. Please see
4 Interrogatory Response to SIA # 17 part a.

5 Storms with severe wind and rain can have unpredictable impacts on Hydro
6 Ottawa Limited's distribution system. Hydro Ottawa Limited is working to adapt to
7 increasing weather related events by making changes to construction
8 requirement standards, capacity planning for supply loss, building alternate
9 supply points and increased use of new technology (Exhibit B-1-2, Page 32).

10 Construction standards are continuously being reviewed by industry groups such
11 as The Centre for Energy Advancement through Technological Innovation
12 (CEATI) to look for ways to improve the resistivity of the distribution system in
13 relation to increasing severity of weather events.

14 Where feasible, Hydro Ottawa Limited plans to N-1 contingency in planning of
15 substation capacity. During the loss of a single supply or substation transformer
16 caused by failure or weather event, load is able to be supplied from elsewhere in
17 the grid.

18 Some parts of the Hydro Ottawa Limited system have alternate supply points,
19 meaning that during an event causing an outage, load can be supplied from
20 elsewhere in the grid until required repairs can be made.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#18

Reference: Exhibit B, Tab 1, Schedule 2, page 242

Question #18:

As part of its facilities strategy, HOL is proposing “to credit ratepayers with the entire value of the after tax proceeds of sale for the 2 buildings and for 50% of the after tax proceeds for the sale of the lands”.

a. Please further explain the statement that “The 50% share of the after tax proceeds for the sale of the lands recognizes that land is an undepreciated asset.” Please elaborate on the justification for a 50/50 split.

b. Given that HOL is proposing to replace one facility for another and one parcel of land for another – why would it not be appropriate to credit the full value of the old facilities as an offset to constructing the new ones?

Response:

a. The ratepayers have refunded the cost of the buildings to the utility for the buildings through depreciation, however land is an undepreciated asset and as such the ratepayers have not funded the cost of land. For this reason, Hydro Ottawa believes the more appropriate fair and equitable approach is to split the after tax process of the sale of the land 50/50 between the shareholder and the ratepayer.



- 1 b. The disposal of one property and construction of a new property is treated as two
- 2 different transactions both for purposes of the APH and IFRS, as such it is not
- 3 appropriate to combine the two transactions.
- 4
- 5



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#19

Reference: Exhibit B, Tab 1, Schedule 2, page 242

Question #19:

HOL states that it “is proposing to establish a deferral account to record the after tax proceeds from the sale of the buildings and lands and will bring forward the deferral account for clearance in a future proceeding once the buildings and lands have been sold”.

Given that the costs of the new facilities will be incurred over the 2016-2018 period, has HOL considered refunding some portion of the value of the old facilities in advance of a formal sale (with a variance account for any differences), both to better align costs and revenues and allow for rate mitigation during the 2016-2018 period?

Response:

Hydro Ottawa Limited (“Hydro Ottawa”) is proposing to introduce a Y factor related to the new facilities when the costs have occurred. No material recovery from customers is anticipated prior to 2018.

Hydro Ottawa did not consider bringing into rates the impact of the sale of the old facilities during the 2016 to 2018 period, prior to the actual sales of the facilities and while the facilities are still in use by Hydro Ottawa.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#20

Reference: Exhibit C, Tab 2, Schedule 1, page 1, table 1

Question #20:

Please explain the drivers behind the notable above average specific service charges revenue received in 2013 (i.e. \$5.3M, as compared to ~\$3.5M in other years prior to 2016).

Response:

Please see Interrogatory Response to Energy Probe Question #24 part a.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#21

Reference: Exhibit D1, Attachment D1(D), PSE Benchmarking Report, Section 1.5, page 9 and 35

Question #21:

The PSE Benchmarking Report generally concludes that HOL is forecast to be an above average performer noting that “Hydro Ottawa’s Custom IR total cost performance remains statistically superior at the 90% confidence level. These results indicate a stretch factor of 0.15% based on the 4th Generation IR stretch factor criteria.”

