EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014

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Ref: Exhibit 1, Tab 4, Schedule 1, Page 4

Horizon states that it "has consistently maintained residential and small commercial customer satisfaction ratings above 90% and above the Ontario average for the last seven years." Were the surveys over the last seven years conducted on the same basis and by the same company as the current year results? If not, please provide a table listing the company conducting the survey, the result achieved, and any major differences in survey methodology from that used in the prior year(s).

Response:

- 1 Horizon Utilities confirms that the customer satisfaction survey results discussed in Exhibit 1,
- 2 Tab 4, Schedule 1 and further detailed in Exhibit 4, Tab 3, Schedule 2, Page 7 were provided by
- 3 the same independent service provider. UtilityPulse has been performing the annual Horizon
- 4 Utilities customer satisfaction survey, using a consistent methodology for more than ten years.

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Ref: Exhibit 1, Tab 4

Did Horizon commission any other customer surveys over the 2012-2014 period that were not filed together along with this application? If so, please provide any applicable reports and explain why Horizon did not believe the results of these surveys to be relevant to the current application.

Response:

- 1 Horizon Utilities commissioned a supplementary customer satisfaction survey in 2012. The
- 2 survey was completed by Pollara Strategic Insights ("Pollara").
- 3 The Pollara Supplementary 2012 Customer Satisfaction Survey (the "Pollara Survey") is
- 4 provided as 1-SIA-2-Attch 1 2012 Pollara Supplemental Customer Satisfaction Survey.
- 5 The Pollara Survey was initiated primarily to validate the results of Horizon Utilities' customer
- 6 satisfaction survey commissioned through UtilityPulse. The purpose of the Pollara Survey was
- 7 also to provide additional analysis regarding customer drivers of satisfaction and opportunities
- 8 for improvement.
- 9 The Pollara Survey customer satisfaction results were consistent with the results from the
- 10 customer satisfaction survey conducted by UtilityPulse. Horizon Utilities did not submit the
- 11 Pollara Survey as part of the pre-filed evidence as the survey did not provide significant
- incremental insights over those contained within the UtilityPulse survey which was included in
- the pre-filed evidence.

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1-SIA-2_Attch 1_2012 Pollara Supplemental Customer Satisfaction Survey

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Horizon Utilities: Supplementary 2012 Customer Satisfaction Survey



Research Report November 2012

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Methodology

From October 15 to October 29, 2012, Pollara conducted a telephone survey among a randomly selected sample of Horizon Utilities customers. Sample was derived from customer lists provided by Horizon Utilities that were drawn at random from the customer base as a whole and included records for 7,256 commercial customers and 11,999 residential customers. From these lists, potential survey participants were selected at random. The total number of survey respondents can be broken down as follows:

Customer Type	Sample Size	Margin of Error (95% Confident Interval)
Residential	n=600	+/- 4.0%
Commercial	n=301	+/- 5.7%
TOTAL	n=901	+/- 3.3%

The results have been statistically weighted according to Statistics Canada's 2011 Census data for region and by Horizon Utilities' records for customer type to ensure a representative sample of the entire Horizon Utilities' customer base. Discrepancies in or between totals are due to rounding.

Towards a Clearer Understanding of Customer Satisfaction

- Overall satisfaction with Horizon Utilities among its customers is rated 7.4 out of 10. This
 score can be contextualized in relation to previous satisfaction scores using a different
 methodology as being consistent. Not only is this score consistent, though, it identifies
 an important customer segment thus far ignored by satisfaction tracking metrics:
- Approximately one quarter of Horizon Utilities have an extremely low level of engagement with Horizon. This group appears throughout the survey:
 - 30% of customers say they have "heard of, but don't know much about" Horizon Utilities
 - 22% cannot offer an opinion whether they think Horizon is headed in the right direction of wrong direction
 - 23% rank their satisfaction with Horizon in the neutral cluster from four to six (out of 10)
- Previously, customers were provided response options to indicate that they were either satisfied or dissatisfied with Horizon Utilities. There was no response option offered that was particularly well suited to this large, disengaged group of customers. Without a neutral or no-response option, this group would tend to choose "somewhat satisfied" simply because they were "not dissatisfied." As a result, the existing satisfaction score can better be characterized as a "not dissatisfied" score to call it a satisfaction score is therefore somewhat misleading.

Towards a Clearer Understanding of Customer Satisfaction

- Armed with this understanding of previous satisfaction metrics as being "not dissatisfied" scores, we can then map that onto the new satisfaction metric as follows: any customer who rates their level of satisfaction as a five or higher out of 10 can be considered "not dissatisfied." This is because five represents the natural mid-point on the scale, the perfectly neutral response. A rating of four although still in the neutral range nonetheless denotes a feeling of slight dissatisfaction, and these customers would probably have leaned towards saying they were "somewhat dissatisfied" on previous surveys.
- Considering this, 91% of customers provided a rating of five or higher out of 10, which is consistent with previous waves of research. It is thus established that the results of this survey are consistent with previous waves of research.
- What we discover in this survey, though, is that the proportion of customers who are actually satisfied is 70%, due primarily to the previously unaccounted-for disengaged group. Meanwhile, just one out of 20 customers (5%) rate themselves as not satisfied on a scale from zero to 10.

Priorities for Improving Customer Satisfaction

- Based on this new understanding of the satisfaction landscape among Horizon Utilities customers, we can see that satisfaction is high among those who are engaged to some degree. Therefore the challenge is not necessarily to improve satisfaction among those who are engaged, but rather to engage with those who are not.
- To provide some direction on how to do this, we look to the key drivers of satisfaction for Horizon Utilities. A total of 20 performance attributes were tested in the areas of customer service, value, operations, and ethics/sustainability. Of these, eight were found to have an impact on overall customer satisfaction:
 - Provides good value for money
 - Maintains high standards of business ethics
 - Beyond creating jobs and paying taxes, is a socially responsible company
 - Keeps the cost of electricity reasonable when compared to other utilities such as gas, cable or telephone
 - Quickly deals with issues that affect you as a customer
 - Makes using electricity safely a top priority
 - Is customer-focused and makes you feel like you are valued
 - Provides consistent, reliable energy

Priorities for Improving Customer Satisfaction

- From that least of eight key drivers of satisfaction, three are focused on issues related to corporate social responsibility. The CSR attributes are the ones wherein the important disengaged customer group are most likely to offer no opinion as to whether or not Horizon Utilities is meeting their expectations, with "don't know" responses ranging between 13% and 34%.
- Therefore, it is recommended that Horizon Utilities place an emphasis on promoting and communicating its efforts in the areas of corporate social responsibility. Doing so would drive improvements in overall customer satisfaction to a more significant degree than focusing on issues related to customer service or operations.
- It is important to note, though, that the single most important driver of overall customer satisfaction is "Provides good value for money." In the current economic climate of an escalating cost of living in Ontario, 65% of customers say Horizon Utilities is meeting or exceeding their expectations on this front, compared to 28% who say that Horizon has been falling short of their expectations.

Customer Service Satisfaction

- A total of 15% of Horizon customers say they have contacted customer service within the past 12 months. This total skews significantly towards commercial customers, 35% of whom have contacted Horizon customer service in the past year, compared to 13% of residential customers.
- Overall satisfaction with Horizon customer service among those who have contacted it within the past year is strong, with an overall rating of 7.7 out of 10, and with 74% of customers expressing satisfaction with a rating of seven or higher out of 10 (this would include 90% of customers if using the five-or-higher "not dissatisfied" scale).
- There is no consensus area for improvement in customer service, and the vast majority of customers use telephone to reach customer service – a method that is unanimously described as "effective."
- Based on these results, no changes or attempted improvements to the method in which customer service is delivered are recommended at this time.

Self-Serve Technology Preferences

- Internet access rates among Horizon Utilities customers are consistent with national and provincial averages.
- Small but meaningful proportions of customers indicate a likelihood to adopt website self-serve tools in the near future (next three months). These proportions range from a low of 6% who will use the website to update their meter reading to a high of 24% who will use it to inform Horizon of a move.
- Similarly, the potential uptake of a self-serve mobile app for a smartphone or tablet can be described as small but meaningful, with 5% of customers likely using it and 11% possibly using it.
- Horizon Utilities customers, when compared to mobile device users across Canada, tend to be significantly more oriented towards Apple smartphones and tablets running iOS (42%) and significantly less oriented towards Blackberry devices (21%). Meanwhile their use of Android devices (24%) is in line with the national average.
- Initial development of a Horizon Utilities app can therefore focus on Apple iOS. Both smartphones and tablets are expected to be used, so both device types should be taken into account when designing the app.

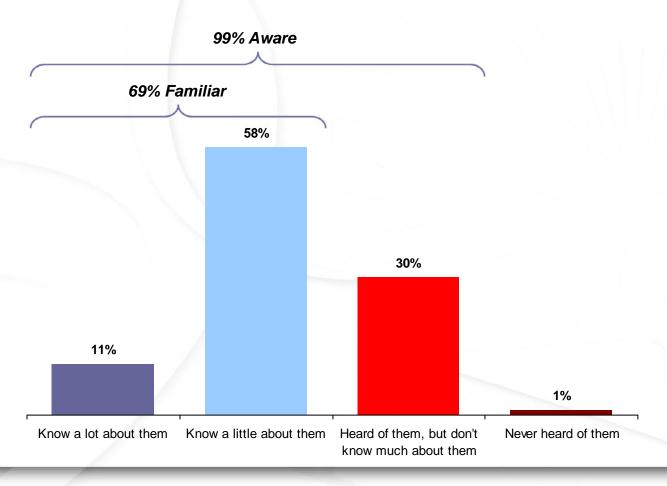
Part 1: Overall Familiarity and Satisfaction



Familiarity with Horizon Utilities:

Two-thirds of customers say they are familiar with Horizon

Roughly two-thirds of customers (69%) say they are familiar with Horizon Utilities. This proportion increases to 78% when
those who are initially unfamiliar are asked how familiar they are with their local electricity company. Notably, unprompted
familiarity is somewhat higher among customers in Hamilton (71%) than those in St. Catharines (63%).

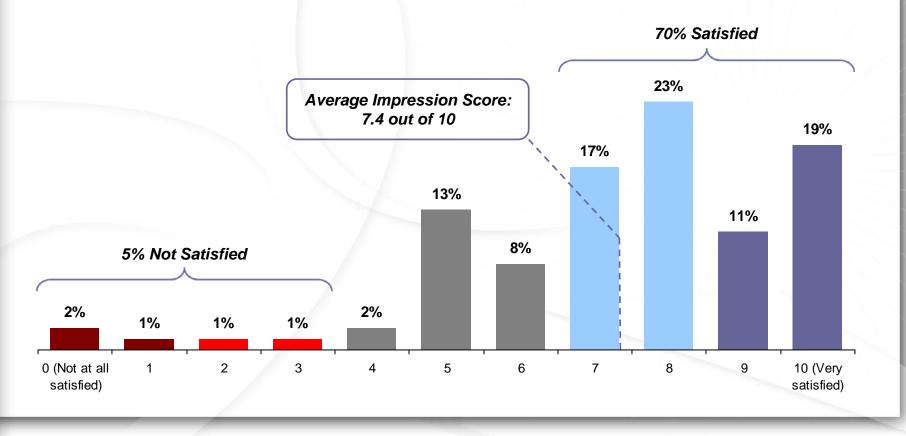


Questions: "Overall, how much would you say you know about Horizon Utilities?" [n=901]; "Horizon Utilities is the name of the electricity distributor in your community. Although you may not be familiar with them by name, how much would you say you know about your local electricity company?" [n=1000]

Overall Satisfaction with Horizon Utilities:

Average score of 7.4 out of 10 denotes widespread satisfaction

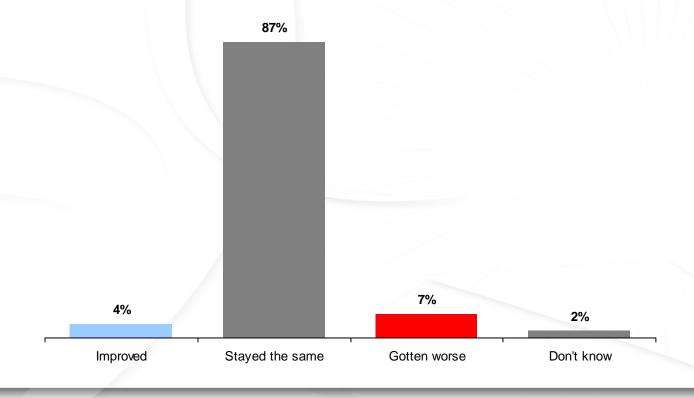
- The average satisfaction score for Horizon Utilities among its customers residents is 7.4 out of 10, a score that can be considered to be quite strong. Using a zero-to-10 scale, fully 70% of customers said they are "satisfied" compared to just 5% who said they are "not satisfied."
- Some differences in average satisfaction ratings include customer type (7.7 for commercial customers vs. 7.3 for residential customers) and region (7.5 for Hamilton vs. 6.9 for St. Catharines).



Satisfaction Momentum:

Most opinions of Horizon Utilities have not changed in past year

- Nine out of 10 customers (87%) say their overall satisfaction with Horizon Utilities has stayed the same over the past 12 months, with little-to-no perceptible positive or negative momentum.
- Those who have contacted Horizon Utilities customer support within the past 12 months are less likely to say their satisfaction has stayed the same (76%). Again, however, no momentum in either direction is discernible, as 11% of these customers say their satisfaction with Horizon Utilities has improved, and 11% say it has gotten worse.



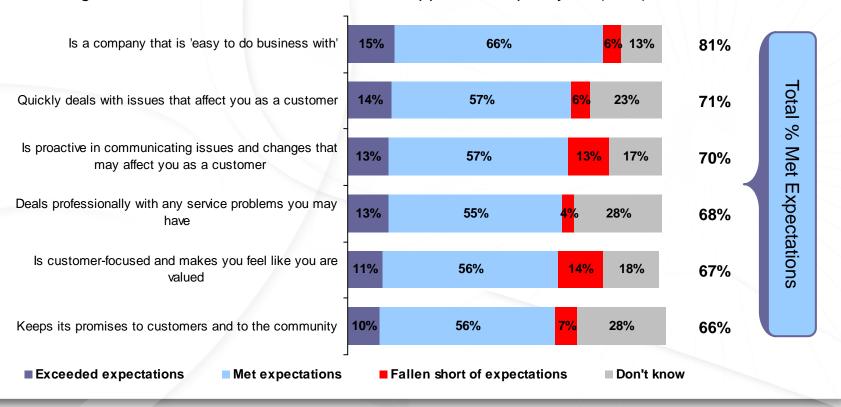
Part 2: Customer Expectations and Key Drivers of Satisfaction



Customer Service Attributes:

Horizon Utilities meeting customer service expectations, easy to do business with

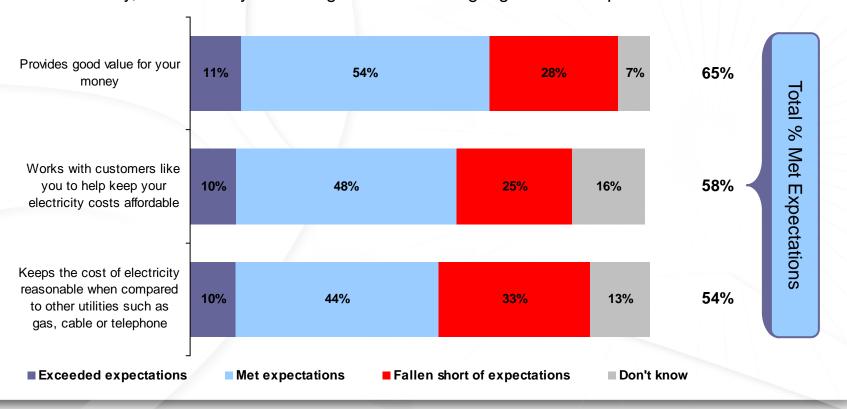
- On the six customer service attributes tested, Horizon Utilities was found to be satisfying expectations across the board. In particular, 81% said Horizon was meeting their expectations of it being a company that is "easy to do business with."
- It should be noted that 15% say Horizon is falling short of expectations in terms of making customers feel like they are valued particularly among high-income (\$100,000+) residential customers (21%) and among those who have contacted customer support in the past year (20%).



Value Attributes:

Up to a third of customers say Horizon falling short on value and affordability

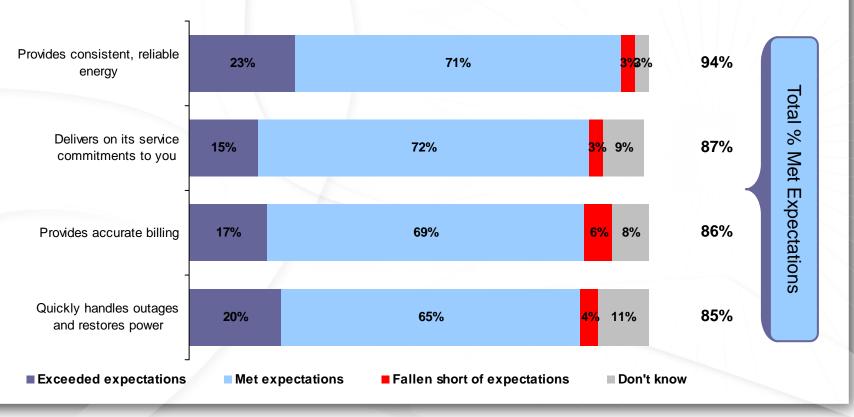
- While Horizon Utilities is meeting the expectations of most of its customers in terms of value and affordability, a significant proportion of customers indicate that Horizon Utilities has been falling short of their expectations on these fronts over the past 12 months.
- Of particular concern are customers with an annual household income of \$100,000 or more. Among this group 40% say Horizon is falling short on keeping costs reasonable, 39% say it is falling short on value for money, and 34% say it is falling short on working together to keep costs affordable.



Operational Attributes:

Operationally, Horizon Utilities is meeting expectations across the board

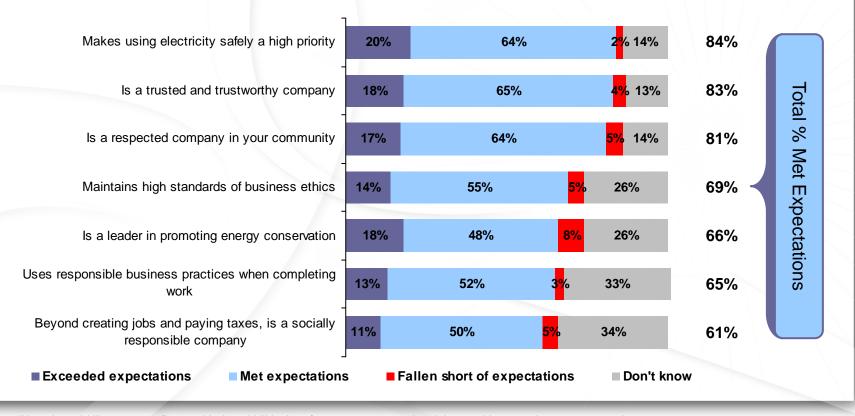
Fully 19 out of 20 customers (94%) say Horizon Utilities has been meeting their expectations for providing consistent, reliable energy over the past 12 months. No fewer than 17 out of 20 (85%) also say Horizon has met their expectations when it comes to delivering on service commitments, providing accurate billing and handling outages.



Corporate Social Responsibility Attributes:

Meeting & exceeding expectations, but low awareness of some CSR attributes

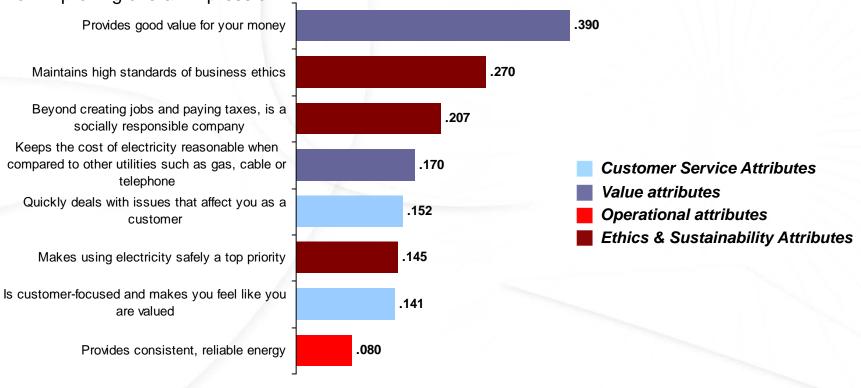
When it comes to ethics and sustainability attributes, Horizon Utilities is meeting and exceeding expectations. The proportion of customers who say the company is falling short of expectations ranges no higher than 8% on any item, although the proportion who say they "don't know" is quite high on a few of the more sustainability-oriented attributes, particularly among residential customers. Perhaps a broad-reach media campaign highlighting Horizon Utilities' initiatives in these areas would help close this gap and improve overall customer satisfaction.



Relative Importance of Attributes on Overall Impression:

Quality of hospital administration should be a target for improvement

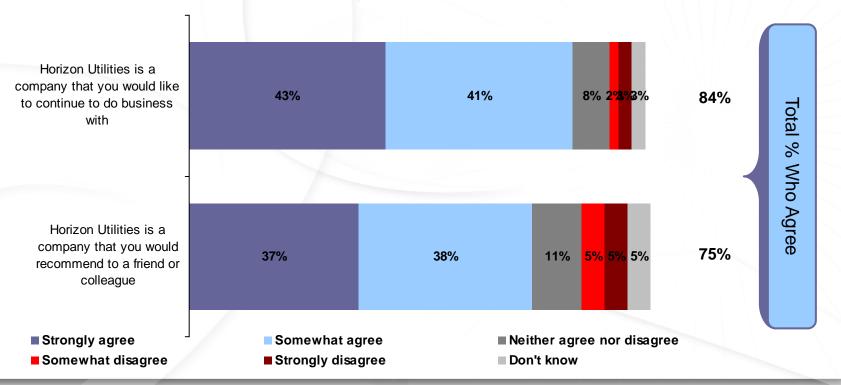
A regression analysis was used to determine which attributes are the most important drivers of overall impression. The eight attributes listed in the chart below are the only ones to have a significant effect on overall satisfaction. Combined, these eight attributes explain 28% of an individual's overall satisfaction with Horizon Utilities. The graph below shows the absolute standardized coefficient of each attribute, and this value shows how important each attribute is in explaining satisfaction. Improving performance on attributes with the highest coefficients will have the most significant impact on improving overall impression.



Customer Engagement Actions:

Vast majority of customers illustrate solid engagement with Horizon Utilities

- Three quarters of Horizon customers (75%) agree that it is a company they would recommend to a friend or colleague, and even more (84%) agree it is a company they would like to continue to do business with. In fact, nearly half (43%) strongly agree with this sentiment.
- Customers with an annual household income of \$100,000 continue to show a lower level of engagement, as 79% say they would like to continue doing business with Horizon, and 68% say they would recommend Horizon. This contrasts with 89% and 82%, respectively, among those earning an annual household income of less than \$100,000.





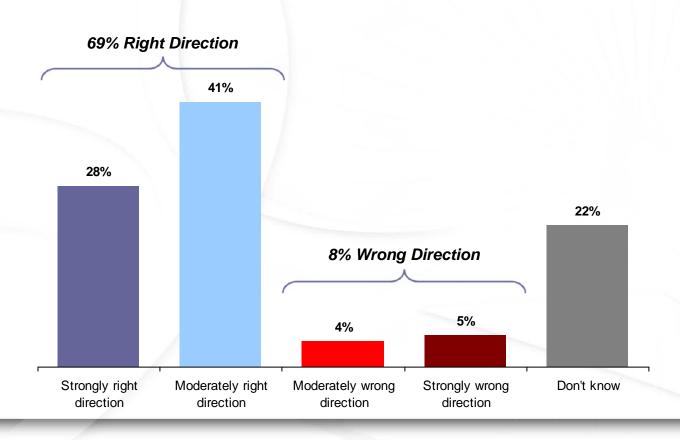
Part 3: Expectations for the Future



Current Direction of Horizon Utilities:

Large majority believe Horizon Utilities is headed in the right direction

• Most customers (69%) believe Horizon Utilities is currently headed in the right direction, while just 8% say it is headed in the wrong direction. The remaining 22% were unable to provide a response either way.



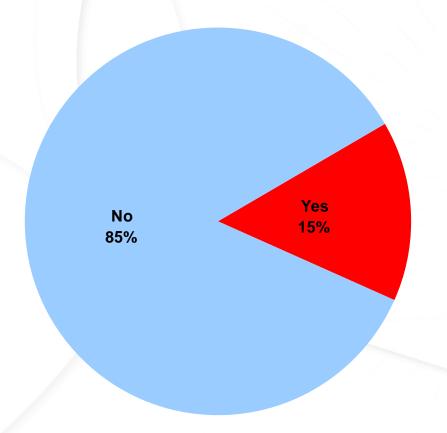
Part 4: Customer Service Experience



Customer Care Incidence Rate:

15% claim to have contacted Horizon customer service in past year

- A total of 15% of Horizon Utilities' customers say they have contacted customer service for some reason over the past 12 months.
- This incidence rate is significantly higher among commercial customers (35%) than among residential customers (13%).



Reasons for Contacting Customer Care:

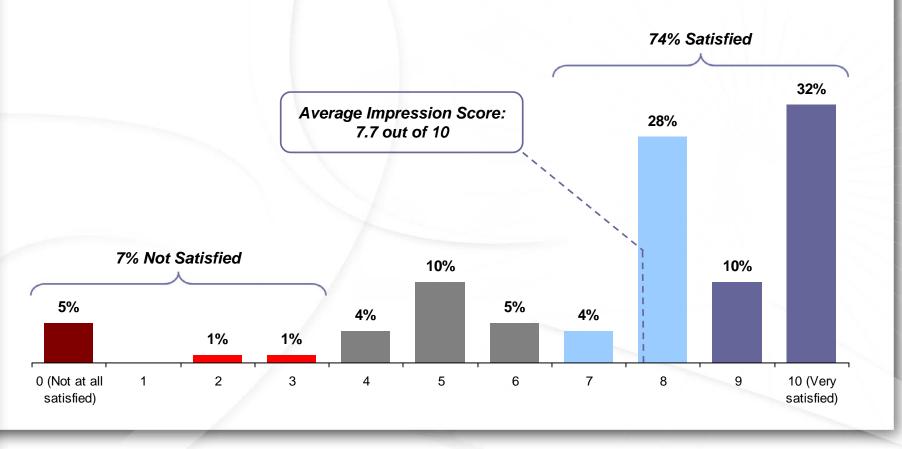
Billing-related inquiries top the list of reasons for customer service calls

- Among the 15% of customers who have had contact with Horizon Utilities' customer service over the past year, the main reasons necessitating this contact were billing related: to settle a dispute (28%) and to pay a bill (17%). The other significant customer service issue reported was to report outages (16%).
- In terms of billing disputes / accuracy issues, 36% of commercial customers said this was the reason for their call, compared to 26% of residential customers.
 - → To settle a billing dispute / accuracy issue (28%)
 - → To make a bill payment (17%)
 - → To report a power failure or power outage (16%)
 - → To deal with an electrical emergency / safety issue (9%)
 - → To get general information (7%)
 - → To inform Horizon of a move or new customer connection (7%)
 - → To discuss issues related to renovations, upgrades and permits (7%)
 - → To deal with meter issues (5%)
 - → To discuss energy conservation (4%)
 - → For some other reason (4%)
 - Can't remember (2%)

Overall Satisfaction with Customer Service:

Three quarters satisfied with overall response to customer service issue

- Overall, 74% of the customers who contacted Horizon customer support in the past year say they were satisfied with the overall response to their issue (90% were "not dissatisfied").
- The average satisfaction rating out of 10 is 7.7 consistent across both residential (7.7) and commercial (7.5) customers.

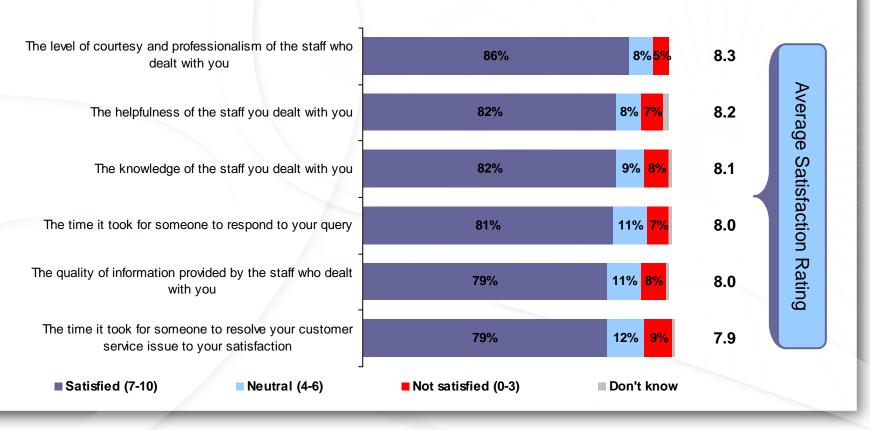


Question: "Overall, how satisfied were you with each of the following regarding your most recent customer service issue? Please use a scale from zero to 10, where zero means you were 'not at all satisfied' and 10 means you were 'very satisfied.' Horizon Utilities' overall response to your customer service issue." [n=186]

Satisfaction with Customer Service Attributes:

Horizon customer service performing well across the board

A significant majority of customers who have reached out to Horizon customer service in the past year are satisfied with each of the six attributes tested, providing average satisfaction rating of no less than 7.9 out of 10. The proportion of customers who indicated their satisfaction with a rating of seven or higher out of 10 ranged between 79% and 86%. The proportion who indicated they were at least "not dissatisfied" by issuing a rating of five or higher out of 10 ranged between 90% and 94%).



Question: "Overall, how satisfied were you with each of the following regarding your most recent customer service issue? Please use a scale from zero to 10, where zero means you were 'not at all satisfied' and 10 means you were 'very satisfied." [n=186]

Suggestions for Improvement:

Half of customers who contacted customer service offer no areas for improvement

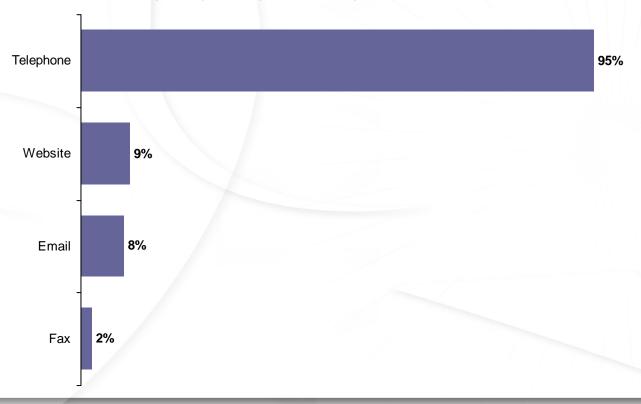
- Customers who rated their satisfaction with Horizon Utilities' overall response to their customer service issue as an eight or lower out of 10 were asked what Horizon could have done differently to improve their satisfaction. Half (49%) indicated in one way or another that everything was fine and that there was nothing Horizon could or should have done differently.
- Meanwhile, there was no consensus among those who did provide a suggestion for improvement.
 Hence, no changes to the method in which customer service is delivered are recommended.
 - → Hire more professional / knowledgeable staff (14%)
 - → Provide quicker service (11%)
 - → Resolve billing issues (10%)
 - → I spent too much time on the telephone (6%)
 - → The cost of electricity is too high (5%)
 - → Something else (17%)
 - → Nothing (17%)
 - → Don't know (16%)
 - → No response (11%)
 - → Everything is fine (5%)

49% were unable or unwilling to provide a suggestion for improvement

Method of Contacting Customer Service:

Telephone remains the dominant method of contact

- Almost all customers (95%) who contact Horizon Utilities customer service in the past year used the telephone. In addition, 9% used the website, 8% used email and 2% used fax. It should be noted that many customers who used these alternate forms of contact also relied on telephone, as just one in 20 (5%) used a method of contact other than telephone exclusively.
- Among those who used the telephone to contact Horizon customer service in the past year, 90% said it was an effective method for getting through, including 70% who said it was very effective.



Question: "What method or methods have you used to contact Horizon Utilities' customer service over the past 12 months?" [n=186]; "Would you say that telephone was a very effective, somewhat effective, not too effective, or not at all effective method for getting through to Horizon Utilities' customer service in your experience?" [n=179]

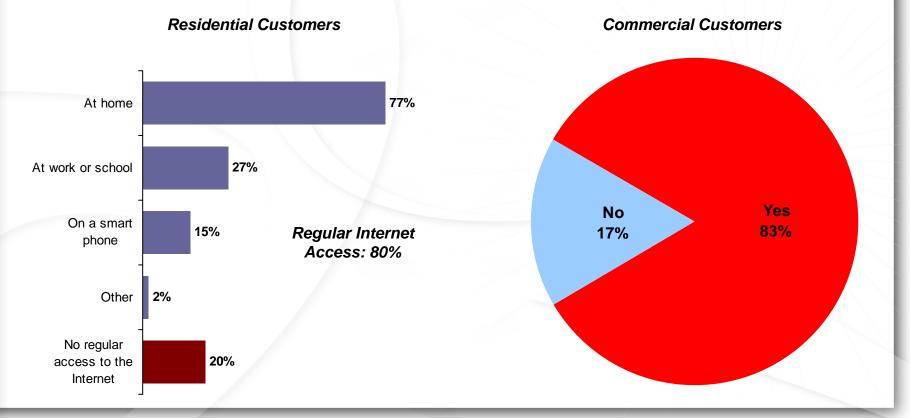
Part 5: Self-Serve Technology Usage and Preferences



Internet Access Among Horizon Customers:

80% of residential customers and 83% of businesses have regular Internet access

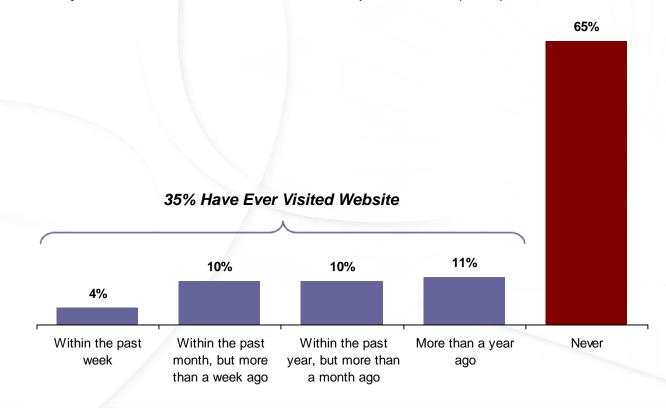
• The incidence rate of regular Internet access among Horizon Utilities customers is similar to that of the country as a whole. According to the Statistics Canada, 79% of Canada households had access to the Internet in 2010, including 81% in Ontario. Among the 77% who have access to the Internet at home are 99% of households with an annual income of \$100,000 or more compared to just 60% of those with an annual income under \$50,000. A similar gap can be noted regarding regular smart phone Internet access (43% vs. 4%).



Website Usage:

A third of Horizon customers have visited the website

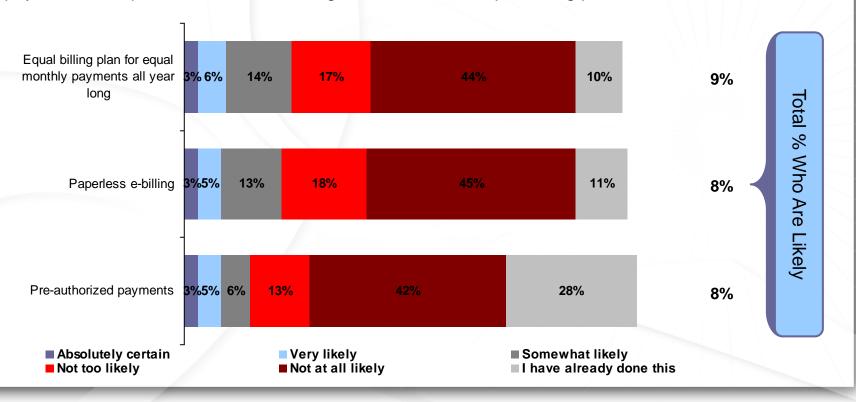
About a third of customers (35%) have ever visited the website, but just 14% have visited it within the past month. Just as higher-income households are more likely to have regular access to the Internet, so too are they more likely to have ever visited the Horizon Utilities website. Roughly half (54%) of those earning \$100,000 or more per year have ever visited the Horizon website compared to 28% of those earning under \$50,000. Despite this significantly higher incidence rate, higher income earners are no more likely to have visited the website in the past month (15%).



Customer Account Services Uptake:

Nearly one in 10 likely to sign up for advanced account services

- Nearly one in 10 Horizon customers say they are "absolutely certain" or "very likely" to sign up for the equal billing plan (9%), e-billing (8%) or pre-authorized payments (8%) in the next three months.
- If those who say they are only "somewhat likely" to take these actions are also taken into account, then the possible uptake rates for theses services are 24%, 22% and 13%, respectively.
- About a quarter of customers (28%) report that they have already signed up for pre-authorized payments, compared to 11% for e-billing and 10% for the equal billing plan.

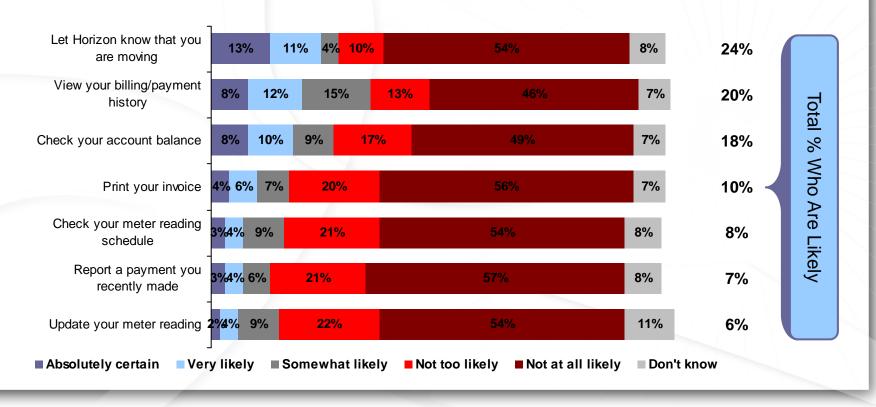




Website Self-Serve Tools Uptake:

Reporting moves most important self-serve tool

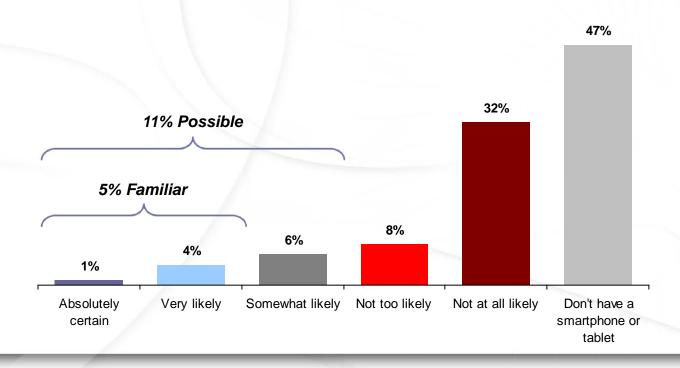
- A quarter of Horizon customers (24%) said they are "absolutely certain" or "very likely" to let Horizon know that they will be moving using the website self-serve tool within the next three months.
- Other website self-serve tools with good uptake rates include viewing billing/payment history (20%), checking account balance (18%) and printing invoice (10%).



Likelihood of Using Smart Phone for Self-Serve Tools:

One out of 20 customers likely to use mobile app

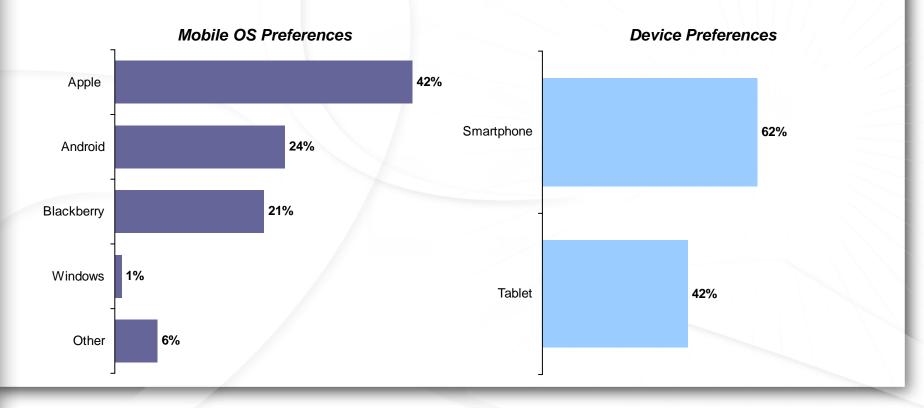
- One out of 20 customers (5%) say they would be either "absolutely certain" or "very likely" to use a Horizon Utilities app on their smartphone or tablet for any of the website self-serve tools. Excluding the 47% of customers who don't have a smartphone or tablet, this accounts for 10% of mobile device users who would be likely to use a Horizon app. If those who say they are just "somewhat likely" are also taken into account, then 21% of mobile device users would possibly use a Horizon Utilities app.
- These likelihood rates are significantly higher among higher-income earners because they are also significantly more likely to be mobile device users. Among those who earn \$100,000 or more per year, just 21% say they don't have a smartphone or tablet, compared to 71% of those earning less than \$50,000 a year.



Mobile OS and Device Preferences:

Apple iOS most popular platform among Horizon customers

- In terms of which platforms should be supported by a Horizon app, 42% of possible users are running Apple iOS, 24% Android and 21% Blackberry. According to industry observer comScore, the market share in Canada as of November 2011 was 36% Blackberry, 30% Apple and 25% Android so the Horizon customer base is heavily skewed towards Apple iOS compared to the rest of the country.
- Industry forecasters expect significant growth in the market shares for both Android and Windows in the next few years, although there has yet to be any evidence of the latter among Horizon customers.



POLLARA ••••

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1-SIA-3

Ref: Exhibit 1, Tab 12, Schedule 1 and Exhibit 1, Tab 12, Schedule 2

Horizon lists "changes in the tax rates" as being addressed through a possible Annual Adjustment, and "Changes to income tax rates and laws" as a possible "Reopener". Please clarify the difference between the two (if any).

Response:

1 Please see response to Horizon Utilities' response to Interrogatory 1-Energy Probe-5 b).

1-SIA-4

Ref: Exhibit 1, Tab 12, Schedule 2

Horizon lists a number of factors (i.e. "reopeners") that would allow for additional adjustments to its rates as a result of events outside the normal course of business.

- a) Given that the majority of the potential "reopeners" are fundamental changes to either billing determinants or overarching regulatory requirements that would apply industry-wide (and by their nature would trigger mandated industry-wide adjustments), does Horizon believe a specific determination on each of these factors is necessary as part of the OEB's decision in this specific proceeding?
- b) Please explain why Horizon does not believe that the OEB's existing Z-Factor is sufficient to guard against these various unforeseen events.

Response:

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- a) Horizon Utilities has identified its list of reopeners to the Application in Exhibit 1, Tab 12, Schedule 2, that are adjustments outside the normal course of business for unexpected events that may have a material impact to the operation of the utility and are outside of Management's control. Horizon Utilities' proposal for these adjustments includes the following:
- 1. Changes to income tax rates and laws:
- Changes to Ontario Market Rules or OEB Codes that would impact costs or revenues;
- 9 3. Changes to Board policies on distributor rate design;
- 4. Changes to environmental laws that would impact business requirements and processes resulting in increased expenditures;
 - 5. Changes to technical requirements beyond the control of the utility;
- 13 6. Items that would meet the OEB's Z-factor criteria;
- 14 7. Ministerial Directives or similar required government action;
- 15 8. Accounting framework changes; and
- 9. Changes to the revenue allocated to unmetered load customers resulting from changes to Board policies on cost allocation for unmetered loads.

Horizon Utilities accepts that these may, by their very nature, trigger mandated industry-wide adjustments. Should an industry-wide adjustment occur, it is not evident at this time when the Board would permit the change to be made. Given that Horizon Utilities will be locked into this rate plan per the specifications on Custom IR in the RRFE, the purpose of the reopeners is to permit the change to be made in advance of the next rebasing application which is anticipated for electricity distribution rates in 2020. Horizon Utilities therefore expects that the Decision of the Board in this Application will include Board concurrence for filing future potential applications for adjustments to elements of the rate plan, as appropriate, due to the unforeseen events proposed by Horizon Utilities in the Application.

b) Please see Horizon Utilities' response to 1-Staff-2.