Has HOL incorporate this stretch factor into its proposed I-X methodology? If not, why not?

Response: (supplied by PSE)

In constructing the 4th Generation IR the stretch factors they are based on historical and not projected cost performance assessments. While PSE found that the proposed future spending of Hydro Ottawa places the company in the 0.15% stretch factor, the most recent historical benchmarks indicate a 0.0% stretch factor.

On page 9 and 35, PSE states that Hydro Ottawa is entering the Custom IR period with a very strong cost performance finding that implies a 0.0% stretch factor. PSE states on page 9 of their report, “Hydro Ottawa is entering the Custom IR period with strong recent cost performance (i.e., costs are below the expected values), with its average 2011 to 2013 total costs being estimated at 37.1% below benchmark values. This is statistically superior cost performance at a 90% confidence level. This performance level is commensurate with a 0.0% stretch factor (Group 1), using the 4th Generation IR criteria



1 put forth in the November 2013 Board report. Hydro Ottawa ranks 4th out of the 78
2 distributors included in the sample.”

3
4 Furthermore, PSE’s supplemental evidence on extreme temperatures (found in the
5 Appendix, Section 7, of the PSE report) found that the benchmark results look even
6 better (-45.6% for 2011-2013 and remaining below -25% in all future years) and imply a
7 0.0% stretch factor in both the historical and future years. Hydro Ottawa’s experience in
8 working in extreme temperatures, leads the Company to believe extreme temperatures
9 present a real and significant cost challenge. This belief is empirically supported by
10 PSE’s extreme temperature model’s results.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#22

Reference: Exhibit D, Tab 2, Schedule 4, Appendix 2M

Question #22:

- a. Please identify the costs of preparing this CIR application (identifying specifically consulting and legal costs).
- b. Given that HOL has left the "One-time costs" section of Appendix 2M blank, please confirm that HOL is not seeking to recover any costs related to the preparation of this application as part of its 2016-2020 rates.

Response:

- a. Please see Interrogatory Response to CCC Question #49.
- b. Hydro Ottawa confirms that it is not seeking to recover any costs related to the preparation of this application as part of its 2016-2020 rates.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#23

Reference: Exhibit D, Tab 1, Schedule 1, page 1

Question #23:

Please provide an updated version of Table 1 with actual year-end 2014 values.

Response:

See response to interrogatory SIA # 23 – A for an updated version of Table 1 with year-end 2014 actual values.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#24

Reference: Exhibit D, Tab 1, Schedule 2, page 2

Question #24:

HOL notes that “The 2016 budget forecast exercise began with the development of the Budget Memo from the office of the Chief Financial Officer that provided top down guidance on the areas of constraints which informed the individual divisions in the development of their bottom up budgets.”

1. Please confirm that the referenced memo is the memo provided as Attachment D1 (A).
2. Were any other memos, documents, or presentations circulated to individual divisions concerning guidance as to the preparation of the CIR application? If so, please provide copies

Response:

- a. Yes, the memo in Exhibit D-1-1 is the budget memo.
- b. Please see Interrogatory Response to CCC Question #5.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#25

Reference: Exhibit D, Tab 1, Schedule 8, Appendix 2K

Question #25:

- a) Please reproduce Appendix 2K by splitting the “Management” category into Executives, Management (Directors and Managers), and Professionals (Supervisors and Professionals) separately.
- b) Using the revised Appendix 2K as per a) above, please show Average Salary and Wages, Average Benefits, and Average Total Compensation per employee by employee type (i.e. Executive, Management, Professionals, Non-union, Union, Total)

Response:

- a) Please see Att-SIA-Q25-A revised as per the categories noted above, with the exception that the one executive is included in the management category.
- b) Please see Att-SIA-Q25-A revised as per the categories noted above, with the exception that the one executive is included in the management category.