1-SIA-5

Ref: Exhibit 1, Tab 5, Appendix 1-10.3

In describing the CIR rate setting method in its Consolidated Financial Statement Horizon paraphrases from the RRFE Report and notes that "The OEB also indicates that it expects that a distributor applying under this method would not seek early termination from the Custom IR (with the exception of a circumstance where the return on equity of an LDC in a given year is either higher or lower than its approved MARE by 300 basis points)." Given this admission, please explain why Horizon nonetheless believes that it would be appropriate for the OEB to approve additional "reopeners" as outlined in Exhibit 1, Tab 12, Schedule 2.

Response:

- 1 The purpose of the "reopeners" that Horizon Utilities has requested in the Application would not
- 2 necessarily cause the termination of the main rate plan. Rather "reopeners" should be
- 3 understood as adjustments to certain elements of the main rate plan for unforeseen or non-
- 4 recurring events. These events are expected to be limited and may not occur at all. Please
- 5 also see Horizon Utilities' response to Interrogatories 1-Staff-2 and 1-Staff-6.

1-SIA-6

Ref: Exhibit 1, Tab 2, Schedule 6

In Exhibit 1, Tab 2, Schedule 6, Horizon explains its needs in choosing to apply for rates under the CIR methodology. In the absence of embedded productivity and stretch factors (that would ordinarily apply under the IRM methodology), what measures or reporting metrics does Horizon propose for itself to ensure that productivity gains continue to be achieved during the 5 year term?

Response:

- 1 It is not correct to imply that embedded productivity is not incorporated into the proposed rates.
- 2 In fact, the proposed revenue requirements and rates do incorporate productivity savings. For
- 3 further elaboration on the embedded productivity savings, please see Horizon Utilities' response
- 4 to 1-Staff-4.
- 5 With respect to reporting, it is not clear whether the question goes to external or internal
- 6 reporting. If external, Horizon Utilities will continue to provide annual reporting to the Board
- 7 through the Reporting and Record Keeping ("RRR") filings. If internal, Horizon Utilities has not
- 8 filed specific measures or metrics as part of the Application; any such measures and reporting
- 9 metrics will be considered in due course as required.

1-SIA-7

Ref: Exhibit 1, Tab 2, Schedule 6, Page 29

Horizon notes that "Although the Board applied a 0.72% productivity factor to 2012 and 2013 IRM rate adjustments, more current analysis within and underlying the Rate Setting Report clarifies realistic expectations for productivity at 0% for those years. Consequently, Horizon Utilities has used a 0% productivity factor for all years within its price index analysis in Table 1-10."

- a) Please explain how the Rate Setting Report "clarifies realistic expectations for productivity at 0% for those years".
- b) In supporting its use of a 0% productivity factor in its analysis, Horizon quotes the Rate Setting Report by noting the OEB's determination that the "productivity factor at zero reflects a reasonable balance of the estimated productivity trend in the sector over the last 10 years...". Please confirm whether Horizon interpreted this statement as suggesting or implying that the productivity factor was in fact zero in 2012 and 2013.
- c) Please reproduce Table 1-10 using the Board approved productivity factor for 2012 and 2013.

Response:

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- a) The Rate Setting Report clarifies such expectations with reference to the SIA quote in b)noting the OEB's determination.
- b) Horizon Utilities does not suggest or imply that the productivity factor was, in fact, zero in
 2012 and 2013. In fact, the productivity factor applied to its rates for those years was
 0.72%. The Board sets the productivity factors that apply to rate-making policy as a matter
 of fact. Horizon Utilities has complied in all respects in applying such factors to its rates
 within Price Cap Incentive Rate-Setting applications or as otherwise required pursuant to
 Board regulation or policy.
 - Horizon Utilities interprets this statement as suggesting and implying that the revised evidence underlying the Rate Setting Report indicates that a reasonable expectation of productivity trend over the last ten years is zero. On this basis, Horizon Utilities submits that it is more reasonable to analyze its cost and rate growth relative to the most current trending data including retrospective implications. The table in Table 1-10 serves to analyze Horizon Utilities' actual and proposed cost structure growth against a historical Price Cap trend that

- is based on more current data than available at the time the productivity factor applicable to
- 2 2013 and 2012 was set.
- 3 c) Please refer to Horizon Utilities' response to 1-EP-3 c).

1-SIA-8

Ref: Exhibit 1, Tab 2, Schedule 6, Page 26

Horizon notes that "The analysis demonstrates that Horizon Utilities is projecting and requesting real OM&A growth, net of achieved and forecast productivity and inflation, of approximately \$4,400,000 from 2011 Approved through the 2019 Test Year". In table 1-10, however, the \$4,400,000 value appears to correspond specifically to the 2019 test year, with different values for each of the years from 2015-2018.

- a) Please confirm/clarify that Horizon is also presenting the \$4,400,000 value as an average annual amount, calculated as being the amount of OM&A required in excess of that which would be notionally permitted under the IRM calculation methodology in each of the five test years.
- b) Please provide/confirm the total OM&A required in excess of that permitted under the IRM calculation over the entire 2015-2019 period using Horizon's methodology and the modified methodology as requested under interrogatory SIA-29c.

Response:

- 1 a) Horizon Utilities does not confirm the contention of SIA in a). The \$4,400,000 value
- 2 referenced in line 7 of Exhibit 1, Tab 2, Schedule 6, page 27 represents the difference
- between the "Projected OM&A under Price Cap" value of \$64,700,000 for the 2019 Test
- 4 Year and the corresponding total OM&A sought within this Application for that year
- 5 (\$69,100,000 rounded).
- 6 b) Horizon Utilities believes that SIA is referring to interrogatory SIA-7c (not SIA-29c) that
- 7 requested a reproduction of Table 1-10 using the Board approved productivity factor for
- 8 2012 and 2013 of 0.72%.
- 9 OM&A required in excess of that permitted under Horizon Utilities' methodology (refer to 1-
- 10 EP-3c and 1-EP-3_Attch 1):
- 11 2015 excess \$5,000,000
- 12 2016 excess \$5,100,000
- 13 2017 excess \$5,300,000
- 14 2018 excess \$4,800,000
- 15 2019 excess \$4,400,000

- 1 OM&A required in excess of that permitted under SIA "modified methodology" (refer to 1-EP-
- 2 3b and 1-EP-3_Attch 4):
- 3 2015 excess \$5,900,000
- 4 2016 excess \$6,000,000
- 5 2017 excess \$6,100,000
- 6 2018 excess \$5,700,000
- 7 2019 excess \$5,300,000

1-SIA-9

Ref: Exhibit 1, Tab 2, Schedule 6, Page 3

Horizon identifies "An increase in OM&A Costs associated with the smart meter implementation" as one of the reasons for its revenue deficiency in 2015. Given that Horizon has largely completed the Smart Meter conversion program, please explain why smart meter OM&A implementation costs (as opposed to capital costs to be added to ratebase, as identified on page 16 of the same reference) are still considered a major reason for increased distribution costs in 2015.

Response:

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1 OM&A costs related to the Smart Meter implementation are considered a major driver for 2 increased distribution costs in 2015 because they are included in the determination of base rates for the first time in 2015. The revenue deficiency in 2015 is calculated by comparing the 3 2015 base revenue requirement to the 2014 approved distribution rates applied to the forecast 4 of customers, connections, load, and demand for the 2015 Test Year. The 2014 distribution 5 rates are based on costs approved in the 2011 Cost of Service Application (EB-2010-0131) plus 6 annual adjustments during the IRM period. OM&A and capital costs related to the Smart Meter 7 8 program were not included in the determination of revenue requirement in 2011. These costs were recorded in a deferral account until the Board issued its Decision on the prudency of the 9 10 expenditures. Horizon Utilities filed its Smart Meter Prudence Application (EB-2011-0417) in December 2011 11 and the Board issued its Decision on May 1, 2012. The Board found the documented costs to 12 be prudent and approved the disposition for recovery of the costs for Smart Meter deployment 13 and operation through a Smart Meter Disposition Rider ("SMDR"). The Board also approved a 14 Smart Meter Incremental Revenue Requirement ("SMIRR") Rate Rider to recover the annual 15 revenue requirement associated with Smart Meters installed from the inception of the Smart 16 Meter program through to December 31, 2011. The SMIRR includes OM&A expenses; 17 depreciation; cost of debt, taxes/PILs, and the return on equity ("ROE"). The Board stated in its 18 19 Decision that the "SMIRR will be in place from May 1, 2012 until the implementation date for

new rates as determined in Horizon Utilities' next cost of service application".

- 1 The inclusion of these Smart Meter costs in the determination of base rates for the first time, is
- 2 identified as a principal driver of the revenue deficiency in 2015. The removal of the SMIRR in
- 3 2015 will have an offsetting effect on customers' total bills.

2-SIA-10

Ref: Exhibit 2, Tab 5, Schedule 1

Horizon proposes to leave its stranded meter balances in ratebase until they are fully depreciated, citing primarily rate impact mitigation as its justification for this approach. Horizon quotes the G-2008-0002 Smart Meter Guidelines as allowing for this option.

- a) Given that the G-2008-0002 Guidelines have been superseded by the G-2011-0001 Guidelines (which no longer provide for the option of leaving these balances in ratebase), why does Horizon believe that this option would continue to be compliant with current regulations?
- b) The G-2011-0001 Guidelines state that "The Board found that the net book value of the stranded assets should be removed from rate base for the applicable customer classes, rather than by leaving the stranded assets in ratebase". Given that rate mitigation would be a factor applicable to all utilities and the clear direction in the G-2011-0001 Guidelines, please explain why an alternative treatment would be appropriate for Horizon.
- c) Please confirm that under Horizon's approach the stranded meters in ratebase would continue to generate a return for the company. Please calculate the magnitude of the return over the remaining life of the stranded meters.
- d) If rate mitigation is a primary consideration for Horizon in proposing to leave the meters in ratebase, has Horizon considered the option of removing the meters from ratebase but clearing the balance over an extended period of time (e.g. approximating the remaining useful life)? Why or why not?
- e) Please calculate the expected rate riders and bill impacts if the stranded meters were to be removed from ratebase and cleared over a period of i) 5 years and ii) over a period matching their current remaining useful life.

Response:

- 1 The revenue requirement impacts identified by Horizon Utilities in Table 2-43 on page 5 of
- 2 Exhibit 2, Tab 5, Schedule 1 calculated the revenue requirement impact of leaving the stranded
- 3 meters in rate base using a short term debt cost rate of 2.46% for the deemed component of
- 4 short-term debt supporting the stranded meter component of rate base. Horizon Utilities
- 5 provides a revised Table 2-43 below which calculates the revenue requirement impact of
- 6 leaving the stranded meters in rate base but with a revised short term debt cost rate of 2.11%
- 7 as updated in the Ontario Energy Board's letter: Cost of Capital Parameters for 2014 Cost of
- 8 Service Applications, dated November 25, 2013. The responses below are based on this
- 9 revised Table 2-43.

Revised Table 2-43

						Total				Total
Description	2015	2016	2017	2018	2019	2015-2019	2020	2021	2022	2015-2022
Revenue Requirement with Stranded										
Meters in Rate Base	\$1,529,293	\$1,458,298	\$1,387,302	\$1,320,420	\$1,251,044	\$6,946,356	\$1,178,409	\$1,105,775	\$1,033,141	\$10,263,682
Revenue Requirement with NBV										
recovered over 5 year IR term	\$2,106,089	\$1,992,495	\$1,878,902	\$1,767,503	\$1,653,025	\$9,398,014	\$0	\$0	\$0	\$9,398,014
Difference	(\$576,795)	(\$534,198)	(\$491,600)	(\$447,082)	(\$401,982)	(\$2,451,658)	\$1,178,409	\$1,105,775	\$1,033,141	\$865,668

- a) The option of keeping the meters in rate base would be compliant with Board policy because the Board has allowed in Section 2.5.1.4 of the Chapter 2 Filing Requirements for different approaches from that set out in Guideline G-2011-0001. Specifically, Section 2.5.1.4 of the Chapter 2 Filing Requirements states: "Distributors wishing to propose a different approach to that outlined above must provide a full explanation of the proposed approach and justification for it, including why the described approach would not be applicable to their circumstances." Horizon Utilities has included such explanation in its pre-filed evidence in Exhibit 2, Tab 5, Schedule 1.
- b) As identified in the response to part (a), the Board has provided for the possibility of a different approach. A distributor is required to justify its approach and Horizon Utilities has done so in its evidence as well as in responses to related interrogatory responses (please see Horizon Utilities' response to 1-Staff-22, 2.0-VECC-7 and 2-EP-15). Rate mitigation is indeed a factor that Horizon Utilities has considered. Horizon Utilities has proposed that, given the stranded meter NBV amount of \$7,974,590, recovery through inclusion in rate base over eight years would be more beneficial to customers. Based on the revised Table 2-43, recovery over five years would result in higher collection from customers in the amount of \$2,451,658 during the term of the rate plan.

- c) Horizon Utilities confirms that, under its proposed approach, the stranded meters in rate base would continue to generate a return for the company. The total regulated return over the remaining life of the stranded meters (2015 to 2022) is \$1,858,501.
 - d) Horizon Utilities considered the option of recovering the costs through rate riders over an extended period of time. This option and the proposed approach of leaving the stranded meters in rate base result in no material difference to the ratepayer, provided that the recovery through rate riders includes a regulated rate of return. Both approaches mitigate the impact to customers over the term covered in the Application.
 - e) Horizon Utilities has provided Tables 1 and 2 below which shows the rate riders if the stranded meters were to be removed from rate base and cleared over a period of: i) 5 years; and ii) over a period matching their current remaining useful life (eight years).
 - Horizon Utilities includes a regulated rate of return component to determine the amount to be recovered from customers. The implementation of Smart Meters was a public policy change mandated by the Ministry of Energy and as such Horizon Utilities was obligated to replace conventional meters with Smart Meters for all Residential and GS<50kW customers. Please also refer to the response to Interrogatory 2-Staff-22a).

Horizon Utilities is prepared to recover the NBV of the stranded meters through a rate rider over an extended period of time (five years or eight years) provided that the recovery includes a regulatory rate of return.

Table 1 - 5-year Rate Rider

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Customer Class	# of Active Metered Customers (average 2015)		Monthly Charge	Charge per Year
Residential	220,565	\$7,237,333	\$0.55	\$1,447,467
GS< 50kW	18,428	\$1,839,778	\$1.66	\$367,956
GS>50kW	2,198	\$320,903	\$2.43	\$64,181
Total	241,190	\$9,398,014		\$1,879,603

Table 2 - 8-year Rate Rider

Customer Class	# of Active Metered Customers (average 2015)		Monthly Charge	Charge per Year	
Residential	220,565	\$7,903,976	\$0.37	\$987,997	
GS< 50kW	18,428	\$2,009,243	\$1.14	\$251,155	
GS>50kW	2,198	\$350,462	\$1.66	\$43,808	
Total	241,190	\$10,263,682		\$1,282,960	

- The associated bill impacts are provided in Table 3 to 10 below.
- Tables 3-6 provide the bill impacts (distribution and total bill) for a 5-year rate rider.
- Tables 7-10 provide the bill impacts (distribution and total bill) for an 8-year rate rider.

Table 3 - 5-year Distribution \$ Impact

				Distribution \$				
	Rate Class	kWh	kW	(2015 vs 2014)	(2016 vs 2015)	(2017 vs 2016)	(2018 vs 2017)	(2019 vs 2018)
	Residential (on TOU)	100		\$1.31	\$0.82	\$0.38	\$0.30	\$0.56
	Residential (on TOU)	200		\$1.43	\$0.89	\$0.41	\$0.33	\$0.61
	Residential (on TOU)	500		\$1.79	\$1.10	\$0.50	\$0.42	\$0.76
	Residential (on TOU)	800		\$2.15	\$1.31	\$0.59	\$0.51	\$0.91
	Residential (on TOU)	1,000		\$2.39	\$1.45	\$0.65	\$0.57	\$1.01
	Residential (on TOU)	1,500		\$2.99	\$1.80	\$0.80	\$0.72	\$1.26
	Residential (on TOU)	2,000		\$3.59	\$2.15	\$0.95	\$0.87	\$1.51
	GS < 50 kW (On TOU)	1,000		\$9.31	\$2.43	\$1.35	\$0.88	\$1.58
	GS < 50 kW (On TOU)	2,000		\$11.21	\$2.93	\$1.65	\$1.08	\$1.88
	GS < 50 kW (On TOU)	5,000		\$16.91	\$4.43	\$2.55	\$1.68	\$2.78
0	GS < 50 kW (On TOU)	10,000		\$26.41	\$6.93	\$4.05	\$2.68	\$4.28
Distribution	GS < 50 kW (On TOU)	15,000		\$35.91	\$9.43	\$5.55	\$3.68	\$5.78
\supseteq	GS > 50 kW (On RPP)	44,000	100	\$107.95	\$28.09	\$17.79	\$8.63	\$18.56
10)	GS > 50 kW (On RPP)	110,000	250	\$168.33	\$43.79	\$27.74	\$13.45	\$28.92
t	GS > 50 kW (On RPP)	154,000	350	\$208.58	\$54.26	\$34.37	\$16.66	\$35.83
S	GS > 50 kW (On RPP)	880,000	2,000	\$872.70	\$227.02	\$143.76	\$69.62	\$149.85
	GS > 50 kW (On RPP)	1,760,000	4,000	\$1,677.70	\$436.42	\$276.36	\$133.82	\$288.05
	Large Use (1) (On RPP)	3,321,500	6,500	(\$7,930.47)	\$1,130.31	\$529.92	\$414.31	\$762.42
	Large Use (1) (On RPP)	3,832,500	7,500	(\$8,268.67)	\$1,178.51	\$552.52	\$432.01	\$794.92
	Large Use (1) (On RPP)	5,110,000	10,000	(\$9,114.17)	\$1,299.01	\$609.02	\$476.26	\$876.17
	Large Use (1) (On RPP)	6,387,500	12,500	(\$9,959.67)	\$1,419.51	\$665.52	\$520.51	\$957.42
	Large Use (2) (On RPP)	7,665,000	15,000	(\$38,485.60)	\$1,114.99	\$2,236.15	\$243.02	\$265.93
	Large Use (2) (On RPP)	10,220,000	20,000	(\$44,508.60)	\$1,289.49	\$2,586.15	\$281.02	\$307.43
	USL (On RPP)	250		\$0.16	\$0.26	\$0.28	\$0.17	\$0.39
	USL (On RPP)	500		\$0.21	\$0.34	\$0.35	\$0.22	\$0.49
	Sentinel (721 Connections)	97,008	216	\$1,339.02	\$348.17	\$188.85	\$214.58	\$233.93
	Street Lighting (36,000 Devices)	2,400,000	6,800	\$28,843.72	\$7,519.32	\$4,083.44	\$4,624.32	\$5,057.84

Table 4 - 5-year Total Bill \$ Impact

•				T - (- D' A	T-1-1 D'II A	T - 1 - 1 - D''!! A	T-1-1-D'II A	T - 1 - 1 - D'II A
	Rate Class	kWh	kW	Total Bill \$ (2015 vs 2014)	Total Bill \$ (2016 vs 2015)	Total Bill \$ (2017 vs 2016)	Total Bill \$ (2018 vs 2017)	Total Bill \$ (2019 vs 2018)
	Residential (on TOU)	100		\$0.68	\$0.80	\$0.42	\$0.35	(\$0.20)
	Residential (on TOU)	200		\$1.13	\$0.86	\$0.49	\$0.43	(\$0.12)
	Residential (on TOU)	500		\$2.46	\$1.05	\$0.71	\$0.68	\$0.12
	Residential (on TOU)	800		\$3.79	\$1.23	\$0.92	\$0.92	\$0.37
	Residential (on TOU)	1,000		\$4.68	\$1.35	\$1.06	\$1.09	\$0.53
	Residential (on TOU)	1,500		\$6.90	\$1.66	\$1.42	\$1.49	\$0.93
	Residential (on TOU)	2,000		\$9.12	\$1.96	\$1.77	\$1.90	\$1.34
	GS < 50 kW (On TOU)	1,000		\$12.45	\$0.24	\$1.66	\$1.29	\$1.10
	GS < 50 kW (On TOU)	2,000		\$17.19	\$0.85	\$2.27	\$1.90	\$1.71
	GS < 50 kW (On TOU)	5,000		\$31.40	\$2.69	\$4.10	\$3.74	\$3.54
	GS < 50 kW (On TOU)	10,000		\$55.09	\$5.75	\$7.14	\$6.80	\$6.58
<u>~</u>	GS < 50 kW (On TOU)	15,000		\$78.78	\$8.81	\$10.19	\$9.86	\$9.63
B	GS > 50 kW (On RPP)	44,000	100	\$245.81	\$32.17	\$30.66	\$21.49	\$31.43
Total	GS > 50 kW (On RPP)	110,000	250	\$517.50	\$53.98	\$59.91	\$45.60	\$61.10
Ħ	GS > 50 kW (On RPP)	154,000	350	\$698.62	\$68.53	\$79.41	\$61.67	\$80.88
\succeq	GS > 50 kW (On RPP)	880,000	2,000	\$3,687.16	\$308.53	\$401.16	\$326.82	\$407.25
	GS > 50 kW (On RPP)	1,760,000	4,000	\$7,309.63	\$599.44	\$791.16	\$648.22	\$802.85
	Large Use (1) (On RPP)	3,321,500	6,500	(\$1,069.62)		\$1,486.72	\$1,371.76	\$1,719.22
	Large Use (1) (On RPP)	3,832,500	7,500	(\$352.29)	\$1,522.81	\$1,656.52	\$1,536.76	\$1,898.92
	Large Use (1) (On RPP)	5,110,000	10,000	\$1,441.01	\$1,758.08	\$2,081.02	\$1,949.26	\$2,348.17
	Large Use (1) (On RPP)	6,387,500	12,500	\$3,234.32	\$1,993.34	\$2,505.52	\$2,361.76	\$2,797.42
	Large Use (2) (On RPP)	7,665,000	15,000	(\$22,451.81)		\$4,444.15	\$2,452.52	\$2,473.93
	Large Use (2) (On RPP)	10,220,000	20,000	(\$25,284.20)		\$5,530.15	\$3,227.02	\$3,251.43
	USL (On RPP)	250		\$0.87	\$0.22	\$0.35	\$0.27	\$0.46
	USL (On RPP)	500		\$1.68	\$0.25	\$0.51	\$0.43	\$0.64
	Sentinel (721 Connections)	97,008	216	\$1,578.62	\$298.31	\$211.70	\$237.45	\$256.78
	Street Lighting (36,000 Devices)	2,400,000	6,800	\$35,693.71	\$10,335.75	\$4,771.60	\$5,312.48	\$5,744.64