File Number: EB-2015-0004
Exhibit: D
Tab: 1
Schedule: 8
Page: 1

Date: ORIGINAL UPDATED:
July 31, 2015

Appendix 2-K - 4-SIA-25 Employee Costs

	2012 Actuals	2013 Actuals	2014 Actuals	2015 Forecast	2016 Forecast
Number of Employees (FTEs including Temporary)¹					
Management (Executive, Directors and Managers)	51.2	49.3	47.2	50.4	50.4
Professionals (Supervisors and Professionals)	79.9	77.1	88.6	87.1	87.1
Non-Union	43.1	48.8	51.8	47.7	47.7
Union	419.3	435.4	434.4	437.5	437.5
Total	593.5	610.6	622.0	622.7	622.7
Total Salary and Wages including overtime and incentive pay					
Management (Executive, Directors and Managers)	\$ 6,473,876.38	\$ 6,505,942.46	\$ 6,195,496.22	\$ 6,251,278.00	\$ 6,406,556.00
Professionals (Supervisors and Professionals)	\$ 7,691,652.82	\$ 7,716,210.51	\$ 9,003,622.04	\$ 8,989,775.00	\$ 9,241,559.00
Non-Union	\$ 3,365,144	\$ 3,830,997	\$ 3,979,888	\$ 3,660,815	\$ 3,868,504
Union	\$ 31,839,026	\$ 34,215,448	\$ 34,694,865	\$ 36,832,143	\$ 38,242,411
Total	\$ 49,369,699	\$ 52,268,598	\$ 53,873,871	\$ 55,734,011	\$ 57,759,030
Total Benefits (Current + Accrued)					
Management (Executive, Directors and Managers)	\$ 1,440,305	\$ 1,533,396	\$ 1,394,509	\$ 1,572,403	\$ 1,660,299
Professionals (Supervisors and Professionals)	\$ 1,801,091	\$ 1,881,025	\$ 2,095,232	\$ 2,173,489	\$ 2,294,060
Non-Union	\$ 779,896	\$ 947,624	\$ 873,802	\$ 867,682	\$ 925,815
Union	\$ 7,514,751	\$ 8,386,018	\$ 8,206,692	\$ 8,741,167	\$ 9,305,079
Total	\$ 11,536,043	\$ 12,748,063	\$ 12,570,234	\$ 13,354,741	\$ 14,185,253
Total Compensation (Salary, Wages, & Benefits)					
Management (Executive, Directors and Managers)	\$ 7,914,181	\$ 8,039,338	\$ 7,590,005	\$ 7,823,681	\$ 8,066,855
Professionals (Supervisors and Professionals)	\$ 9,492,744	\$ 9,597,235	\$ 11,098,854	\$ 11,163,264	\$ 11,535,619
Non-Union	\$ 4,145,040	\$ 4,778,621	\$ 4,853,690	\$ 4,528,497	\$ 4,794,319
Union	\$ 39,353,778	\$ 42,601,466	\$ 42,901,556	\$ 45,573,310	\$ 47,547,490
Total	\$ 60,905,742	\$ 65,016,660	\$ 66,444,105	\$ 69,088,752	\$ 71,944,283
Average Salary and Wages including overtime and incentive pay					
Management (Executive, Directors and Managers)	\$ 126,443	\$ 131,966	\$ 131,261	\$ 124,033	\$ 127,114
Professionals (Supervisors and Professionals)	\$ 96,265	\$ 100,091	\$ 101,638	\$ 103,212	\$ 106,103
Non-Union	\$ 78,161	\$ 78,500	\$ 76,789	\$ 76,747	\$ 81,101
Union	\$ 75,939	\$ 78,579	\$ 79,861	\$ 84,188	\$ 87,411
Total	\$ 83,184	\$ 85,602	\$ 86,614	\$ 89,504	\$ 92,756
Average Benefits (Current + Accrued)					
Management (Executive, Directors and Managers)	\$ 28,131	\$ 31,103	\$ 29,545	\$ 31,198	\$ 32,942
Professionals (Supervisors and Professionals)	\$ 22,542	\$ 24,400	\$ 23,652	\$ 24,954	\$ 26,338
Non-Union	\$ 18,114	\$ 19,418	\$ 16,859	\$ 18,190	\$ 19,409
Union	\$ 17,923	\$ 19,259	\$ 18,890	\$ 19,980	\$ 21,269
Total	\$ 19,437	\$ 20,878	\$ 20,209	\$ 21,447	\$ 22,780
Average Compensation (Salary, Wages, & Benefits)					
Management (Executive, Directors and Managers)	\$ 154,574	\$ 163,070	\$ 160,805	\$ 155,232	\$ 160,057
Professionals (Supervisors and Professionals)	\$ 118,807	\$ 124,490	\$ 125,290	\$ 128,166	\$ 132,441
Non-Union	\$ 96,275	\$ 97,918	\$ 93,648	\$ 94,937	\$ 100,510
Union	\$ 93,862	\$ 97,838	\$ 98,761	\$ 104,168	\$ 108,680
Total	\$ 102,621	\$ 106,480	\$ 106,823	\$ 110,950	\$ 115,536



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#26

Reference: Exhibit D, Tab 1, Schedule 3, page 6

Question #26:

HOL explains that its bad debt increased to abnormally high levels in 2013, but using “several mitigation strategies, management was able to bring bad debt expense down in 2014 and back to the industry average going forward”. Given that bad debt cost has decreased over the last few years from a high of \$2.3M in 2013 to \$1.5M in 2015, why does HOL nonetheless forecast a nearly 25% increase in bad debt costs between 2015 and 2016?

Response:

Please see Interrogatory Response to CCC Question #39.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#27

Reference: Exhibit H, Tab 1, Schedule 1, page 2

Question #27:

HOL notes that its fixed/variable split for the "Residential Class was adjusted with the Board's April 2015 Report in mind and therefore goes beyond a 50% fixed component." However, the referenced April 2015 OEB report notes that:

"The OEB has determined that the change will be phased in, with a four year transition period. During the transition period, the fixed charge will be increased gradually and the usage charge will be reduced slowly. At the end, there will be a fixed charge which recovers the distributor's costs, and there will no longer be any usage charge. We are phasing the change to reduce the impact on those customers whose bills will increase. The rate changes will begin in 2016 and will be completed in 2019."

Given the clear direction to complete conversion to fully fixed rates within four years (by 2019), why is HOL proposing its 2020 residential rates to be based on a fixed variable ratio of only 66.2% ?

Response:

Please refer to Exhibit H-1-1, Hydro Ottawa limited states "As part of this application Hydro Ottawa has started to apply the Ontario Energy Board's ("the Board") principles in its Draft Report on Rate Design for Electricity Distributors (EB-2012-0410). On April 2, 2015 the Board released the Board Policy, A New Distribution Rate Design for Residential Electricity Customers. Hydro Ottawa will wait until the Board's Working Groups has put forth its recommendations prior to incorporating these directions".



1 On July 16, 2015 the Board released a letter, Implementing a New Rate Design for
2 Electricity Distributors OEB File No. EB-2012-0410, which discussed the working groups
3 inputs and gave direction on the implementation approach of fixed rates for the
4 residential class. Please see response to Ontario Energy Board Staff Interrogatory
5 Question # 1 for updated rates.

6



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#28

Reference: Exhibit H, Tab 7, Schedule 1, page 4

Question #28:

With regard to the Special Billing Service charge, HOL is effectively not proposing a fixed “charge”, but an approved hourly rate that will be applied based on the amount of effort involved in any particular request. However, the Distribution Rate Handbook 2006 already permits utilities to charge for services “on an actual cost, time, and materials basis”, without seeking OEB approval. Given this provision, why does HOL feel it is nonetheless necessary to have an approved hourly rate for this particular service? (as opposed to requesting that this service charge simply be dropped from HOL's Tariff sheet?)