Table 5 - 5-year Distribution % Impact

				Distribution %				
	Rate Class	kWh	kW	(2015 vs 2014)	(2016 vs 2015)	(2017 vs 2016)	(2018 vs 2017)	(2019 vs 2018)
	Residential (on TOU)	100		7.99%	4.63%	2.05%	1.59%	2.92%
	Residential (on TOU)	200		8.01%	4.61%	2.03%	1.60%	2.92%
	Residential (on TOU)	500		8.04%	4.57%	1.99%	1.64%	2.91%
	Residential (on TOU)	800		8.06%	4.54%	1.96%	1.66%	2.91%
	Residential (on TOU)	1,000		8.07%	4.53%	1.94%	1.67%	2.91%
	Residential (on TOU)	1,500		8.09%	4.50%	1.92%	1.69%	
	Residential (on TOU)	2,000		8.10%	4.49%	1.90%	1.71%	
	GS < 50 kW (On TOU)	1,000		22.27%	4.75%	2.52%	1.60%	2.83%
	GS < 50 kW (On TOU)	2,000		22.24%	4.75%	2.56%	1.63%	
	GS < 50 kW (On TOU)	5,000		22.19%	4.76%	2.61%	1.68%	
0	GS < 50 kW (On TOU)	10,000		22.15%	4.76%	2.65%	1.71%	
<u>+</u>	GS < 50 kW (On TOU)	15,000		22.14%	4.76%	2.67%	1.73%	
	GS > 50 kW (On RPP)	44,000	100	21.05%	4.53%	2.74%	1.29%	
	GS > 50 kW (On RPP)	110,000	250	20.33%	4.40%	2.67%	1.26%	
+	GS > 50 kW (On RPP)	154,000	350	20.10%	4.35%	2.64%	1.25%	2.65%
Distribution	GS > 50 kW (On RPP)	880,000	2,000	19.38%	4.22%	2.57%	1.21%	2.58%
	GS > 50 kW (On RPP)	1,760,000	4,000	19.28%	4.20%	2.55%	1.21%	2.57%
	Large Use (1) (On RPP)	3,321,500	6,500	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (1) (On RPP)	3,832,500	7,500	(24.52%)	4.63%	2.07%	1.59%	
	Large Use (1) (On RPP)	5,110,000	10,000	(24.52%)	4.63%	2.07%	1.59%	
	Large Use (1) (On RPP)	6,387,500	12,500	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (2) (On RPP)	7,665,000	15,000	(87.34%)	19.99%	33.41%	2.72%	2.90%
	Large Use (2) (On RPP)	10,220,000	20,000	(87.34%)	19.99%	33.41%	2.72%	2.90%
	USL (On RPP)	250		1.21%	2.00%	2.05%	1.25%	2.77%
	USL (On RPP)	500		1.24%	2.01%	2.04%	1.26%	2.72%
	Sentinel (721 Connections)	97,008	216	22.31%	4.74%	2.46%	2.72%	2.89%
	Street Lighting (36,000 Devices)	2,400,000	6,800	22.31%	4.76%	2.47%	2.72%	2.90%

Table 6 - 5-year Total Bill % Impact

				Total Bill %	Total Bill %	Total Bill %	Total Bill %	Total Bill %
	Rate Class	kWh	kW		(2016 vs 2015)			
	Residential (on TOU)	100		2.24%	2.57%	1.32%	1.09%	(0.61%)
	Residential (on TOU)	200		2.59%	1.93%	1.08%	0.94%	(0.25%)
	Residential (on TOU)	500		2.98%	1.23%	0.82%	0.78%	0.14%
	Residential (on TOU)	800		3.12%	0.98%	0.73%	0.72%	0.29%
	Residential (on TOU)	1,000		3.17%	0.89%	0.69%	0.70%	0.34%
	Residential (on TOU)	1,500		3.25%	0.76%	0.64%	0.67%	0.42%
	Residential (on TOU)	2,000		3.28%	0.69%	0.61%	0.65%	0.46%
	GS < 50 kW (On TOU)	1,000		7.76%	0.14%	0.96%	0.74%	0.63%
	GS < 50 kW (On TOU)	2,000		6.07%	0.28%	0.75%	0.63%	0.56%
	GS < 50 kW (On TOU)	5,000		4.83%	0.39%	0.60%	0.54%	0.51%
=	GS < 50 kW (On TOU)	10,000		4.36%	0.44%	0.54%	0.51%	0.49%
\mathbf{B}	GS < 50 kW (On TOU)	15,000		4.20%	0.45%	0.52%	0.50%	0.49%
	GS > 50 kW (On RPP)	44,000	100	4.23%	0.53%	0.50%	0.35%	0.51%
Total	GS > 50 kW (On RPP)	110,000	250	3.68%	0.37%	0.41%	0.31%	0.41%
¥	GS > 50 kW (On RPP)	154,000	350	3.57%	0.34%	0.39%	0.30%	0.39%
	GS > 50 kW (On RPP)	880,000	2,000	3.34%	0.27%	0.35%	0.28%	0.35%
	GS > 50 kW (On RPP)	1,760,000	4,000	3.31%	0.26%	0.35%	0.28%	0.35%
	Large Use (1) (On RPP)	3,321,500	6,500	(0.25%)	0.34%	0.35%	0.32%	0.40%
	Large Use (1) (On RPP)	3,832,500	7,500	(0.07%)	0.31%	0.34%	0.31%	0.38%
	Large Use (1) (On RPP)	5,110,000	10,000	0.22%	0.27%	0.32%	0.30%	0.36%
	Large Use (1) (On RPP)	6,387,500	12,500	0.40%	0.25%	0.31%	0.29%	0.35%
	Large Use (2) (On RPP)	7,665,000	15,000	(2.35%)	0.17%	0.48%	0.26%	0.26%
	Large Use (2) (On RPP)	10,220,000	20,000	(2.00%)	0.33%	0.44%	0.26%	0.26%
	USL (On RPP)	250		2.16%	0.53%	0.85%	0.66%	1.10%
	USL (On RPP)	500		2.36%	0.34%	0.69%	0.58%	0.86%
	Sentinel (721 Connections)	97,008	216	8.88%	1.54%	1.08%	1.20%	1.28%
	Street Lighting (36,000 Devices)	2,400,000	6,800	8.58%	2.29%	1.03%	1.14%	1.22%

Table 7 - 8-year Distribution \$ Impact

				Distribution \$				
	Rate Class	kWh	kW	(2015 vs 2014)	(2016 vs 2015)	(2017 vs 2016)	(2018 vs 2017)	(2019 vs 2018)
	Residential (on TOU)	100		\$1.31	\$0.82	\$0.38	\$0.30	\$0.56
	Residential (on TOU)	200		\$1.43	\$0.89	\$0.41	\$0.33	\$0.61
	Residential (on TOU)	500		\$1.79	\$1.10	\$0.50	\$0.42	\$0.76
	Residential (on TOU)	800		\$2.15	\$1.31	\$0.59	\$0.51	\$0.91
	Residential (on TOU)	1,000		\$2.39	\$1.45	\$0.65	\$0.57	\$1.01
	Residential (on TOU)	1,500		\$2.99	\$1.80	\$0.80	\$0.72	\$1.26
	Residential (on TOU)	2,000		\$3.59	\$2.15	\$0.95	\$0.87	\$1.51
	GS < 50 kW (On TOU)	1,000		\$9.31	\$2.43	\$1.35	\$0.88	\$1.58
	GS < 50 kW (On TOU)	2,000		\$11.21	\$2.93	\$1.65	\$1.08	\$1.88
	GS < 50 kW (On TOU)	5,000		\$16.91	\$4.43	\$2.55	\$1.68	\$2.78
Distribution	GS < 50 kW (On TOU)	10,000		\$26.41	\$6.93	\$4.05	\$2.68	\$4.28
-	GS < 50 kW (On TOU)	15,000		\$35.91	\$9.43	\$5.55	\$3.68	\$5.78
\supset	GS > 50 kW (On RPP)	44,000	100	\$107.95	\$28.09	\$17.79	\$8.63	\$18.56
10)	GS > 50 kW (On RPP)	110,000	250	\$168.33	\$43.79	\$27.74	\$13.45	\$28.92
+	GS > 50 kW (On RPP)	154,000	350	\$208.58	\$54.26	\$34.37	\$16.66	\$35.83
S	GS > 50 kW (On RPP)	880,000	2,000	\$872.70	\$227.02	\$143.76	\$69.62	\$149.85
\Box	GS > 50 kW (On RPP)	1,760,000	4,000	\$1,677.70	\$436.42	\$276.36	\$133.82	\$288.05
	Large Use (1) (On RPP)	3,321,500	6,500	(\$7,930.47)	\$1,130.31	\$529.92	\$414.31	\$762.42
	Large Use (1) (On RPP)	3,832,500	7,500	(\$8,268.67)	\$1,178.51	\$552.52	\$432.01	\$794.92
	Large Use (1) (On RPP)	5,110,000	10,000	(\$9,114.17)	\$1,299.01	\$609.02	\$476.26	\$876.17
	Large Use (1) (On RPP)	6,387,500	12,500	(\$9,959.67)	\$1,419.51	\$665.52	\$520.51	\$957.42
	Large Use (2) (On RPP)	7,665,000	15,000	(\$38,485.60)	\$1,114.99	\$2,236.15	\$243.02	\$265.93
	Large Use (2) (On RPP)	10,220,000	20,000	(\$44,508.60)	\$1,289.49	\$2,586.15	\$281.02	\$307.43
	USL (On RPP)	250		\$0.16	\$0.26	\$0.28	\$0.17	\$0.39
	USL (On RPP)	500		\$0.21	\$0.34	\$0.35	\$0.22	\$0.49
	Sentinel (721 Connections)	97,008	216	\$1,339.02	\$348.17	\$188.85	\$214.58	\$233.93
	Street Lighting (36,000 Devices)	2,400,000	6,800	\$28,843.72	\$7,519.32	\$4,083.44	\$4,624.32	\$5,057.84

Table 8 - 8-year Total Bill \$ Impact

•	Rate Class	kWh	kW	Total Bill \$ (2015 vs 2014)	Total Bill \$ (2016 vs 2015)	Total Bill \$ (2017 vs 2016)	Total Bill \$	Total Bill \$ (2019 vs 2018)
	Residential (on TOU)	100		\$0.50	\$0.80	\$0.42	\$0.35	(\$0.20)
	Residential (on TOU)	200		\$0.95	\$0.86	\$0.49	\$0.43	(\$0.12)
	Residential (on TOU)	500		\$2.28	\$1.05	\$0.71	\$0.68	\$0.12
	Residential (on TOU)	800		\$3.61	\$1.23	\$0.92	\$0.92	\$0.37
	Residential (on TOU)	1,000		\$4.50	\$1.35	\$1.06	\$1.09	\$0.53
	Residential (on TOU)	1,500		\$6.72	\$1.66	\$1.42	\$1.49	\$0.93
	Residential (on TOU)	2,000		\$8.94	\$1.96	\$1.77	\$1.90	\$1.34
	GS < 50 kW (On TOU)	1,000		\$11.93	\$0.24	\$1.66	\$1.29	\$1.10
	GS < 50 kW (On TOU)	2,000		\$16.67	\$0.85	\$2.27	\$1.90	\$1.71
	GS < 50 kW (On TOU)	5,000		\$30.88	\$2.69	\$4.10	\$3.74	\$3.54
	GS < 50 kW (On TOU)	10,000		\$54.57	\$5.75	\$7.14	\$6.80	\$6.58
\mathbf{B}	GS < 50 kW (On TOU)	15,000		\$78.26	\$8.81	\$10.19	\$9.86	\$9.63
	GS > 50 kW (On RPP)	44,000	100	\$245.04	\$32.17	\$30.66	\$21.49	\$31.43
Ø	GS > 50 kW (On RPP)	110,000	250	\$516.73	\$53.98	\$59.91	\$45.59	\$61.10
Ť.	GS > 50 kW (On RPP)	154,000	350	\$697.85	\$68.53	\$79.41	\$61.67	\$80.88
Tota	GS > 50 kW (On RPP)	880,000	2,000	\$3,686.39	\$308.53	\$401.16	\$326.82	\$407.25
	GS > 50 kW (On RPP)	1,760,000	4,000	\$7,308.86	\$599.44	\$791.16	\$648.22	\$802.85
	Large Use (1) (On RPP)	3,321,500	6,500	(\$1,069.62)	\$1,428.70	\$1,486.72	\$1,371.76	\$1,719.22
	Large Use (1) (On RPP)	3,832,500	7,500	(\$352.29)	\$1,522.81	\$1,656.52	\$1,536.76	\$1,898.92
	Large Use (1) (On RPP)	5,110,000	10,000	\$1,441.01	\$1,758.08	\$2,081.02	\$1,949.26	\$2,348.17
	Large Use (1) (On RPP)	6,387,500	12,500	\$3,234.32	\$1,993.34	\$2,505.52	\$2,361.76	\$2,797.42
	Large Use (2) (On RPP)	7,665,000	15,000	(\$22,451.81)	\$1,602.59	\$4,444.15	\$2,452.52	\$2,473.93
	Large Use (2) (On RPP)	10,220,000	20,000	(\$25,284.20)	\$4,093.62	\$5,530.15	\$3,227.02	\$3,251.43
	USL (On RPP)	250		\$0.87	\$0.22	\$0.35	\$0.27	\$0.46
	USL (On RPP)	500		\$1.68	\$0.25	\$0.51	\$0.43	\$0.64
	Sentinel (721 Connections)	97,008	216	. ,	\$298.31	\$211.70	\$237.45	\$256.78
	Street Lighting (36,000 Devices)	2,400,000	6,800	\$35,693.71	\$10,335.75	\$4,771.60	\$5,312.48	\$5,744.64

Table 9 - 8-year Distribution % Impact

				Distribution %				
	Rate Class	kWh	kW	(2015 vs 2014)	(2016 vs 2015)	(2017 vs 2016)	(2018 vs 2017)	(2019 vs 2018)
	Residential (on TOU)	100		7.99%	4.63%	2.05%	1.59%	2.92%
	Residential (on TOU)	200		8.01%	4.61%	2.03%	1.60%	2.92%
	Residential (on TOU)	500		8.04%	4.57%	1.99%	1.64%	2.91%
	Residential (on TOU)	800		8.06%	4.54%	1.96%	1.66%	2.91%
	Residential (on TOU)	1,000		8.07%	4.53%	1.94%	1.67%	2.91%
	Residential (on TOU)	1,500		8.09%	4.50%	1.92%	1.69%	2.91%
	Residential (on TOU)	2,000		8.10%	4.49%	1.90%	1.71%	2.91%
	GS < 50 kW (On TOU)	1,000		22.27%	4.75%	2.52%	1.60%	2.83%
	GS < 50 kW (On TOU)	2,000		22.24%	4.75%	2.56%	1.63%	2.79%
	GS < 50 kW (On TOU)	5,000		22.19%	4.76%	2.61%	1.68%	2.73%
0	GS < 50 kW (On TOU)	10,000		22.15%	4.76%	2.65%	1.71%	2.69%
Distribution	GS < 50 kW (On TOU)	15,000		22.14%	4.76%	2.67%	1.73%	2.67%
\supset	GS > 50 kW (On RPP)	44,000	100	21.05%	4.53%	2.74%	1.29%	2.75%
	GS > 50 kW (On RPP)	110,000	250	20.33%	4.40%	2.67%	1.26%	2.68%
ţ	GS > 50 kW (On RPP)	154,000	350	20.10%	4.35%	2.64%	1.25%	2.65%
S	GS > 50 kW (On RPP)	880,000	2,000	19.38%	4.22%	2.57%	1.21%	2.58%
	GS > 50 kW (On RPP)	1,760,000	4,000	19.28%	4.20%	2.55%	1.21%	2.57%
	Large Use (1) (On RPP)	3,321,500	6,500	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (1) (On RPP)	3,832,500	7,500	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (1) (On RPP)	5,110,000	10,000	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (1) (On RPP)	6,387,500	12,500	(24.52%)	4.63%	2.07%	1.59%	2.88%
	Large Use (2) (On RPP)	7,665,000	15,000	(87.34%)	19.99%	33.41%	2.72%	2.90%
	Large Use (2) (On RPP)	10,220,000	20,000	(87.34%)	19.99%	33.41%	2.72%	2.90%
	USL (On RPP)	250		1.21%	2.00%	2.05%	1.25%	2.77%
	USL (On RPP)	500		1.24%	2.01%	2.04%	1.26%	2.72%
	Sentinel (721 Connections)	97,008	216	22.31%	4.74%	2.46%	2.72%	2.89%
	Street Lighting (36,000 Devices)	2,400,000	6,800	22.31%	4.76%	2.47%	2.72%	2.90%

Table 10 - 8-year Total Bill % Impact

•				Total Bill %	Total Bill %	Total Bill %	Total Bill %	Total Bill %
	Rate Class	kWh	kW		(2016 vs 2015)			
	Residential (on TOU)	100		1.65%	2.59%	1.33%	1.09%	(0.61%)
	Residential (on TOU)	200		2.18%	1.94%	1.09%	0.95%	(0.26%)
	Residential (on TOU)	500		2.76%	1.23%	0.82%	0.78%	0.14%
	Residential (on TOU)	800		2.97%	0.98%	0.73%	0.72%	0.29%
	Residential (on TOU)	1,000		3.05%	0.89%	0.69%	0.70%	0.34%
	Residential (on TOU)	1,500		3.16%	0.76%	0.64%	0.67%	0.42%
	Residential (on TOU)	2,000		3.22%	0.69%	0.62%	0.65%	0.46%
	GS < 50 kW (On TOU)	1,000		7.44%	0.14%	0.96%	0.74%	0.63%
	GS < 50 kW (On TOU)	2,000		5.89%	0.29%	0.76%	0.63%	0.56%
	GS < 50 kW (On TOU)	5,000		4.75%	0.40%	0.60%	0.54%	0.51%
	GS < 50 kW (On TOU)	10,000		4.32%	0.44%	0.54%	0.51%	0.49%
<u> </u>	GS < 50 kW (On TOU)	15,000		4.17%	0.45%	0.52%	0.50%	0.49%
	GS > 50 kW (On RPP)	44,000	100	4.22%	0.53%	0.50%	0.35%	0.51%
Total	GS > 50 kW (On RPP)	110,000	250	3.67%	0.37%	0.41%	0.31%	0.41%
¥	GS > 50 kW (On RPP)	154,000	350	3.57%	0.34%	0.39%	0.30%	0.39%
\succeq	GS > 50 kW (On RPP)	880,000	2,000	3.34%	0.27%	0.35%	0.28%	0.35%
	GS > 50 kW (On RPP)	1,760,000	4,000	3.31%	0.26%	0.35%	0.28%	0.35%
	Large Use (1) (On RPP)	3,321,500	6,500	(0.25%)	0.34%	0.35%	0.32%	0.40%
	Large Use (1) (On RPP)	3,832,500	7,500	(0.07%)	0.31%	0.34%	0.31%	0.38%
	Large Use (1) (On RPP)	5,110,000	10,000	0.22%	0.27%	0.32%	0.30%	0.36%
	Large Use (1) (On RPP)	6,387,500	12,500	0.40%	0.25%	0.31%	0.29%	0.35%
	Large Use (2) (On RPP)	7,665,000	15,000	(2.35%)	0.17%	0.48%	0.26%	0.26%
	Large Use (2) (On RPP)	10,220,000	20,000	(2.00%)	0.33%	0.44%	0.26%	0.26%
	USL (On RPP)	250		2.16%	0.53%	0.85%	0.66%	1.10%
	USL (On RPP)	500		2.36%	0.34%	0.69%	0.58%	0.86%
	Sentinel (721 Connections)	97,008	216	8.88%	1.54%	1.08%	1.20%	1.28%
	Street Lighting (36,000 Devices)	2,400,000	6,800	8.58%	2.29%	1.03%	1.14%	1.22%

2-SIA-11

Ref: Exhibit 2, Appendix 2-4, Tables 1 and 2

Please produce a summary table (following the sample format provided below) listing all proposed capital programs (as listed in Tables 1 and 2 in the above reference) along with the associated drivers of each program (safety, reliability, etc). If a program is a result of more than one driver, please indicate the primary driver.

	Cost 2015-2019	Driver 1	Driver 2	Etc
Program 1	\$	X	P	
Program 2	\$	P		
Etc	\$	X	X	P

Response:

- 1 Horizon Utilities provides the summary tables below listing all proposed capital programs (as
- 2 listed in Tables 1 and 2 in Exhibit 2, Appendix 2-4, Tables 1 and 2) along with the associated
- 3 drivers of each program. The primary driver is indicated with a "P".