Response:

Hydro Ottawa decided to seek OEB-approval for this charge, given the fact this proposed charge replaces a current OEB-approved Request for Billing Information charge. Given the administrative nature of the service and for consistency, the decision was taken to request OEB approval.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#29

**Reference: Exhibit H, Tab 7, Schedule 1, Attachment H-7(A) - Special Billing
Service Calculation Table**

Question #29:

- a) Please confirm that the \$95 labour rate is meant to be the "Direct labour (Inside Staff) Straight Time" (rather than "field staff"). If not, please recalculate the charge using the rate for Inside Staff.
- b) Please clarify the basis for the labour rates used for this and other service charges for both "inside staff" and "field staff".

Response:

- a. Please see Interrogatory Response to OEB Staff Question #21 parts ii and iv.
- b. See above.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#30

Reference Exhibit H, Tab 7, Schedule 1, page 1

Question #30:

- a. Given the large increases requested for other service charges, please explain why HOL is not proposing to update the rates charged for the six items listed on lines 22-27.
- b. Please calculate the real cost based rate for each of the six items in a) above, as well as projected revenue using those rates, and the variance in revenue as compared to continuing to use the current rate over 2016-2020.

Response:

- a. Hydro Ottawa did not undertake a review of costs associated with the six service charges listed on lines 22-27 of Exhibit H-7-1 for several reasons.

The following service charges were not changed due to process efficiencies and/or declining customer utilization of the service. As a result, the existing service charges were deemed to be fair and reasonable:

- i. Arrears Certificate;
- ii. Duplicate Invoices from Previous Billing;
- iii. Credit Reference/Credit Check;
- iv. Unprocessed Payment Charge.



1 The following service charges were not revised due to the need to review and,
2 potentially revise several cost drivers, which could not be undertaken within the
3 required timeframe. Further, as noted by the Ontario Energy Board (“the Board”)
4 in the Wireless Attachment Consultation memo dated December 11, 2014 the
5 Board indicated “plans to undertake a review of all Specific Service Charges next
6 fiscal year.”¹ These services are above average in volume; therefore, Hydro
7 Ottawa opted to wait until a full review of service charges is undertaken. The
8 service charges impacted are:

9

- 10 v. Account Set-Up/Change of Occupancy Charge;
- 11 vi. Disconnect/Reconnect Charge (all 4 categories).

12

- 13 b. The requested information is not readily available and therefore could not be
- 14 provided within the time frame of interrogatory responses. Also, please see part
- 15 a) of this interrogatory response.

16

17

¹ Wireless Attachment Consultation, Board File No. EB-2014-0365, memo dated December 11, 2014, page 3.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#31

Reference Exhibit H, Tab 7, Schedule 1, page 1

Question #31:

HOL proposes to install remote disconnect meters for approximately 36,000 customers. HOL also proposes to maintain the same rate for its "Disconnect/Reconnect" service charge.

- a. Given that "Remote disconnect meters reduce the expense requirements associated with travelling to the premise for disconnect and reconnect requirements", why has HOL not considered a different (lower) "Disconnect/Reconnect at meter" service charge rate for customers served by remote disconnect meters? Alternatively, would HOL consider a blended cost rate (i.e. remote and non-remote) for all disconnect/reconnects?
- b. Please calculate a new "disconnect/reconnect at meter (remote meter)" charge based on the costs of performing this task using a remote disconnect meter.
- c. Please calculate a "disconnect/reconnect at meter" charge based on HOL's blended costs of performing this task (assuming 36,000 remote disconnect meters, with all others non-remote).

Response:

- a. As Hydro Ottawa currently has a modest number of remote disconnect/reconnect meters in service. Within the next five (5) years, the number of meters installed



1 with this feature will remain modest in comparison to the overall meter count.
2 Hydro Ottawa has not considered a rate change for remote disconnect/reconnect
3 services. Rather, to avoid rate discrimination, disconnect/reconnect service
4 charges continue to be uniform to provide the same rate to customers whether
5 they remain on the traditional technology which requires a premise visit (the vast
6 majority of customers) or whether they have the newer metering technology in
7 place.