4 Table 1 - System Access Investments

				Drivers	
Project ID	Project Name	Cost 2015-2019	Customer Service Requests	3rd Party Infrastructure Development Requirements	Mandated Service Obligations
SA-1	Customer Connections	\$ 20,471,578	Р		
SA-2	Road Relocations	\$ 9,759,743		Р	
SA-3	Meters	\$ 10,744,370			Р

Table 2 - System Renewal Investments

				Dri	vers		
Project ID	Project Name	Cost 2015-2019	Failure Risk	Failure (Reactive)	Functional Obsolescence	Customer Impact	
4kV & 8kV R	enewal						
	Aberdeen S/S	\$ 7,961,000	Р		Х	X	
	Baldwin S/S	\$ 6,191,000	Р		Х	X	
	Central S/S	\$ 5,732,000	Р		Х	X	
	Grantham S/S	\$ 5,326,000	Р		Х	X	
	Highland S/S	\$ 1,786,000	Р		Х	X	
SR-1	John S/S	\$ 10,775,000	Р		Х	X	
SK-1	Strouds S/S	\$ 8,171,000	Р		Х	X	
	Taylor S/S	\$ 185,000	Р		Х	Х	
	Vine S/S	\$ 9,267,000	Р		Х	Х	
	Welland S/S	\$ 172,000	Р		Х	X	
	Whitney S/S	\$ 9,974,000	Р		Х	Х	
	York S/S	\$ 1,074,000	Р		Х	Х	
U/G (XLPE) I	Renewal						
	Ancaster/Flamborough/Dundas	\$ 6,228,000	Р			X	
SR-2	Hamilton Mountain	\$ 16,717,000	Р			X	
3R-2	St. Catharines	\$ 10,661,000	Р			X	
	Stoney Creek	\$ 2,408,000	Р			Х	
SR-3	Reactive Renewal	\$ 22,720,000		Р			
SR-4	Substation Infrastructure Renewal	\$ 2,410,000	Р		X		
Other Renew	val						
SR-5	Pole Residual Replacements	\$ 6,487,000	Р				
SR-6	LDBS Renewal	\$ 1,727,000	P				
SR-7	Proactive TX Replacements	\$ 1,863,000	P				
SR-8	Gage TS Egress Feeder Renewal	\$ 4,793,000				Р	
SR-9	Rear Lot Conversion	\$ 3,420,000	X			P	

8 Table 3 - System Service Investments

				Drivers				
Project ID	Project Name	Cos	t 2015-2019	Safety	Safety Reliability Capacity		Security	Feeder Automation
SS-1	# 6 Wire Replacement	\$	570,000	Р	X			
SS-2	Distribution Automation	\$	1,250,000		X			Р
SS-3	Waterdown 3rd Feeder	\$	984,000			Р	Х	
SS-4	Caroline/George Redundancy	\$	952,000		X		Р	
SS-5	Duct Structure - Elgin TS to King St.	\$	535,000			Р		
SS-6	East 16th and Mohawk Security Project	\$	324,000		X		Р	
SS-7	St. Paul Street Conductor Upgrade	\$	1,362,000			Р		
SS-8	Grays Road	\$	413,000		X		Р	
SS-9	Mohawk/Nebo T/S Upgrade	\$	1,000,000	_		Р		

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Table 4 - General Plant Investments

			Drivers				
Project ID	Project Name	Cost 2015-2019	Non-system Physical Plant	Business Operations Support	Rolling Stock	System Maintenance Support	
GP-1	Annual Corporate Computer Replacement	\$ 1,718,400		Р			
GP-2	IFS ERP Upgrade	\$ 2,607,600		Р			
GP-3	SAN Expansion	\$ 700,000		Р			
GP-4	Enterprise Phone System Upgrade	\$ 400,000		Р			
GP-5	Capital Lease - IBM	\$ 1,800,000		Р			
GP-6	Building Renovations - John and Hughson	\$ 7,000,000	Р				
GP-7	Building Renovations - Stoney Creek	\$ 1,200,000	Р				
GP-8	Building Security Replacement	\$ 500,000	Р				
GP-9	John Street Roof Replacement	\$ 900,000	Р				
GP-10	Nebo Road Emergency Backup Generato	\$ 300,000	Р				
GP-11	John Street Window Replacement	\$ 800,000	Р				
GP-12	Vehicle Replacement	\$ 3,903,000			Р		
GP-13	Tools, Shop and Garage Equipment	\$ 2,742,960				P	

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Ref: Exhibit 2, Tab 6, Schedule 1, Page 1

Horizon states that its "...capital expenditures have increased from \$39,000,000 in the 2011 Board- Approved to \$39,939,967 in the 2015 Test Year and \$51,272,477 by 2019. This increase is driven by the necessary renewal of Horizon Utilities' distribution assets, buildings and information systems technology." Given that capital spending has remained relatively flat over 2011 through 2015 but is projected to increase dramatically from 2015 through 2019, did Horizon consider making any of the investments proposed in this application prior to 2015? If funding was an issue, did Horizon consider filing an ICM application? If not, why not?

Response:

- 1 Horizon Utilities has an ongoing capital expenditure requirement driven by necessary renewal of
- 2 Horizon Utilities' distribution assets, as identified in this Application. Horizon Utilities advanced
- 3 similar evidence in its 2011 Cost of Service Application (EB-2010-0131). In the Decision of the
- 4 Board in that proceeding, the Board found "that the capital expenditures for setting 2011 rates
- 5 should be \$39 million (exclusive of smart meters), which is approximately equal to a \$5 million
- 6 reduction in the applied-for capital expenditures budget of about \$44 million."
- 7 Horizon Utilities' actual capital expenditures before smart meters for the period 2011-2013 were
- 8 \$39.098MM (CGAAP), \$32.326MM (MIFRS) and \$39.505M (MIFRS) respectively as identified
- 9 in Table 2-63 Appendix 2-AB Capital Expenditure Summary in Exhibit 2, Tab 6, Schedule 3;
- and for 2014 are forecast in the Application at \$37.773MM (MIFRS), also provided in Table 2-
- 11 63. Capital spending has not "remained relatively flat over 2011 through 2015" as stated in the
- 12 interrogatory, once the impact of the transition to IFRS is considered. The expenditures for
- 13 2011 increased 0.3% over Board-Approved and the actual expenditures for the 2012 and 2013
- increased 8.6% and 22.2% respectively over prior year. Furthermore, these investment levels
- 15 were higher than the levels that underpinned the rates that the Board had approved.
- 16 The interrogatory suggests the Incremental Capital Module ("ICM") was a funding option
- 17 available to Horizon Utilities and probes why Horizon Utilities did not use this mechanism. The
- 18 Board released revised Chapter 3 Filing Requirements for Transmission and Distribution
- 19 Applications ("2011 Chapter 3 Requirements") in June 2011. In the 2011 Chapter 3
- 20 Requirements, the Board specified on page 12 that a distributor requesting relief using ICM
- 21 would have to demonstrate that the expenditure was non-discretionary and that it was unusual

- and unanticipated. Applications for ICM or at least the Board decisions, to Horizon Utilities'
- 2 understanding, have aligned with the criteria for an ICM as noted above.
- 3 Horizon Utilities' capital expenditures, as identified in its 2011 Application, for the years 2011-
- 4 2014, consisted of anticipated and necessary capital expenditures. These expenditures were
- 5 not unusual and unanticipated and contemplation of an ICM application during the IRM term
- 6 would have failed on the Board's then-applicable criteria.
- 7 The ICM criteria were revised in the Chapter 3 Filing Requirements for Transmission and
- 8 Distribution Applications issued in June 2012 by removing words such as "unusual" and
- 9 "unanticipated" as prerequisites to an ICM application. The first decision, to Horizon Utilities'
- 10 knowledge, where application of the revised policy was directly considered was in April 2013, in
- the partial decision of the Board in the Toronto Hydro-Electric System Limited's ("THESL") ICM
- 12 Application.
- However, by April 2013, Horizon Utilities was well underway in the preparation of the current
- 14 Custom IR Application and would not have been in a position to revise its filing approach to
- 15 advance an ICM Application.
- 16 More importantly, the Board released the RRFE Report in October 2012 in which it provided
- 17 rate-setting policies which included the Custom IR method. The Board's own specification on
- 18 Custom IR was that it "will be most appropriate for distributors with significantly large multi-year
- or highly variable investment commitments that exceed historical levels."
- 20 Horizon Utilities' capital expenditure requirements align to the Custom IR approach.

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2-SIA-13

Ref: Exhibit 2, Tab 8, Schedule 1

- a) Please provide the outage information contained in Appendix 2G broken down by cause code (e.g. loss of supply, animal contact, etc).
- b) Other than remaining within the rolling three year average OEB targets, does Horizon have an internal long term target for SAIFI and SAIDI?
- c) Has Horizon commissioned any studies or prepared any internal memos or reports as to SAIFI and SAIDI targets? If so, please provide copies. If not, please explain why Horizon feels this would not be helpful to its reliability and capital investment planning.

Response:

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a. Horizon Utilities provides the outage information identified in Table 2-120 - Appendix 2-G Service Reliability Service Indicators in Exhibit 2, Tab 8, Schedule 1, broken down by cause code in Tables 1 and 2 below. Note that foreign interference is defined by the Canadian Electricity Association as: customer interruptions beyond the control of the utility such as birds, animals, vehicles, dig-ins, vandalism, sabotage and foreign objects.

Table 1 – SAIDI Outage Information by Cause Code

	2009	2010	2011	2012	2013
Unknown/Other	0.11	0.04	0.02	0.04	0.04
Scheduled Outage	0.20	0.10	0.11	0.10	0.11
Loss of Supply	0.02	0.09	0.02	0.02	0.63
Tree Contact	0.05	0.07	0.07	0.09	0.14
Lightning	0.05	0.04	0.22	0.06	0.01
Material/Equipment Breakdowr	0.37	0.35	0.54	0.45	0.35
Adverse Weather	0.14	0.30	1.10	0.48	3.50
Adverse Environment	0.02	0.03	-	0.02	-
Human Element	0.01	ı	-	0.01	0.02
Foreign Interference	0.20	0.22	0.17	0.18	0.18
Total	1.18	1.24	2.25	1.45	4.97

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Table 2 – SAIFI Outage Information by Cause Code

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	2009	2010	2011	2012	2013
Unknown/Other	0.31	0.22	0.21	0.13	0.25
Scheduled Outage	0.04	0.05	0.03	0.04	0.04
Loss of Supply	0.25	0.04	0.10	0.32	0.20
Tree Contact	0.11	0.08	0.12	0.11	0.12
Lightning	0.15	0.24	0.07	0.05	0.14
Material/Equipment Breakdowr	0.47	0.47	0.44	0.32	0.49
Adverse Weather	0.18	0.40	0.34	0.49	0.40
Adverse Environment	0.04	-	0.03	-	0.02
Human Element	0.01	0.01	0.02	0.06	0.03
Foreign Interference	0.25	0.30	0.38	0.43	0.39
Total	1.81	1.80	1.74	1.95	2.09

b. Horizon Utilities has an internal target for SAIDI. Other than remaining within the rolling three year average OEB target, Horizon Utilities does not have an internal long term target for SAIFI.

Horizon Utilities developed an internal target for SAIDI through a comparison of system performance relative to a comparator set of 20 urban utilities in Southern Ontario. Horizon Utilities' methodology for setting its internal SAIDI target is described on page 20 of Exhibit 2, Tab 6, Appendix 2-4.

c. Horizon Utilities has not commissioned any external studies for determining SAIDI and SAIFI targets. In Ontario, all licenced distributors file Reporting and Record Keeping ("RRR") filings with the OEB on an annual basis. The RRR filings include each distributors SAIDI, SAIFI and CAIDI data. The OEB publishes the data annually in the OEB Yearbook of Electricity Distributors. With this data set availability, Horizon Utilities is satisfied that the methodology utilized for determining the annual SAIDI target, as described on page 20 of Exhibit 2, Tab 6, Appendix 2-4 results in an appropriate reliability target. Horizon Utilities' SAIDI target provides an appropriate balance between service reliability to customers and the investment required to achieve the target.

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2-SIA-14

- 2 [Ref: Exhibit 2, Appendix D]
- The Customer Consultation Report states that "When asked what Horizon Utilities can do to improve its services, a common initial theme was that Horizon Utilities should keep rates down".

a) Given this apparent preference for lower cost service, has Horizon considered any alternative investment scenarios that would result in lower rates than those proposed in this application?

b) Please explain why Horizon believes that the nominally high percentage bill increases resulting from the investments outlined in this application (Exhibit 1, Tab 7, Schedule 4) correctly reflect the preferences of customers for low rates.

Response:

- a) It is not surprising that when engaging customers on the topic of electricity, which the general public typically sees as a commodity product, people say they would like to pay less.
 - The question "Is there anything in particular that Horizon Utilities can do to improve their service to you?" [Figure 3.3, page 63 of the Customer Consultation Report] was the third substantive question asked of respondents in the telephone survey, after screening questions (which were used to qualify respondents). As customers learned more about their distribution system throughout the telephone survey (note: only 16% of customers say they are very familiar with the local distribution system [Figure 3.1, page 61], but further qualitative research among Horizon Utilities' customers suggests this is actually lower than reported), the challenges and pressure the system is currently facing and were asked to think about these challenges in the context of a trade-off between reliability and cost, most customers gave Horizon Utilities their support to proceed with its proposed plan and resulting rate increase.

Horizon Utilities' believes its proposed investment scenario and resulting rate increase is in line with the preferences and needs of a majority of its customers: 32% support the proposed rate increase, while 41% don't like the proposed rate increase but believe it is necessary; only 24% of customers believe the rate increase is unreasonable and oppose it (see Figure 3.12, page 77 of the Customer Consultation Report).

However, as experts and

Horizon Utilities takes into consideration the opinions of the 24% of its residential 1 customers who oppose the proposed investment plan. 2 stewards of the distribution system assets and based on the evidence presented in the 3 application, Horizon Utilities believes that the investments and plans presented in this 4 application are both necessary and prudent; and such are supported by the vast majority 5 of residential customers (73%). Further, the evidence that Horizon Utilities has 6 advanced already incorporates a pacing of the required investment compared to that 7 which was recommended by the 3rd Party expert, Kinectrics (Exhibit 2, Tab 6, Appendix 8 9 2-4, Page 171 and 172).

b) Further analysis of the customer telephone survey data shows that a majority (63%) of customers who have a preference for lower rates (question B7 of the survey instrument) gave Horizon Utilities their support to proceed with the proposed rate increase.

Table 1 below provides the results of the feedback for the proposed rate increase among customers who stated that Horizon Utilities could improve their service by lowering the price of electricity delivery (question G24 cross tabulated with question B7 of the survey instrument):

Table 1: Results of Proposed Rate Increase Feedback

The proposed rate increase is reasonable and I support it	26%
I don't like it, but I think the proposed rate increase is necessary	37%
The proposed rate increase is unreasonable and I oppose it	34%
Don't know / Refused	3%

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2-SIA-15

Ref: Exhibit 2

The Boards RRFE Report (page 20) states that under CIR, "Once rates have been approved, the Board will monitor capital spending against the approved plan by requiring distributors to report annually on actual amounts spent."

- a) Does Horizon have a proposal for how the execution of its capital plan should be monitored on an annual basis?
- b) In the event that Horizon under-spends on its capital plan, does Horizon anticipate a true-up mechanism at the end of the 5 year period such that any under-spent amounts are properly refunded to customers?

Response:

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- a) All electricity distributors are required to file information with the Board, including reporting on their capital plan, in the manner specified by the Board in the Reporting and Record Keeping Requirements ("RRR"). Horizon Utilities does not propose a different proposal than that which the Board stipulates in the RRR.
- b) Please refer to Horizon Utilities' response to 1-Staff-3 b) and c).

2-SIA-16

Ref: Exhibit 2

With the assumption that all investments will to some limited extent incrementally improve system reliability and restoration time, are any of Horizon's investments planned for the 2015 to 2019 period specifically designed to mitigate against major outages? If so, please identify those most relevant and briefly state their intended benefits. If not, please explain why Horizon believes a specific major outage mitigation effort is not a priority and/or is not possible.

Response:

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- 1 Horizon Utilities' investment in the following Capital Investment Programs provides mitigation
- 2 against major power outages. The justifications for these projects can be found in Exhibit 2,
- 3 Tab 6, Appendix 2-4. The most relevant are within the 4kV and 8kV Renewal Program, the
- 4 Cross-Linked Polyethylene ("XLPE") cable renewal program, distribution automation and
- 5 projects to install additional capacity.
 - 4kV & 8kV Renewal Program
 - The 4kV and 8kV Renewal Program was designed in a manner to mitigate against major outages. It utilizes an area-wide approach centred on the substation and the surrounding area it serves. Failure to renew the entire area would:
 - Leave a large number of customers stranded in the event of a service interruption, due to lack of interconnection with an adjacent substation; and
 - Require old substation assets to remain in service with high and increasing risk of critical failure as identified on page 15 of Exhibit 2, Tab 6, Schedule 1.
 - The justification provided for the 4kV and 8kV Renewal Program in Exhibit 2, Tab 6, Appendix 2-4 describes potential scenarios that could lead to extended outages to customers that will be mitigated through the investments in this program in the 2015 to 2019 Test Years. The 4kV and 8kV renewal investments are identified by substation in
- Table 2-67 on page 13 of Exhibit 2, Schedule 6, Tab 3.
- 19 U/G (XLPE) Renewal Program

An analysis of all service interruptions caused by material or equipment failure reveals that 50% of such are due to failures of underground cable and equipment. Over 30% of these outages exceeded four hours in duration while 5% of these outages exceeded 12 hours in duration. Of the service interruptions caused by underground cable and equipment, 88% are caused by XLPE cable and associated equipment. Failures of underground distribution assets have represented approximately 16% of the total customer minutes in the 2010 to 2013 time period when major events are excluded. It is reasonable to expect that the negative impact on customers will increase, as the Health Index of this asset group declines. Further details are provided on page 89 of the DSP filed as Appendix 2-4 in Exhibit 2, Tab 6.

Investments in the XLPE Renewal Program will mitigate the increasing impact of outages caused by failing XLPE primary cable and accessories. The XLPE renewal investments are identified by area in Table 2-67 on page 13 of Exhibit 2, Schedule 6, Tab 3.

Distribution Automation

The automation of the distribution system (i.e. the ability to remotely identify faulted areas and remotely restore service through the use of remotely controlled switches), in conjunction with renewal programs, is key to Horizon Utilities' efforts to reverse the recent trend of declining reliability and increased service interruptions. Distribution automation will provide the ability to decrease the duration of service interruptions to offset the impact on the customer of an increasing volume of interruptions due to equipment failures associated with the declining health of the distribution system. Distribution automation will also mitigate the impact of service interruptions resulting from significant weather events (i.e. the high volume of outages resulting from wind and ice storms). Horizon Utilities worst performing feeders with the largest number of customer minutes of outage are the highest priority for automation. Further details are provided on page 178 of the DSP filed as Appendix 2-4 in Exhibit 2, Tab 6.

During severe storms, contractors and other utilities are often engaged when the scale of restoration exceeds Horizon Utilities' crew capacity to deal with outages in a timely manner. Automation allows sections of the distribution plant to be restored remotely,

allowing crews to be dispatched to other calls requiring on-site response. In this way, automation offers an opportunity to limit the number of customer experiencing outages and consequently mitigate against major outages.

System Service

The relevant system service projects which are specifically designed to mitigate against major outages are:

- Construction of a back-up feeder for Caroline Street and George Street (discussed in further detail on page 66 of Appendix A in the DSP, filed as Appendix 2-4 in Exhibit 2, Tab 6). Horizon Utilities' existing infrastructure in this area of the downtown core has insufficient capacity to service the new developments. Failure to perform this investment would result in the loss of service to business and commercial customers in the downtown core in the event of a failure.
- Construction of an alternate supply to the Grays Road area (discussed in further detail on page 65 of Appendix A in the DSP, filed as Appendix 2-4 in Exhibit 2, Tab 6). In 2013, the radial cable supplying this area had a failure and customers were without power for over 24 hours until repairs were made. Completion of this project will provide customers with proper backup supply in the event of an equipment failure.
- Construction of a feeder to provide an alternate supply for the Waterdown area. (discussed on further detail in page 65 of Appendix A in the DSP, filed as Appendix 2-4 in Exhibit 2, Tab 6). The section along Valley Road from York Rd to Rock Chapel Road is especially susceptible to outages as this section ascends the Niagara Escarpment through heavy vegetation. This poses a risk to security as pole failure or falling trees could damage the conductors affecting both feeders and leave the 7,000 customers in Waterdown without service until repairs are complete. Completion of this project will provide improved security to the village of Waterdown.

2-SIA-17

Ref: Exhibit 2

In developing the spending plan for 2015-2019, please identify any capital programs that were considered but ultimately rejected. Please provide the program name, a brief description, anticipated cost, and the reason for exclusion from this application.

Response:

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1 Horizon Utilities identifies the following capital investment projects that were considered but not

included in the proposed capital expenditures in the rate plan term in Table 1 below. A brief

description and the anticipated cost of each project is included following the table. The reason

for the exclusion of the Eastmount F3 Feeder and F8 Feeder Conversions, Solid Pole

Replacements and Secondary Pedestals projects has been individually provided. In the case of

6 each of the other excluded projects, the prioritization score for each project was not high

7 enough, relative to the scores of the other capital projects included in the proposed investment

8 for the period 2015 to 2019, for those projects to proceed.

1 **Table 1**

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#	Program Name	Ant	icipated Cost
1	Dundas M2 Capacity Upgrade McMaster Ave and Grant Blvd	\$	217,000
2	Dundas M7 Capacity Upgrade - Olympic Drive	\$	84,000
3	Nebo M4 Feeder Pole Relocation	\$	154,000
4	Nebo M62 Feeder Subdivision Backup Feed	\$	350,000
5a	Clearwater Rear Lot Conversion (Overhead Option)	\$	364,000
5b	Clearwater Rear Lot Conversion (Underground Option)	\$	1,404,000
6a	Darlington Rear Lot Conversion (Overhead Option)	\$	628,000
6b	Darlington Rear Lot Conversion (Underground Option)	\$	2,127,000
7	Lake M2 Feeder - Queenston Road	\$	74,000
8	Manhold Lid Replacement	\$	135,000
9	Ontario Street Rebuild	\$	2,742,000
10	Padmounted Switchgear Renewal	\$	403,000
11	Reinsulating of Mountain Passes	\$	250,000
12	Mohawk M64 Feeder - Manhole 1296 Renewal	\$	94,000
13	Newton M32 Feeder Radial Backup	\$	157,000
14	Horning M4 Feeder Radial Backup	\$	54,000
15	Bunting M57 Feeder Upgrade - Phase 1	\$	2,160,000
16	Eleanor Ave Loop	\$	201,000
17	Green Mountain Road Conversion	\$	1,470,000
18	Lake M4 Feeder Conductor Upgrade	\$	442,000
19	Nebo M3 Feeder - Mistywood Drive Backup	\$	172,000
20	Rear Lot Renewal - Birdland	\$	495,000
21	Nebo M3 Feeder - Reliability Investment	\$	254,000
22	Nebo M4 Feeder - Reliability Investment	\$	137,000
23	Mohawk M72 Feeder - Radial Feed	\$	2,721,000
24	Vintage Crescent Renewal	\$	1,065,000
25	Wellington M11 Feeder Conversion	\$	1,642,000
26	Eastmount F3 Feeder and F8 Feeder Conversions	\$	1,657,000
27	Solid Pole Replacement	\$	467,000
28	Secondary Pedestals	\$	281,000
TOTA		\$	22,401,000

1. Dundas M2 Feeder Capacity Upgrade McMaster Ave and Grant Blvd

- This project involves an investment of \$217,000 to replace undersized conductor along
 McMaster Avenue and Grant Boulevard in the Dundas operating area. This section of
 feeder is required to eliminate a capacity constraint on the Dundas M2 feeder preventing the
 use of the full capacity available from the Hydro One breaker.
- 8 2. Dundas M7 Feeder Capacity Upgrade Olympic Drive

1		This project involves an investment of \$84,000 to replace undersized conductor along
2		Olympic Drive in the Dundas operating area. A section of the Dundas M7 feeder is
3		undersized creating a capacity constraint on this feeder and preventing the use of the full
4		capacity available from the Hydro One breaker.
5	3.	Nebo M4 Feeder Pole Relocation
6		This project involves an investment of \$154,000 to relocate poles in a farmer's field to the
7		road allowance improving access for ease of maintenance and replacement in the Stoney
8		Creek operating area. This section of feeder cannot be accessed by bucket trucks which
9		results in increased cost, time required, and risk to worker safety.
10	4.	Nebo M62 Feeder Subdivision Backup Feed
11		This project involves an investment of \$350,000 to install a backup supply to a subdivision in
12		the Rymal Road/Upper Wentworth Street area in the Hamilton Mountain operating area.
13	5.	Clearwater Rear Lot Conversion
14		a. Overhead Option
15		This project involves an investment of \$364,000 to relocate a rear lot pole line to the
16		front lot (overhead construction) on Clearwater Drive in the Hamilton Mountain
17		operating area. T
18		b. Underground Option
19		This project involves an investment of \$1,404,000 to relocate a rear lot pole line to
20		the front lot (underground construction) on Clearwater Drive in the Hamilton
21		Mountain operating area.
22	6.	Darlington Rear Lot Conversion
23		a. Overhead Option

This project involves an investment of \$628,000 to relocate a rear lot pole line to

the front lot (overhead construction) in the Hamilton Mountain operating area.

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b. Underground Option

This project involves an investment of \$2,127,000 to relocate a rear lot pole line to the front lot (underground construction) in the Hamilton Mountain operating area.

4 7. Lake M2 Feeder – Queenston Road

- 5 This project involves an investment of \$74,000 to replace undersized conductor along
- 6 Queenston Road in the Stoney Creek operating area. This project is required to utilize the
- 7 full capacity available from the breaker at the Hydro One Transformer Station.

8 8. Manhole Lid Replacement

- 9 This project involves an investment of \$135,000 to replace civil structures assessed by
- 10 Kinectrics in 2011 as being in poor health and in need of replacement throughout Horizon
- 11 Utilities' service territory.

12 9. Ontario Street Rebuild

- This is a two year project requiring an investment of \$2,742,000 to rebuild the two existing
- poles lines on Ontario Street in the St. Catharines operating area to consolidate services
- onto a single pole line.

16 10. Padmounted Switchgear Renewal

- 17 This project involves an investment of \$403,000 to proactively replace padmounted
- switchgear throughout Horizon Utilities' service territory that are identified as nearing end-of-
- 19 life through Horizon Utilities' maintenance and inspection activities. Reinsulating of
- 20 Mountain Passes
- 21 This project involves an investment of \$250,000 for refurbishment of the three 27.6kV
- 22 connections that traverse the Niagara Escarpment providing the ability to interconnect the
- 23 north and south areas of the Stoney Creek operating area

24 11. Mohawk M64 Feeder – Manhole 1296 renewal

- This project involves an investment of \$94,000 to install feeder projection through the
- installation of a padmounted switchgear in the area adjacent to Upper Wentworth Street
- 27 north of Stonechurch Road in the Hamilton Mountain operating area. This project will lower
- the number of customers affected upon occurrence of an outage. The prioritization score for

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this project was not high enough for this project to be included in the proposed investment

2 for the 2015 to 2019 Test Years.

3 12. Newton M32 Feeder Radial Backup

- 4 This project involves an investment of \$157,000 to provide a backup supply for several
- 5 apartment buildings in the Hamilton West operating area. These apartment buildings are on
- a radial feed (i.e. only have a single point of supply) and would experience an extended
- 7 outage should a failure to the existing supply occur.

8 13. Horning M4 Feeder Radial Backup

- This project involves an investment of \$54,000 to install a backup supply to a residential
- subdivision in the Rymal Road/West 5th Street area in the Hamilton Mountain operating
- 11 area. This subdivision is on a radial feeder and would experience an extended outage
- should a failure to the existing supply occur.

13 14. Bunting M57 Feeder Upgrade - Phase 1

- This two phase multi-year investment of \$2,160,000 is required to utilize the Bunting M57
- feeder in the St. Catharines operating area. This feeder provided a dedicated supply to a
- large customer in St. Catharines that is no longer operational and as such, the feeder is
- 17 currently not used. This project would expand the existing feeder to provide load relief,
- additional feeder ties and operational contingency to the north east area of the city.

19 15. Eleanor Ave Loop

- This project involves an investment of \$201,000 to install a backup supply to a subdivision in
- the Eleanor Avenue are of the Hamilton Mountain operating area. This subdivision is on a
- 22 radial feeder and would experience an extended outage should a failure to the existing
- 23 supply occur.

24 16. Green Mountain Road Conversion

- 25 This project involves an investment of \$1,470,000 to renew the assets and perform a
- voltage conversion on a rural section of 8kV to 27.6kV. This area is: radially fed having no
- 27 alternative supply; is at a different operating voltage than the surrounding area; and has
- 28 experienced multiple long duration outages in recent years.

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1	17. Lake	M4 Feeder	Conductor	Upgrade
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- 2 This project involves an investment of \$442,000 to replace undersized conductor along Gray
- Road in the Stoney Creek operating area. This is required to take full advantage of the
- 4 feeder capacity available from the breaker at the Hydro One Transformer Station.
- 5 18. Nebo M3 Feeder Mistywood Drive Backup
- 6 This project involves an investment of \$172,000 to construct a backup supply to a
- 7 subdivision in the Mistywood Drive area of the Stoney Creek operating area. This
- 8 subdivision is on a radial feeder and would experience an extended outage should a failure
- 9 to the existing supply occur.
- 10 19. Rear Lot Renewal Birdland
- This project involves an investment of \$495,000 to relocate a rear lot pole line in the Upper
- Wellington Street/Meadowlark Drive area of the Hamilton Mountain operating area.
- 13 20. Nebo M3 Feeder Reliability Investment
- This project involves an investment of \$254,000 to the Nebo M3 feeder in the Stoney Creek
- operating area. The Nebo M3 feeder is historically one of Horizon Utilities' worst performing
- feeders and this project is targeted to redesign various sections of the feeder experiencing
- 17 frequent failures.
- 18 21. Nebo M4 Feeder Reliability Investment
- This project involves an investment of \$137,000 to the Nebo M4 feeder in the Stoney Creek
- operating area. The Nebo M3 feeder is historically one of Horizon Utilities worst performing
- 21 feeders and this project is targeted to redesign various sections of the feeder experiencing
- frequent failures. The prioritization score for this project was not high enough for this project
- to be included in the proposed investment for the 2015 to 2019 Test Years.
- 24 22. Mohawk M72 Feeder Radial Feed
- 25 This project involves an investment of \$2,721,000 to create an overhead interconnection
- point to improve the security for a radial section of this 13kV feeder. The existing feeder
- 27 layout is bordered by 4kV feeders limiting the ability to interconnect with neighboring
- 28 feeders.

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1 23. Vintage Crescent Renewal

- 2 This project involves an investment of \$1,065,000 to replace underground cable and
- padmount transformers that are nearing end-of-life along Vintage Crescent in the St.
- 4 Catharines operating area.
- 5 24. Wellington M11 Feeder Conversion
- This project involves an investment of \$1,642,000 to convert a 4kV feeder to 13.8kV in the
- 7 Hamilton Mountain operating area. The existing feeder layout is bordered by 4kV feeders
- 8 which limits the ability to interconnect with neighboring feeders.
- 9 25. Eastmount F3 Feeder and F8 Feeder Conversions
- This project involves an investment of \$1,657,000 to convert portions of the Eastmount F3
- and F8 feeders from 4kV to 13.8kV in the Hamilton Mountain operating area. These feeders
- have limited interconnections with the neighboring 4kV distribution system and conversion to
- the higher voltage level would increase the ability to provide operational contingencies to
- this area. This project was not included in the proposed investment for the 2015 to 2019
- Test Years as the 4kV and 8kV Renewal Program identified Hamilton Mountain operating as
- a lower priority than the operating areas that were included in the proposed investment for
- 17 the 2015 to 2019 Test Years.
- 18 26. Solid Pole Replacement
- This project involves an investment of \$467,000 to replace 24' solid concrete poles across
- 20 Horizon Utilities' service territory. These 24' solid poles pose a safety and reliability risk due
- 21 to the low height of the poles which result in lower line clearance heights over roadways.
- The most critical locations have been resolved through previous investments and the
- 23 prioritization score for the remaining locations was not high enough for this project to be
- included in the proposed investment for the 2015 to 2019 Test Years.
- 25 27. Secondary Pedestals
- This project involves an investment of \$281,000 to replace secondary pedestals in the St.
- Catharines operating area. Secondary pedestals, when in poor health, can pose a risk to
- 28 public safety. The most critical locations have previously been replaced and the

- 1 prioritization score for remaining locations was not high enough for this project to be
- 2 included in the proposed investment for the 2015 to 2019 Test Years.

2-SIA-18

Ref: Exhibit 2, Tab 6, Schedule 1, Page 14

Horizon defines an unacceptable Health Index distribution when "at least 20% of the assets within the group have a Health Index of either very poor or poor". What is Horizon's long term goal in terms of an acceptable Health Index distribution of assets?

Response:

- 1 Horizon Utilities' long term goal objective for any asset class is to achieve a stable, level
- 2 investment requirement such that it does not require any significant unexpected capital
- 3 expenditures year-over-year.
- 4 Please also see Horizon Utilities' response to Interrogatory 2-SEC-12.

2-SIA-19

Ref: Exhibit 2

Please describe the level of accuracy/specificity with which the capital cost estimates been calculated for each of the years of the five year term? Are the cost estimates during the outer years of the term (2017-2019) based on higher-level forecasts than those of the earlier years?

Response:

- 1 The level of accuracy/specificity with which the capital cost estimates have been calculated for
- the five year term is dependent upon the project category (System Access, System Renewal,
- 3 System Service or General Plant) and the specific year in the five year term.

4 System Access

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Road Relocations - Horizon Utilities is an active participant in two Public Utility Coordinating Committees ("PUCCs"): 1) the City of Hamilton and 2) the City of St. Catharines and Region of Niagara. The PUCCs are a forum for city officials, regional officials and utilities to: meet (on a quarterly basis) and discuss common issues; share project information; develop solutions to issues or project related matters; and review project schedules. It is either through these forums or through direct communication with the City of Hamilton, the City of St. Catharines or Region of Niagara that Horizon Utilities obtains forecasts, updates, and budget confirmation for proposed road relocation projects. The planning timelines for road relocation projects often result in Horizon Utilities receiving notification between six and 24 months prior to the start of the projects. The level of certainty with respect to known volume and scope of road relocation projects decreases in the later test years. Please refer to Horizon Utilities response to Interrogatory 2.0-VECC-11 for a list of known road relocation projects by year within the rate plan. Additionally, Horizon Utilities does not receive engineering drawings from the City of Hamilton or the City of St. Catharines until the year the project is constructed and as such capital cost estimates are based on historical capital expenditure levels.

Horizon Utilities' investment requirements for 2015 are based upon the volume and scope of known road relocation projects. The 2016 to 2019 investment requirement is based on a forecast of 25 projects annually; the average annual number of road

- relocation projects based on 2011 to 2013 actuals and 2013 to 2015 forecasts. The average annual project cost used to determine the 2016 to 2019 Test Year investment requirements, relative to the maximum and minimum average annual project costs, is identified in Figure 78 on page 234 of the DSP filed as Appendix 2-4 in Exhibit 2.
- Customer Connections Horizon Utilities is not informed of individual customer connections until the service is required. As such, Horizon Utilities relies on historical trends to forecast capital expenditure for customer connections. In addition to assessing the historical expenditures of past years, Horizon Utilities also performs assessments of the local economy, the current customer requests project schedule, and potential future projects based upon discussion with customers and developers in the determination of future investment to support customer connections. Horizon Utilities takes all steps possible to coordinate with the City of Hamilton and the City of St. Catharines on planning for customer connections. Ultimately, system access projects are driven by decision points within the City of Hamilton and City of St. Catharines and the level of accuracy in terms of volume and scope decreases in the later years.
- Meters Investments in meters are forecasted primarily through the review of required compliance sampling to comply with Measurement Canada regulations, metering requirements to support new connections and conversion of multi-residential buildings, metering installation requirements to support the Smart Metering Implementation Plan, and forecasted incremental growth. Meters are budgeted on a 25-year planning horizon and the forecasted capital expenditures are as accurate in 2019 as they are in 2015. The variability in the capital cost estimates results from the actual pricing of the metering. Horizon Utilities does not have guaranteed pricing, and typically assumes only an inflationary increase.

System Renewal and System Service

The level of accuracy/specificity for system renewal and system service projects, for which project scope and location can be predetermined, is high and consistent throughout rate plan term. Individual projects and project scope are developed from Horizon Utilities' asset management plan as identified in Section 3.1.3 of the DSP filed as Appendix 2-4 of Exhibit 2. The number and type of assets requiring replacement

within each individual project are extracted from Horizon Utilities' Geospatial Information System ("GIS") based upon the project scope. The estimate for each individual project is determined by applying unit replacement costs (material, equipment and labour) to the number and type of assets requiring replacement. Horizon Utilities' unit replacement costs are updated yearly based on historical actuals. The unit replacement costs are adjusted for inflation throughout the rate plan term. The level of accuracy/specificity for system renewal projects is high, based on detailed project scope and accuracy of unit costing.

For system renewal projects where the project scope and location cannot be predetermined (e.g., reactive renewal, pole residual program, proactive transformer replacements), the volume and type of asset requiring replacement is determined based on historical replacement quantities. These types of projects are reactive or dependent on test results which are outside of Horizon Utilities' control. Unit costing as described above, is applied to the number and type of assets requiring replacement to determine the level of capital investment. The cost estimates for all years of the term have the same level of accuracy. However, there is a higher potential for actuals to vary from budget due to the unknown project scope and location.

General Plant

- Buildings The project scope for each building refurbishment project was developed based on the results of the Building Condition Assessments ("BCAs") as identified on page 33 of Exhibit 2, Tab 6, Schedule 1. The estimate for each individual project is determined by applying projected square footage to be renovated to unit costs per square foot. Unit costs are determined using estimates provided in the BCAs and historical actuals for projects with a similar scope. Unit costs are updated yearly based on historical actuals and preliminary quotes obtained in advance of each project start date. The level of accuracy for building renewal projects is high and the cost estimates during the outer years of the term have the same level of accuracy as those in the earlier years.
- Fleet Horizon Utilities' vehicles are assessed annually for replacement based on a criteria matrix defined within the Fleet Replacement Plan filed as Appendix O of the DSP

in Exhibit 2. Capital cost estimates for each of the test years are based on historical purchase costs which are available for multiple vehicles and years. The unit replacement costs are adjusted for inflation throughout the test years. Forecasts of time to reach end-of-life for vehicles have a high level of accuracy.

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Information Systems Technology – These projects include application system upgrades; server upgrades; telephone systems; Storage Area Networks; and data backup and archiving expansion. Horizon Utilities relies on historical costs and its experience implementing the same or similar projects in order to forecast capital expenditures. This includes estimation of internal labour costs based on resource utilization for comparable historical projects. The level of accuracy with which the capital cost estimates have been calculated for each of years of the rate plan term is high.

3-SIA-20

Ref: Exhibit 3 Tab 3 Schedule 3 Page 2

Horizon states that "Other Revenue for 2015 is forecasted to be in line with 2014 amounts and is projected at \$5,477,916, representing a decrease of \$576,418 or 9.42% from 2014."

- a) Why does Horizon categorize the 2015 forecast as being "in line with 2014 amounts" given the nearly 10% variance? Is this magnitude of variability expected?
- b) Please explain the drivers of the reduced forecast in 2015 as compared to 2014.

Response:

- a) As provided in the corrections filed on June 13, 2014, Horizon Utilities had determined there
- was a typographical error on page 2 of Exhibit 3, Tab 3, Schedule 3. The corrected blue
- page indicated that the forecast for 2015 is characterized as in line with 2014 as the
- 4 variance is only \$63,412 or 1.14%.
- In preparing this response Horizon Utilities has discovered that the correction issued on
- June 13th provided the corrected dollar variance, but did not correct the % impact to read
- 7 1.14%. Horizon Utilities has provided a track changes version of the corrections of the
- typographical errors in this Schedule as 3-SIA-20-Attch 1_Correction Pages.
- 9 b) As explained in Horizon Utilities' response to part a) above, the forecast for Other Revenue for 2015 is in line with 2014.

3-SIA-20a_Attch 1_Correction Page

Horizon Utilities Corporation EB-2014-0002 Exhibit 3

Tab 3 Schedule 3 Page 1 of 2

Page 1 of 2 Filed: April 16, 2014

OTHER REVENUE – VARIANCE ANALYSIS

- 2 This section provides variance analysis for Horizon Utilities' Other Revenue.
- 3 Horizon Utilities receives and provides services from/to its affiliate companies in order to realize
- 4 economies of scale, manage costs, and maintain service levels. A detailed discussion on
- 5 Shared Services and Corporate Cost Allocation is provided in Exhibit 4, Tab 4, Schedule 3.

6 2011 Board Approved vs. 2011 Actual

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- 7 The 2011 Board-Approved Other Revenue was \$5,895,920. This total of included management
- 8 fees paid by affiliates of \$620,266, which the OEB directed Horizon Utilities to reclassify as an
- 9 offset to OM&A in its next Cost of Service application (EB-2010-0131, Decision and Order, page
- 10 27). Accordingly, the 2011 Board-Approved figure has been reduced by \$620,266, for an
- adjusted total Other Revenue of \$5,275,654.
- 12 2011 Actual Other Revenue was \$5,183,239, and is within 1.8% of the Board Approved amount.
- 13 Miscellaneous Service Revenues were \$310,071 below the Board Approved amount, primarily
- 14 due to: lower re-connection and collection charges; new customer service regulations; and
- 15 lower than forecasted new connections.

16 **2012 Actual vs. 2011 Actual**

- Other Revenue for 2012 totaled to \$6,034,010, representing an increase of \$850,771 from 2011
- Actuals. This increase is attributed an increase to a) interest income of \$349,003 and b) Retail
- 19 Service Revenues of \$265,052.

20 **2013 Actual vs. 2012 Actual**

- 21 Other Revenue for 2013 totaled to \$6,117,746, or 1.39% higher than 2012 Actuals. This
- 22 increase is primarily attributed to higher Rent from Electric Property and offset but lower
- 23 Miscellaneous Service Revenues, Retail Service Revenues, and Interest Income.

Filed: April 16, 2014

2014 Bridge Year vs. 2013 Actual

- 2 Other Revenues for 2014 are lower than 2013 amounts and are projected at \$5,541,328,
- 3 representing a decrease of \$\frac{319,506}{576,418} from 2013 Actual. This decrease is attributable to
- 4 | a lower in Rent from Electric Property and Interest Income, offset by higher to-Retail Service
- 5 Revenues.

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6 **2015 Test Year vs. 2014 Bridge Year**

- 7 Other Revenue for 2015 is forecasted to be in line with 2014 amounts and is projected at
- 8 \$5,477,916, representing a decrease of \$576,41863,412 or 9.421.14% from 2014. Please refer
- 9 to Exhibit 6, Table 6-2 for an explanation of the revenue deficiency for the 2015 Test Year.

10 **2016 Test Year vs. 2015 Test Year**

- Other Revenues for 2016 are projected at \$5,516,509, representing an increase of \$38,594 or
- 12 0.70% from 2015. Please refer to Exhibit 6, Table 6-3 for an explanation of the revenue
- 13 deficiency for the 2016 Test Year.

14 **2017 Test Year vs. 2016 Test Year**

- Other Revenues for 2017 are projected at \$5,555,937, representing an increase of \$39,428 or
- 16 0.71% from 2016. Please refer to Exhibit 6, Table 6-4 for an explanation of the revenue
- 17 deficiency for the 2017 Test Year.

18 2018 Test Year vs. 2017 Test Year

- Other Revenues for 2018 are projected at \$5,666,198, representing an increase of \$110,262 or
- 20 1.98% from 2017. Please refer to Exhibit 6, Table 6-5 for an explanation of the revenue
- 21 deficiency for the 2018 Test Year.

22 2019 Test Year vs. 2018 Test Year

- 23 Other Operating Revenues for 2019 are projected at \$5,753,899, representing an increase of
- 24 \$87,700 or 1.55% from 2018. Please refer to Exhibit 6, Table 6-6 for an explanation of the
- 25 revenue deficiency for the 2019 Test Year.

4-SIA-21

Ref: Exhibit 4, Tab 3, Schedule 2, Page 8

- a) Please confirm that it is Horizon's intention to transition the identified 2500 conventional meters to smart meters by the end of 2015.
- b) Are accessibility and/or other technical issues the primary reason why these meters have not yet been converted? If so, when were these issues first identified as posing a potential challenge for conversion?
- c) Where any efforts made to convert these meters in prior years? If not, why not?
- d) Please detail Horizon's plan to convert these remaining meters to smart meters.

Response:

- a) Horizon Utilities confirms that it intends to transition the remaining conventional meters to Smart Meters by the end of 2015. All outstanding residential and GS < 50 kW meters are scheduled to be replaced with Smart Meters by the end of 2014. GS > 50 kW meters will be converted to Smart Meters within the meter maintenance program or at the time of re-verification through to the end of 2015. As stated in Exhibit 4, Tab 3, Schedule 2, Page 8, line 14, "a very small number of conventional meters are expected to remain unconverted due to physical restrictions in accessing the meter."
- b) Horizon Utilities has a small number of hard-to-reach ("HTR") residential, GS < 50 kW and GS > 50 kW customers where the meter conversion to a Smart Meter has not yet occurred.
 - The primary issue in the case of residential customers is a lack of accessibility to the meter. This issue was initially identified during the mass deployment of Smart Meters. As provided in Exhibit 9, Tab 7, Schedule 1, Page 2, Horizon Utilities' HTR program was created to: increase customer awareness of access issues; gain access to the premises; and to utilize alternative meter technologies as they become available to resolve confined space constraints and unusual configurations.
 - Horizon Utilities' GS < 50 kW and GS > 50 kW outstanding meter locations are being converted to Smart Meters at the time of re-verification. In its Decision in Horizon Utilities' Smart Meter Prudence Application (EB-2011-0417), the Board authorized Horizon Utilities to continue to record capital costs for the installation of Smart Meters for

the outstanding residential and GS <50kW customers whose Smart Meters will be replaced upon repair or re-verification to the end of 2014. This approach reduces duplication of efforts and related costs, and maintains a steady schedule for future reverification efforts.