8

9 b. Not applicable.

10

11

12 c. Not applicable.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#32

Reference Exhibit H, Tab 7, Schedule 1, page 1

Question #32:

HOL describes the High Bill Investigation charge as being “intended to recover the direct costs associated with offsite high bill investigations, when all other means of addressing customer high bill concerns have not been satisfactory to the customer.”

a. Please outline “all other means” that HOL would employ prior to proceeding with a High Bill Investigation.

b. Please explain why HOL believes it to be appropriate to apply an additional charge to a customer who is already concerned and stressed with a high bill. Would an additional payment for an investigation not exacerbate the problem?

Response:

a. Hydro Ottawa undertakes a review of the account by asking the customer if there were any changes in circumstances that would impact the electricity consumption, as well as, provide a comparison of the similar service periods such as the previous month, same month of previous two years, etc., to determine the variance. Hydro Ottawa also provides the customers tips for energy conservation and informs them of any on-going programs and incentives. Further, Hydro Ottawa provides, free of charge, a customer portal called MyHydroLink. This portal offers the customer access to data such as usage, payments, bills, and the ability to set thresholds for



1 electricity usage. Once the customer-defined thresholds are exceeded an e-mail
2 alert is sent to the customer.

- 3
- 4 b. In some cases, after Hydro Ottawa completes the aforementioned steps, customers
5 may not be completely satisfied and insist that there is still “something wrong” and
6 often suspect their meter is the problem. The customer will insist that Hydro Ottawa
7 send a technician to their premise. Past experience has revealed that the technician
8 often ends up doing a home energy audit beyond the meter point – which is the
9 demarcation point between HOL’s equipment and customer’s equipment. This type
10 of work is outside of Hydro Ottawa’s mandate and is, in fact, a competitive service
11 offered by many energy management companies. Hydro Ottawa believes that
12 premise visit charges in such circumstances need to be fully recovered by those
13 customers who generate the costs and receive the benefits from this service.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#33

Reference Exhibit H, Tab 7, Schedule 1, Attachment H7(A)

Question #33:

a. For each of the three proposed Basic Temporary Service connection charges (i.e., overhead, underground, and overhead with transformer), please provide the detailed assumptions and calculations for the materials cost line item.

b. What happens to the materials used for the connection after the temporary connection is removed. Are they scrapped or reused?

c. Please confirm that for all materials that can be reused or retain value after the temporary connection is terminated (e.g. the overhead transformer for the “with transformer” charge), that HOL's charge calculations use a discounted value for each material (e.g. not the full value of the transformer, but some discounted value based on connection duration assumptions). In the alternative, please explain why it would be appropriate to assume the full value of the materials in establishing the charge.

d. If HOL used the full cost of materials without discounting for residual value in c) above, please recalculate the charges assuming the temporary connection is in place for 1 year, and exclude the residual value of any assets recovered after the connection is terminated.

Response:



a. Please see Interrogatory Response to OEB Staff Question #21 for detailed calculations of the 2016 material cost line items. The Temporary Service Charges were based upon the following assumptions:

1) Basic Temporary Service Install and Remove – Overhead, No transformer

Taxes were excluded; lie along refers to the existing pole and primary service; the work is performed during regular business hours and includes both installation and removal.

2) Basic Temporary Service Install and Remove – Underground, No transformer

Taxes were excluded; lie along refers to the existing mini-pad transformer; civil works is excluded; work is performed during regular business hours and includes both installation and removal.

Miscellaneous Hardware for parts 1) and 2) consists of items that HOL requires to perform the job such as: stirrups, standoff pins and insulators, three-quarter inch bolts, preformed grips, connectors, clamps, amp packs and amp pack covers, lubricants, cleaners, etc.