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The lack of an appropriate meter solution for 600V delta meters delayed the deployment for some GS<50kW and GS>50kW meter locations beyond the original conversion schedule. This issue was identified early in the process and resolved by the vendor in 2012.

Horizon Utilities' outstanding GS>50kW meters are scheduled to be replaced in 2015; the remaining GS<50 kW meters will be converted to Smart Meters by the end of the 2014, exclusive of some HTR locations.

- c) Horizon Utilities' efforts to covert locations where there was an accessibility issue began in 2007 with the beginning of the Smart Meter mass deployment program and continue today. Horizon Utilities' HTR Customer Contact plan is provided in Exhibit 9, Tab 7, Schedule 1, Page 2.
- d) Horizon Utilities' plan to convert the remaining conventional meters to Smart Meters is consistent with the existing strategy for HTR customers. Horizon Utilities' HTR Customer Contact plan is provided in Exhibit 9, Tab 7, Schedule 1, Page 2.

4-SIA-22

Ref: Exhibit 4, Tab 3, Schedule 2, Page 10

Regarding the Daffron and Associates billing system, Horizon claims that it "is nearing the end of its useful life and requires investment to migrate to a new system or undertake a major upgrade to the current Daffron browser-based solution." However, Horizon is not proposing to replace it (i.e. have an operational replacement) until 2021.

- a) When was this system installed?
- b) What is its expected useful life?
- c) Is the system currently capable of ensuring full compliance with all applicable billing, collections, and reporting requirements?
- d) If the system is "nearing the end of useful life", is Horizon confident that it will be able to maintain full compliance with all applicable billing, collections, and reporting requirements from 2015 through 2021?
- e) Other than routine maintenance and routine upgrades, will any major investments be required to keep the system operational prior to 2021?
- f) Where in the program budgets in this application are any costs related to this upgrade project located?

Response:

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a. The Daffron and Associates ("Daffron") Customer Information System ("CIS") was originally implemented by the former Hamilton Hydro Electric System in October 2000 during the amalgamation of the five utilities that formed Hamilton Hydro Inc. Two previous version upgrades were completed in 2002 and 2005 with additional software updates as required to: bill Time-of-Use rates; integrate with the provincial Meter Data Management Repository ("MDM/R"); and comply with regulation changes.

Daffron has advised its customers that the current CIS version 5.1.1, the version that Horizon Utilities currently uses, will be reaching its end-of-life as of 2015. Despite this status, Daffron has confirmed and acknowledged that system support, program changes to support regulatory requirements and other custom program requests will continue through to 2021 to accommodate late client migrations to Daffron's new version of the software. Horizon Utilities considers the expected useful life to therefore be 2021.

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- b. Horizon Utilities' Daffron CIS is compliant with all current billing, collections, and
 reporting requirements.
 - c. Horizon Utilities works closely with Daffron to ensure the system meets all regulatory and business requirements. Horizon Utilities is confident its CIS will continue to meet regulatory compliance requirements through to 2021, based on known government and regulatory change requirements to date.
 - d. Horizon Utilities does not anticipate any significant investments to the CIS system beyond regular maintenance and system updates to meet business needs and regulatory compliance, based upon known government and regulatory change requirements to date.
 - e. As provided in Exhibit 4, Tab 2, Schedule 2 Page 46, a one-time OM&A expenditure of \$400,000 has been budgeted for 2017 within the Customer Care Management Fee in connection with the issuance of a Request for Information to potential CIS vendors, principally for third-party consultants to assist in defining and documenting system requirements and to assist in the evaluation of vendor submissions.
 - Capital requirements to support the CIS upgrade did not meet the materiality threshold of this Application. They are budgeted within Customer Care to be \$150,000 in 2015 for pre-work to build common system interfaces and data integration with foundational systems in advance of the CIS upgrade and \$200,000 in 2019 to perform initial implementation steps including data mapping and integration.
 - The capital costs associated with the new or upgraded CIS software will be determined through the Request for Proposals process and provided in a future Application.

4-SIA-23

Ref: Exhibit 4, Tab 3, Schedule 3, Page 21 & Exhibit 4, Tab 4, Schedule 6

- a) Please provide a breakdown of the Regulatory Affairs budget of \$2,883,584 into its major sub-components.
- b) Please identify the differences between the "Regulatory Affairs Budget" of \$2,883,584 in Exhibit 4, Tab 3, Schedule 3 with the "Regulatory costs" of \$1,150,000 in Exhibit 4, Tab 4, Schedule 6, Page 1. Is the latter a subset of the former?

Response:

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a) Please refer to Table 1 below which identifies the major components of the Regulatory Affairs budget of \$2,883,584 for 2015. There are three major components of the budget: payroll; the amortized costs for the 2015 Custom IR application; and regulatory costs (OEB annual assessments and fees; legal and consulting; and operating expenses) as detailed in Exhibit 4, Tab 4, Schedule 6, Table 4-72.

Table 1: 2015 Regulatory Affairs Budget

Regulatory Affairs Budget 2015	
Payroll 2015 Custom IR application (\$2,759,704/5 - amortized over 5 years) Regulatory Costs (Exhibit 4/Tab 4/Schedule 6/Table 4-72) subset of total budge	\$ 1,181,643 551,941 1,150,000
Total Regulatory Affairs Budget (Exhibit 3/Schedue 3/Page 21)	\$ 2,883,584

b) Regulatory Costs are a subset of the Regulatory Affairs Budget as noted in Table 1 above, in response to (a). The details of the Regulatory Costs are provided in Exhibit 4, Tab 4, Schedule 6, Table 4-72 of the Application.

4-SIA-24

Ref: Exhibit 4, Tab 3, Schedule 3, Page 22

Horizon states that it "continues to be proactive in their efforts to achieve productivity and savings in the 2015 – 2019". Please identify any measures or initiatives planned, considered, or undertaken to achieve productivity savings in the Regulatory Affairs department.

Response:

- 1 The functions and activities of the Regulatory Affairs department are described in Exhibit 4, Tab
- 2 3, Schedule 2, pages 37 and 38. As can be ascertained from that evidence, the activities of the
- 3 Regulatory Affairs department are largely reactive to meet external requirements, including
- 4 government and their agencies, and in particular the Ontario Energy Board. Leading and
- 5 defending rates applications, albeit significant, is only a part of the department's overall
- 6 responsibilities.
- 7 Requirements from authorities have been on the increase in recent years and it is anticipated
- 8 that they will continue to increase during the term of the rate plan. The fact that the
- 9 department's budget has been increasing and it is proposed that it increase at about the pace of
- inflation during the term of the rate plan is a demonstration of the department's commitment to
- 11 continued productivity.
- 12 An example of a specific initiative was to bring the load forecasting function in-house. This
- 13 function was outsourced for both the 2008 and 2011 Cost of Service Applications (EB-2007-
- 14 0697 and EB-2010-0131 respectively). Horizon Utilities brought load forecasting in house to
- build internal expertise and to control costs. Future initiatives will be undertaken as market
- 16 challenges arise. Knowledgeable staff will be able to participate in initiatives that develop new
- 17 policies. This too should minimize outside costs. Regulatory is also committed to automating
- the regulatory accounting requirements with the general accounting processes to align with
- each other. Currently, the regulatory accounting is done off line and then manually merged with
- 20 the general accounting. Productivity in this area will improve timeliness and the ability to
- 21 provide more analysis, for more accurate reporting.

4-SIA-25

Ref: Exhibit 4, Tab 3, Schedule 2 and Schedule 3

Please map the divisions and departments identified in Schedule 2 to the program costs identified in Schedule 3 (Tables 4-22 through 4-25).

Response:

- 1 The divisions and departments identified in Schedule 2 are mapped to the programs identified in
- 2 Schedule 3, in Table 1 below.

3 Table 1: Division and Department Mapping

Division Overview	Reference in Division Overview	Name in Program Variance Analysis	Table Reference	
Customer Services Division				
Customer Service Business Unit	Figure 4-1			
Meter Reading Work Group	Figure 4-2	Advance Meter Inventory/ Meter Data Management & Repository	Table 4-22, Table 4-24	
motor reading train creap	Figure 4-2	MV90	Table 4-22, Table 4-24	
Customer Care	Figure 4-2	INVOO	rabio i 22, rabio i 2	
Billing Work Group	Figure 4-2	Customer Care Intracompany Horizon	Table 4-22, Table 4-24	
Credit and Collections Work Group	Figure 4-2	Customer Care Intracompany Horizon	Table 4-22, Table 4-24	
Call Centre Work Group	Figure 4-2	Customer Care Intracompany Horizon	Table 4-22, Table 4-24	
Bad Debt Expense	Figure 4-2	Customer Care Intracompany Horizon	Table 4-22, Table 4-24	
Customer Connections Business Unit	Figure 4-1	Customer Connections	Table 4-23, Table 4-2	
	3	Meter Assets and Inside Service	Table 4-23, Table 4-2	
Conservation and Demand Management Business Unit	Figure 4-1	Excluded, not part of regulated business	N/A	
Jtilities Operations Division	1 "	Utility Operations	Table 4-23, Table 4-2	
Engineering and Operating Business Unit	Figure 4-4	Engineering Operations & Operational Improvement	Table 4-23, Table 4-25	
Capital Projects Department	Figure 4-5	Capital Projects	Table 4-23, Table 4-25	
Engineering and Asset Management Department	Figure 4-5	Engineering and Asset Management	Table 4-23, Table 4-25	
Engineering Systems and Asset Records Department	Figure 4-5	Engineering Systems and Asset Records	Table 4-23, Table 4-29	
Control Room Operations Department	Figure 4-5	Control Room Operations	Table 4-23, Table 4-25	
Construction and Maintenance Services Business Unit	Figure 4-4	Construction and Maintenance Services	Table 4-23, Table 4-25	
Project Controls Office Department	Figure 4-6	Project Controls Office	Table 4-23, Table 4-29	
		Underground	Table 4-23, Table 4-29	
Underground Lines and Substations Department	Figure 4-6	Substations	Table 4-23, Table 4-25	
Hamilton Overhead Lines Department	Figure 4-6	Overhead	Table 4-23, Table 4-25	
St. Catharines Overhead Lines Department	Figure 4-6	Overhead	Table 4-23, Table 4-25	
Outside Contractors Department	Figure 4-6	Contractor Management	Table 4-23, Table 4-25	
Supply Chain Management Business Unit	Figure 4-4	Supply Chain	Table 4-23, Table 4-25	
Facilities Department	Figure 4-7	Facilities General	Table 4-23, Table 4-25	
		Building - Substations	Table 4-23, Table 4-2	
		Building - John St.Hamilton	Table 4-23, Table 4-2	
		Building - Nebo Rd. Hamilton	Table 4-23, Table 4-2	
		Building - Stoney Creek	Table 4-23, Table 4-2	
		Building - Vansickle Rd	Table 4-23, Table 4-25	
Procurement Department	Figure 4-7	Procurement	Table 4-23, Table 4-25	
Fleet Services Department	Figure 4-7	Fleet	Table 4-23, Table 4-29	
Logistics Department	Figure 4-7	Logistics	Table 4-23, Table 4-25	
Human Resources Division				
Human Resources (Corporate Services) Busines Unit	Figure 4-8	Corporate Services	Table 4-22, Table 4-24	
Healthy Workplace and Safety Department	Figure 4-8	Healthy Workplace and Safety	Table 4-22, Table 4-24	
Human Resources Department	Figure 4-8	Human Resources	Table 4-22, Table 4-24	
Business Development Division			T	
Corporate Communications Department	Figure 4-9	Corporate Communications	Table 4-22, Table 4-24	
Business Development (Unregulated) Department	Figure 4-9	Excluded, not part of regulated business	N/A	
Office of the SVP and CFO Division		Corporate	Table 4-22, Table 4-24	
Regulatory Affairs Department	Figure 4-10	Regulatory Affairs	Table 4-22, Table 4-24	
Corporate Finance Department	Figure 4-10	Corporate Finance	Table 4-22, Table 4-24	
Information Systems & Technology Department	Figure 4-10	Business Applications	Toble 4 22 Table 4 2	
Business Applications Sub-Department Technical Services Sub- Department		Business Applications PC Services	Table 4-22, Table 4-24 Table 4-22, Table 4-24	
Business Projects Sub-Department	1	Business Projects	Table 4-22, Table 4-24	
	1	Dualiteaa Fiojetta	Travie 4-22, Table 4-2	
IT Security Sub-Department		Cyber Security	Table 4-22, Table 4-2	

4-SIA-26

Ref: Exhibit 4, Tab 3, Schedule 3, Page 65

Horizon states that "The storm in July 2013, which included a record rainfall, caused flash flooding in Toronto". Please confirm that the \$954K in damages in Horizon's service territory was also the result of flash flooding. If not, please identify the types of damage experienced.

Response:

- 1 Horizon Utilities cannot confirm that the \$954K in damages was the result of flash flooding.
- 2 The July storm brought heavy winds and rain that brought down trees, large limbs and branches
- 3 onto distribution and co-located third party lines in large areas of Horizon Utilities' service area
- 4 in Hamilton and St. Catharines. Many poles, transformers, and kilometers of overhead lines
- 5 and associated hardware were brought down and were damaged or destroyed. The large
- 6 amount of rain saturated the ground. The high winds that occurred at the same time caused
- 7 trees to be uprooted. Streets were blocked with downed trees and distribution assets. These
- 8 caused significant obstructions such that the streets were impassable. Extensive cleanup was
- 9 required before repairs, removal and replacement of the distribution assets could begin.
- 10 External line contractors, other LDCs, and line clearing contractors were required to assist
- 11 Horizon Utilities' workforce with the massive cleanup and repairs over a number of days.
- 12 At the height of the July 2013 storm, more than 39,650 Horizons Utilities' customers were
- without power. The number of lightning strikes documented the evening of July 19th was almost
- 14 13,000 in Horizon Utilities' service territory.

4-SIA-27

Ref: Exhibit 4, Tab 3, Schedule 3, Page 65

With regard to the December 2013 ice storm:

- a) Please provide a breakout of the length of time customers were without power in 12 hour intervals. (i.e. # of customers without power 0-12 hours, 12-24 hours, etc)
- b) Did the experiences of the ice storm lead Horizon to identify the need for any changes in maintenance policies and/or capital standards? If not, why not?
- c) Did Horizon prepare any internal reports, memos, or other analysis of the impact of the ice storm on its distribution system? If so, please provide copies.

Response:

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a) Please see the table below for customers that were without power timed in 12 hour intervals

Table 1: Customer Impact

Interval in Hours	Number of Customer Affected			
0-12	77,912			
12-24	731			
24-36	47			
36-48	15			
48-60	60			

The total number of customers experiencing momentary outages (i.e. less than one minute in duration) was 25,076 during the ice storm which are not included in the 0-12 hour numbers in the table above. The number of customers identified in the chart above do not reconcile with the number of customers affected as identified in the part (c) of this question. The number of customers affected identified in part (c) of this question were unaudited numbers and contained some duplication in the count of customers affected.

Page 2 of 3

b) Horizon Utilities conducted a post mortem ice-storm discussion with all internal stakeholders.

11 The outages experienced during the ice storm resulted from excessive ice build-up on branches

- and trees and were not due to material and/or equipment failures. Horizon Utilities' review
- indicated that any changes or modifications to the policies and/or capital standards, other than
- 14 relocating existing overhead infrastructure to underground which is cost prohibitive, would not
- 15 have mitigated the impact of the storm. The rate of occurrence of severe storms is increasing
- as described starting on page 64 of Exhibit 4, Tab 3, Schedule 3. Horizon Utilities will continue
- 17 to investigate and evaluate options for the distribution system to withstand storm damage.
- 18 c) At its meeting of February 20, 2014 Horizon Utilities staff provided the following brief update
- to its Board of Directors regarding the December 2013 ice storm:

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- Adverse weather in the form of a major ice storm impacted much of Ontario and Quebec
 beginning December 21, resulting in power outages to more than 31,000 customers
 - Staff worked 24/7 through to December 25, with line staff working in 16-hour shifts to restore power and remove more than 800 fallen trees and limbs from power lines
 - The Call Centre was also open 24/7, answering more than 13,100 customer calls in five days
 - Power was restored to all neighbourhoods by December 25. Customers who had to make repairs to their equipment and schedule an Electrical Safety Association (ESA) inspection had power restored once the approval was received.
 - Horizon Utilities assisted neighbouring utilities following our own restoration efforts: line crews assisted Toronto Hydro for up to six days; 10 Linemen assisted Milton Hydro for three days
 - The City of Hamilton distributed grocery gift cards to low-income citizens who had experienced a power outage exceeding 48-hours. Horizon Utilities staff assisted in the validation of customer eligibility by utilizing the smart meter data and promoting customer awareness of the offering.
- Horizon Utilities is including the following attachments of reports and memos regarding the December 2013 ice storm.
 - 4-SIA-27 Attch 1 Ice Storm Update Dec 22 2013
- 4-SIA-27 Attch 2 Power restoration update Dec 23 2013

40 •	4-SIA-27_	Attch_3_	_Christmas	Eve Pow	er Outage	Update	Dec 24 2013
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- 4-SIA-27_Attch_4_lce Storm Restoration Efforts Dec 24 2013
- 4-SIA-27_Attch_5_lce Storm Thank You Dec 24 2013
- 4-SIA-27_Attch_6_My Horizon Issue 2 Winter 2014
- 4-SIA-27_Attch_7_Message from CEO Jan 9 2014
- 4-SIA-27_Attch_8_Deputy Mayor of Toronto Thanks Horizon Utilities Jan 15 2014

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 1_Ice Storm Update Dec 22 2013

4-SIA-27_Attch 1_Ice Storm Update Dec 22 2013

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 1_Ice Storm Update Dec 22 2013 **From:** Corporate Communications

Sent: Sunday, December 22, 2013 4:11 PM

To: Horizon - All Employees

Subject: Ice Storm Update from Mayor Bratina

CorpComm

Mayor Bratina statement to ice storm

Hamilton, Ont. Dec. 22, 2013

Thousands of Hamilton residents have been affected by the overnight ice and rain storm. An army of city, hydro, police, fire and emergency workers are on duty responding to the needs of our people and dealing with dangerous situations such as fallen wires, tree limbs, icy roads, etc. Every available staff person has been assigned to required duties or on standby. Premier Wynne has called to be apprised of our situation as the Provincial Government monitors needs in affected communities. Our biggest concern right now is the safety of our residents as it relates to power outages, fallen wires and tree limbs and driving conditions.

At this point in time, the City will be opening up four recreation/community centres for those residents who have lost power. These centres will have Red Cross and city shelter staff on site by 5 p.m. Sunday afternoon.

Recreation/Community Centres:

- North Wentworth Arena 27 Hwy #5
- Dundas Lions Memorial Community Centre = 10 Market St. Dundas
- Stoney Creek Recreation Centre 45 King St. W.
- Huntington Park Recreation Centre 87 Brentwood Dr.

For any emergencies related to City-services, please call 905-546-CITY (2489). Our Contact Centre is open 24 hours a day.

Bob Bratina

Mayor, City of Hamilton

EB-2014-0002
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Responses to Sustainable Infrastructure
Alliance of Ontario Interrogatories
Delivered: August 1st, 2014
4-SIA-27_Attch 2_Power Restoration Update Dec 23 2013

4-SIA-27_Attch 2_Power Restoration Update Dec 23 2013

EB-2014-0002
Horizon Utilities Corporation
Responses to Sustainable Infrastructure
Alliance of Ontario Interrogatories
Delivered: August 1st, 2014
4-SIA-27_Attch 2_Power Restoration Update Dec 23 2013

From: Corporate Communications

Sent: Monday, December 23, 2013 9:50 AM

To: Horizon - All Employees; Horizon - Contract Employees

Subject: Power Restoration Update

CorpComm

Horizon Utilities crews worked through the night to restore service to as many customers as quickly as possible. The total number of customers still without power is down to approximately1,500 in Hamilton and St. Catharines, down from 12,000 Sunday night and a high of 30,000 earlier on Sunday. The majority of customers were restored in St. Catharines on Sunday, where tree clean up continues.

As an employee, you can help us ensure that power is restored to all of our customers as quickly as possible. If you know of someone in our service territory who is still without power please convey the following important information:

- 1. Customers still without power on Monday morning are encouraged to call Horizon Utilities because, while the main grid can be restored, individual services can still be without power. To report power outages call: 905-522-6611 in Hamilton or 905-684-8111 in St. Catharines.
- Customers without power are asked to check their equipment for damage that might need repair by a
 certified contractor. An Electrical Safety Authority inspection may be need before Horizon can reconnect your
 service. Call ESA (1-877-372-7233) to get
 re-connected. More

info: www.horizonutilities.com/ourCompany/publications/Documents/2013/ServiceStackRepair.pdf

Further updates will be provided as our crews complete their investigations and damage assessments. Horizon Utilities will continue to provide updates at horizontilities.com. For outage notifications and updates, please follow us on Twitter @HorizonLink (twitter.com/HorizonLink).

Thank you to all employees who continue to work tirelessly in the field and at our offices to assist with power restoration efforts.

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 3_Christmas Eve Power Outage Update Dec 24 2013

4-SIA-27_Attch 3_Christmas Eve Power Outage Update Dec 24 2013

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 3_Christmas Eve Power Outage Update Dec 24 2013 **From:** Corporate Communications

Sent: Tuesday, December 24, 2013 4:35 PM

To: Horizon - All Employees; Horizon - Contract Employees

Subject: Power Restoration Update

CorpComm

Christmas Eve Power Outage Update

Our crews continued to work overnight and into today to restore power in Hamilton and St. Catharines caused by the ice storm that began Saturday evening. We are proud to report that we have successfully restored power to 31,600 customers. There are approximately 400 of our customers who are still experiencing outages.

Thanks to the hard work and dedication of our employees, we continue our efforts to restore power to each and every customer.

Our efforts have received praise from customers and the City of Hamilton and resulted in positive news coverage. Please see the links below to photos and video of our restoration efforts.