3) Basic Temporary Service Install and Remove – Overhead, With transformer

Taxes were excluded; lie along refers to the existing pole and primary service; work is performed during regular business hours and includes both installation and removal.

Overhead transformer hardware consists of: conductor, connection leads, ground wire, plus applicable miscellaneous hardware.

Transformer costs of \$1,152 represent one-third the average, weighted cost of the transformer.



1

2 The basic temporary service transformers are subjected to excessive and
3 repetitious wear and tear due to frequent transportation, installation and usage by
4 construction loads. HOL tests all its transformers that are removed from service
5 to determine if the transformer can be re-used or recycled, which incurs
6 additional testing and restocking costs. If the transformer tests successfully, it is
7 then re-stocked for emergency proposes and not re-issued to planned customer
8 requested projects.

9

10 Similar to transformers, used metering ancillary equipment requires retesting and
11 restocking. These costs are not captured in the stock value. The temporary
12 customer pays the new value for the meter. The new value of the meter provides
13 a contribution component to offset the retesting and restocking of the used meter
14 equipment.

15

16 HOL does not have a separate financial system set up for construction rental of
17 its equipment (as is the case for the majority of temporary services) and has
18 normalized the re-use of major equipment into its regular material handling
19 process.

20

21 b. End of asset life material is recycled, with the exception of the transformer and
22 the meter. The secondary triplex cable cannot be re-used due to the varied
23 lengths that are cut for each specific basic temporary service. The hardware is
24 also one-time use. Only the transformer and meter are re-purposed.

25

26 c. See Interrogatory Response to SIA Question #33, part a) for transformers and
27 meters.

28

29 d. See Interrogatory Response to SIA Question #33, part a) for transformers and
30 meters. The next basic temporary service is not issued a re-used transformer;



- 1 therefore, discounting for residual value is not required. The other items are
- 2 recycled after one time use and do not have a residual value.
- 3



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#34

Reference Exhibit I, Tab 1, Schedule 2, page 2

Question #34:

Concerning the Y Factor, HOL states that it is designed to recover “routine or expected cost changes outside the scope of the annual adjustment mechanism”. However, HOL goes on to say that it “proposes to use a Y factor to pass along to ratepayers the costs associated with the construction of the administrative and operational buildings” (emphasis added)

Please confirm whether the Y factor is meant to address only the cost changes or the total costs of the buildings.

Response:

Hydro Ottawa Limited (“Hydro Ottawa”) is proposing to use the Y factor for the total costs associated with the construction of the administrative and operational buildings.



Response to Sustainable Infrastructure Alliance Ontario Interrogatory Question

#35

Reference Exhibit I, Tab 1, Schedule 2, page 2

Question #35:

HOL states that it prefers to “use the Y factor as opposed to embedding the full cost into revenue requirement as the precise costs and the timing in which they will be incurred remain unknown at this time. Hydro Ottawa proposes to record the expenses incurred due to the construction of new head office and operations facilities by using a Y factor Variance or Deferral Account.”

- a. Please clarify the difference, if any, between the “Y factor” and a standard deferral or variance account.
- b. Please confirm whether the “Y Factor” is meant to be a deferral account (in which no amounts are included in rates) or a variance account (in which a forecast is included in rates, but variances are tracked for subsequent clearance).
- c. Under what assumption (variance or deferral) has HOL presented the Y factor throughout this CIR application? What portion of the costs (if any) of the head office and operations facility are currently factored in the capital spending, rate base, and bill impact tables in this CIR application?

Response:

- a. Standard deferral and variance accounts are approved by the OEB for use and generally reflect regular day-to day operations. A Y factor is designed to recover costs when the timing and precise amount is unknown.



- 1 b. Hydro Ottawa will follow the Board's decision regarding whether a deferral or
2 variance account is more appropriate in this case.
3
4
5 c. Hydro Ottawa has presented the Y Factor in this Custom IR as a deferral or variance
6 account. Please see Interrogatory Response to Energy Probe Question # 51 part a,
7 regarding the cost portion of this question.