Ice Storm - Power Restoration Photos

Horizon Utilities featured on CHCH news - view on your PC

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 4_Ice Storm Restoration Efforts Dec 24 2013

4-SIA-27_Attch 4_Ice Storm Restoration Efforts Dec 24 2013

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 4_Ice Storm Restoration Efforts Dec 24 2013



Ice Storm Restoration Efforts

December 24, 2013

Ice storm hits Southern Ontario – Dec. 22



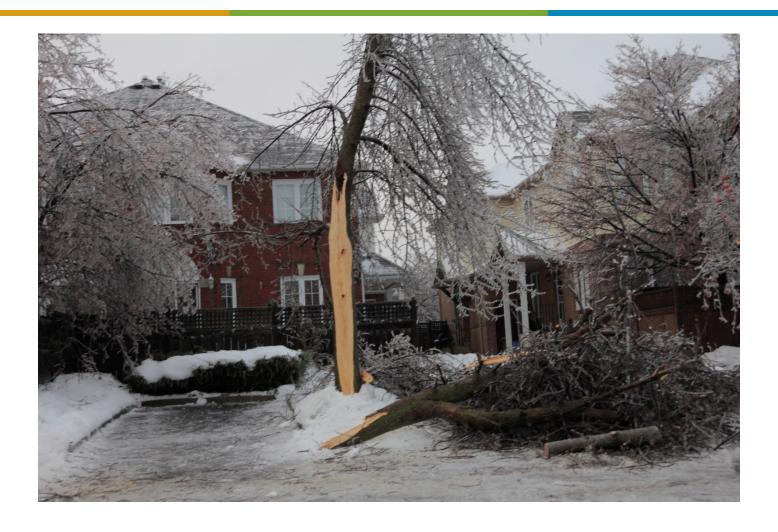


Devastating damage to power lines



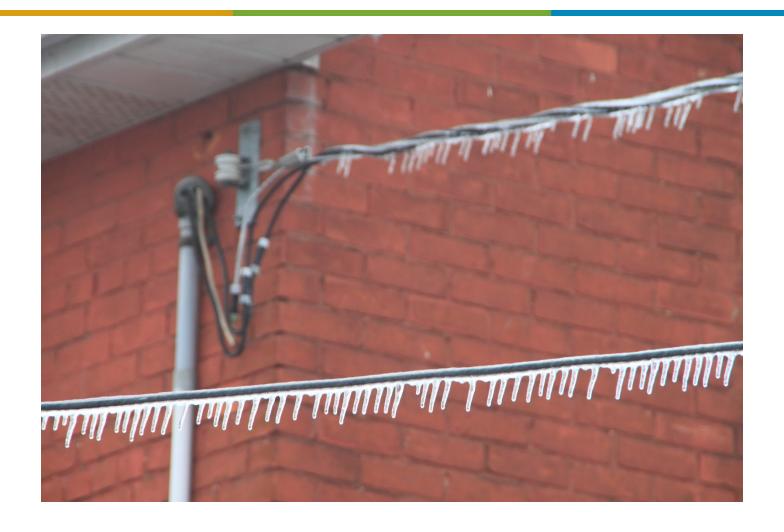


Massive tree damage



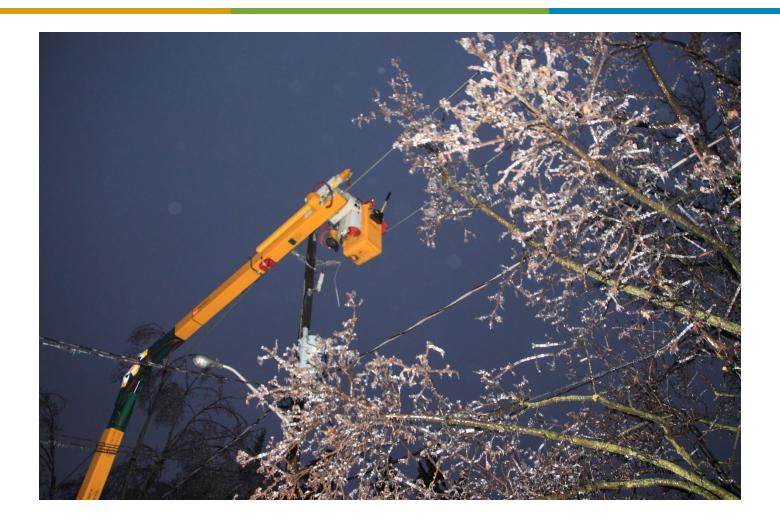


Ice accumulation on lines





Our crews in the air





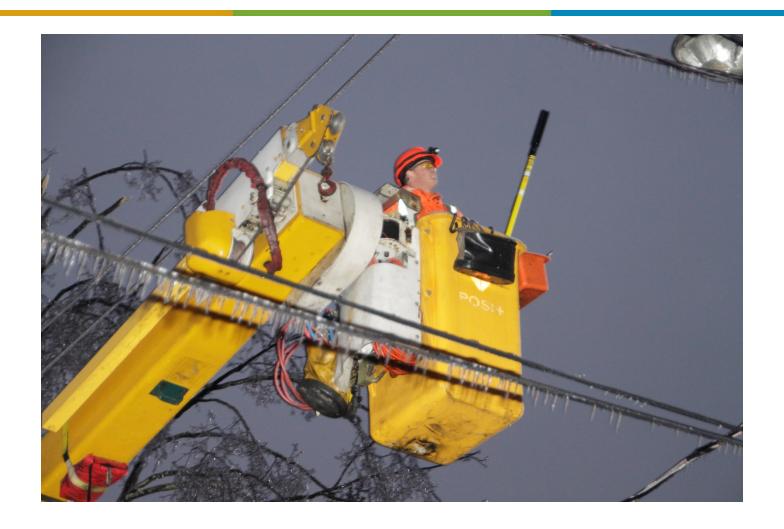
Our crews in the air





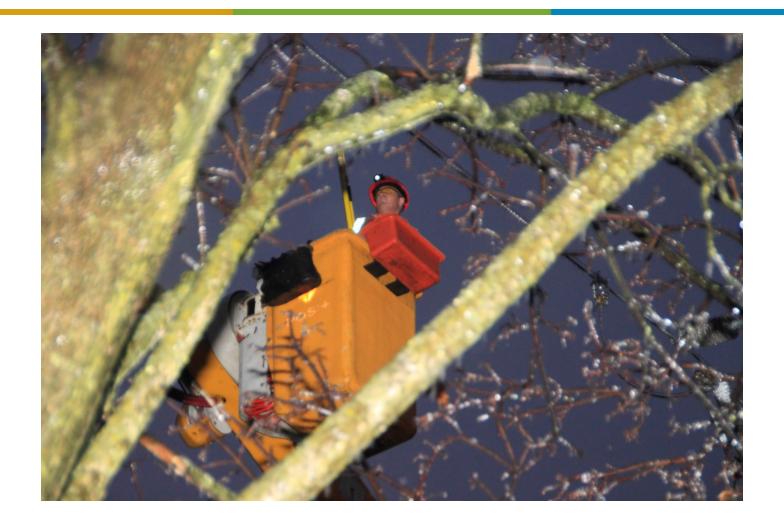


Working through the ice



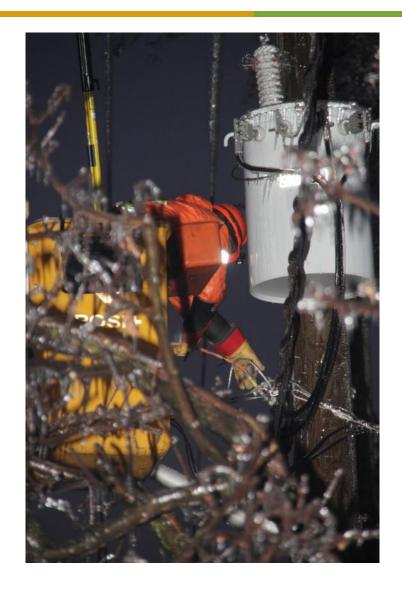


Working through the ice





Working through the ice







Crews respond to repair damaged lines







Still in good spirits after a long day



Dave Riddell, Jeff Skidmore and Andrew Sumner.



A sincere Thank You

- Thank you to all Horizon Utilities employees who have banned together to restore power to our customers following this devestating ice storm
- Power has been restored to over 31,000 customers
- We should all be very proud of our efforts
- Our customers are extremely grateful for power this holiday season
- Keep up the great work!



EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 5_Ice Storm Thank You Dec 24 2013

4-SIA-27_Attch 5_Ice Storm Thank You Dec 24 2013

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 5_Ice Storm Thank You Dec 24 2013 **From:** Corporate Communications

Sent: Tuesday, December 24, 2013 4:35 PM

To: Horizon - All Employees; Horizon - Contract Employees

Subject: Power Restoration Update

CorpComm

Christmas Eve Power Outage Update

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Thanks to the hard work and dedication of our employees, we continue our efforts to restore power to each and every customer.

Our efforts have received praise from customers and the City of Hamilton and resulted in positive news coverage. Please see the links below to photos and video of our restoration efforts.

Ice Storm - Power Restoration Photos

Horizon Utilities featured on CHCH news - view on your PC

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 6_My Horizon Issue 2 Winter 2014

4-SIA-27_Attch 6_My Horizon Issue 2 Winter 2014

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 6_My Horizon Issue 2 Winter 2014 Winter 2014

INSIDE THIS EDITION | A GREENER HORIZON Page 2 | CHILDREN'S HOLIDAY PARTY Page 3 | HORIZON IN THE COMMUNITY Page 4

Holiday spirit inspires our ice storm recovery efforts



A devastating ice storm struck Hamilton and St. Catharines on the evening of December 21. It resulted in widespread power outages that triggered an immediate call to action to restore service to our customers. Horizon Utilities' employees worked around the clock, making the safe restoration of electricity their top priority.

he devastating winter ice storm that struck Southern Ontario on the evening of Saturday, December 21, 2013, caused extensive damage to Horizon Utilities' distribution system. Toppled tree branches and downed power lines across the cities of Hamilton and St. Catharines left more than 32,000 of our customers without service.

Thanks to the Herculean restoration efforts of Horizon Utilities' employees, who worked nonstop as temperatures plummeted, only 400 of our customers remained without power by Christmas Eve. Still, crews soldiered on, giving up precious time with their families over the holiday season to ensure that our customers who remained without power, largely in hard-to-reach rural areas, would have their service restored in the shortest time possible. After all safety hazards were secured and power was restored to as many of our customers as possible, our crews were able to assist hard-hit Milton Hydro and Toronto Hydro with their restoration efforts.

"On behalf of the entire Executive Management Team," said Max Cananzi, President & CEO, "I sincerely thank each and every employee for your efforts, and especially wish to acknowledge those who worked through the holidays in an effort to restore power to all of our customers. Your positive and selfless response to the ice storm strongly reinforces our core values: safety, respect, integrity, excellence and innovation."

Recognized in 2013 for doing 'good things' at work and for the environment

QUEST 2013 Community Energy Builder Award

The Quality Urban Energy Systems of Tomorrow (QUEST) Community Energy Builder Awards recognize leadership and innovation in advancing smart energy communities in Canada. We are the proud recipient in the Utility category. The award acknowledges both our new Smart Growth Connection Policy, which encourages sustainable urban development, and our Energy Conservation Mapping Project, a powerful tool that identifies customers who can benefit the most from specific energy conservation programs.



Horizon Utilities received the Community Energy Builder Award in the Utility category at the Smart Energy Gala Dinner and Awards Ceremony held in Markham on November 13 as part of the 2013 QUEST Conference & Trade Show (left to right): Neil Freeman, Vice President, Business Development; Gord Reynolds, Capgemini Canada; and Mary Wiens, CBC Metro Morning.

Bruce Trail Conservancy Patron Award

The support we provide the Bruce Trail Conservancy (BTC) helps ensure that future generations

will have access to the Niagara Escarpment, a UNESCO World Biosphere reserve, via the Bruce Trail, Canada's oldest and longest marked footpath. On November 14, the BTC presented Horizon Utilities with the Patron Award in recognition of our ongoing support. Since 2009, we have partnered with the BTC to plant trees, remove invasive species and sponsor educational signage along the trail.

We are excited about this year's event – Bring Back the Butterflies - on April 22. We will join forces with the BTC on Earth Day to plant shrubs and native wildflowers in order to attract wildlife, specifically the Mottled Duskywing butterfly (shown above). Our contribution will help biodiversity in an area of the trail that our support efforts have been focused on for the past few years.

Watch for more event details on HUCnet and HTV.

Hamilton-Niagara's Top 10 Employers

Horizon Utilities has been selected as one of the Top 10 Employers in Hamilton-Niagara for the third



year in a row. The annual competition is organized by the editors of Canada's Top 100 Employers. This special designation recognizes employers in the Hamilton-Niagara area that lead their industries in offering exceptional places to work.

BLOOM Sustainability Leadership Award

We won the 2013 BLOOM Sustainability Leadership Award in the Institutional/



Municipal category at the Sustainability Applied 2013 Gala Dinner and Awards Ceremony held on October 1.

The Leadership Awards acknowledge organizations that excel in creating value through their sustainability strategy, actions and outcomes.

"Winning the BLOOM Sustainability Leadership Award is a tremendous honour for Horizon Utilities. Our strategic decision to focus on sustainable development has made us a better and stronger company," said Neil Freeman, Vice President, Business Development.

BALANCED SCORECARD:

- Easy to Do Business With
- Grow Our Business Profitably
- Best Performing Utility
- - A Great Place to Work



EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 7_Message from CEO Jan 9 2014

4-SIA-27_Attch 7_Message from CEO Jan 9 2014

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27_Attch 7_Message from CEO Jan 9 2014 **From:** Corporate Communications

Sent: Thursday, January 09, 2014 4:44 PM

To: Horizon - All Employees; Horizon - Contract Employees

Subject: A message from Max

A Message from Max

With the ice storm behind us, I would once again like to thank all of our employees involved for their tremendous contribution to our restoration efforts. It was an especially trying time, not only given the holiday season, but the adverse weather conditions caused by the storm itself.

I am so proud of how quickly we were able to get almost all 30,000 customers back on before Christmas day. This was so very much appreciated by our customers. All groups worked extremely well together. It was a real team effort. We maintained regular and informative communications throughout the emergency conditions. We received many positive phone calls and were recognized for our efforts.

As you may be aware, we did have two line maintainers who suffered injuries while on the job. Both are currently recuperating at home. We wish them a speedy recovery and look forward to their return to work in the coming weeks.

Horizon Utilities takes the safety of our employees very seriously - it is our number one priority. When it comes to lost-time injuries, it is never easy news to report. Unfortunately, our employees are often faced with challenging circumstances such as the wind storm that hit our service territory in July and last month's ice storm. And while we have reset the counter, I want to applaud our staff on the achievement of over **2.6 million hours without a lost-time injury**. This is an outstanding achievement!

We should all be very proud of our safety record and our contribution to the communities where we live and work.

Sincerely, Max

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27-Attch 8_Deputy Mayor of Toronto Thanks Horizon Utilities Jan 15 2014

4-SIA-27-Attch 8_Deputy Mayor of Toronto Thanks Horizon Utilities Jan 15 2014

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 4-SIA-27-Attch 8_Deputy Mayor of Toronto Thanks Horizon Utilities Jan 15 2014

Deputy Mayor Norm Kelly

Wednesday, January 15, 2014

Max Cananzi
President & CEO
Horizon Utilities
55 John Street North
Hamilton, ON L8R 3M8

Dear

As the residents and businesses of the City of Toronto return to normalcy, I want to take this opportunity to thank you for your assistance in our recovery effort. Your crews helped the City of Toronto pull through the worst ice storm in recent history.

The damage from the December 21st ice storm was staggering. Nearly 1,000,000 residents, including our most vulnerable, were left without heat or power in extreme cold temperatures. Healthy trees collapsed onto hydro lines, leaving debris on roads and property. The situation was unprecedented.

With Horizon Utilities crews working alongside our emergency response teams, progress was made and power was quickly restored.

On behalf of the Emergency Committee of the City Toronto, thank you for your assistance.

Sincerely

Norm Kelly Deputy Mayor

Chair, Toronto Emergency Management Program Committee (TEMPC)

City of Toronto

EB-2014-0002

Horizon Utilities Corporation Responses to Sustainable Infrastructure

Alliance of Ontario Interrogatories Delivered: August 1st, 2014

Page 1 of 1

4-SIA-28

Ref: Exhibit 4, Tab 3, Schedule 3, Page 67

For the weather event forecasts on lines 15-22, please identify the timeframe by when these events are expected to occur.

- 1 Response:
- 2 Lines 15-22 from Exhibit 4, Tab 3, Schedule 3, Page 67 are reproduced below in **bold** for ease
- 3 of reference.

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- 4 Mean temperatures in Great Lakes Basin could increase by 1.5° C to 2° C in the autumn
- 5 and 4.5 5 °C in winter.
- 6 The Conference Board of Canada reference refers to changes over the next few decades.
- 7 The number of days over 30° C in southern region is expected to more than double by
- 8 2050, with some studies indicating the frequency could increase three-fold.
- 10 The Chiotti/Lavender paper comment is based on studies for the 2050 time period.
- 11 Most areas will experience more precipitation, with most of the increase occurring as
- rain and less as snowfall and an increased risk of ice.
- 13 This trend towards more annual precipitation is already happening as discussed later in the
- 14 Chiotti/Lavender paper. See also discussion on page 35 of Union of Concerned Scientists,
- 15 Confronting Climate Change in the Great Lakes Region, April 2003.
- 16 Great Lakes water levels could decline by 0.5-1.6 meters, despite the increase in
- 17 precipitation, due to reduced ice cover and higher evaporation losses.
- The lower end of the range is based on projected changes by 2050 and the high end of the
- range is consistent with projections for the 2090 period.

4-SIA-29

Ref: Exhibit 4, Tab 3, Schedule 4, Page 15

Please quantify the reduced meter reading costs in 2011 through 2013 as a result of smart meter installations.

Response:

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- 1 Horizon Utilities provides the following Table 1 of OM&A costs associated with the reduction in
- 2 manual meter reading expenditures in 2011 through to 2013 for all rate classes.

3 Table 1: Meter Reading Costs

Meter Reading Costs			
	2011 Actual	2012 Actual	2013 Actual
Manual Meter Reading	\$167,288	\$125,657	\$54,533

- 5 Horizon Utilities has recognized meter reading expenditures savings from the installation of
- 6 Smart Meters of \$41,631 and \$112,755 in 2012 and 2013 respectively.

4-SIA-30

Ref: Exhibit 4, Tab 4, Schedule 6 & Exhibit 4, Tab 3, Schedule 3, Page 22

At Exhibit 4, Tab 4, Schedule 6 Horizon proposes to recover the regulatory costs of this application over the five year period 2015-2019 and states that these costs "have been incurred and expensed in 2013 and 2014". At Exhibit 4, Tab 3, Schedule 3, Horizon states that its Regulatory Budget has been reduced by "\$300,000 relating to the 2011 CoS Application".

- a) Should this \$300K per year, implicitly embedded in rates in 2013 and 2014, not be used to offset the costs of this 2015-2019 application for which Horizon claims costs were incurred in 2013 and 2014 and for which Horizon is requesting full cost recovery over 2015-2019? Why or why not?
- b) In addition to the \$300K, did Horizon's approved regulatory budget in its last COS application include any other costs for applications/regulatory filings or other categorically related expenses? If so, please provide the relevant amounts.
- c) To the extent that some funding for regulatory applications was included in base rates (in a) and/or b) above), please explain why Horizon is requesting full recovery of its 2013 and 2014 costs related to this application over the 2015-2019 period.
- d) Notwithstanding any of the above, under what regulatory authority does Horizon request recovery of out of period costs (i.e. the 2013 and 2014 costs related to this application), which were not tracked in an approved deferral or variance account for clearance? How would Horizon distinguish this approach from retroactive ratemaking?

Response:

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a) 2015 Regulatory Affairs expenditures are forecast to be \$247,791 higher than 2011 Board-Approved. This increase is the "net" difference of the amortized recovery of costs related to preparation of the 2015 Custom IR Application in the amount of \$551,941, and the amortized amount that was approved for the 2011 CoS at \$240,000 per year. The difference of approximately \$61,000 is the reallocation of the "envelope" from the 2011 application and assigned to Regulatory at that time to adjust for expenses that were incurred in 2011 for the CoS. The amount of \$240,000 has been embedded into the rates from 2011 – 2014 and do not offset any of the costs for the 2015 application. Horizon Utilities' approved regulatory budget in its last CoS included amounts estimated for annual IRM applications and ad hoc filings, separate from the 2011 CoS costs.

Page 2 of 2

Horizon Utilities has not included costs in this application for the preparation of the next rebasing application currently planned to be filed in 2019.

- b) The amount included in base rates since 2011 was the amortized amount approved by the Board for costs that were incurred in the development of the 2011 CoS application in previous years. Costs for adhoc applications such as Service Area Amendments ("SAAs"); Smart Meter Prudence Review ("SMPR") and annual Incentive Rate Mechanisms ("IRMs") are expected to be absorbed in the regulatory budget. The costs relating to this 2015 Custom IR Application were not part of the 2011 Regulatory budget and therefore not embedded in rates.
- 10 c) Please see response to b) above.

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- d) Under the "Filing Requirements for Electricity Distribution Rate Applications (updated July 17, 2013) Chapter 2, Section 2.7.3.4, the following is stated with respect to One-Time Costs:
 - "The applicant must identify one-time costs in the historical, bridge and test years and provide an explanation as to how the costs included in the test year are to be recovered. If a distributor is not proposing that one-time costs be recovered over the test year and the subsequent IRM term, an explanation must be provided."
- In Exhibit 4, Tab 4, Schedule 6, Table 4-72, the description reads:
- "Please fill out the following table for all <u>"one-time"</u> costs related to this Cost of Service application to be amortized over the test year, plus the IRM period.
- The Board's policy on the recovery of costs incurred to prepare applications has been in place for a number of years without the requirement for the establishment of a deferral account.

4-SIA-31

Ref: Exhibit 4, Tab 4, Schedule 7

Please confirm that Horizon has used the "Service Revenue Requirement" (as opposed to the "Distribution Revenue Requirement") in calculating its LEAP amounts for 2015 through 2019.

Response:

- 1 Horizon Utilities has not used the Service Revenue Requirement to calculate LEAP amounts for
- 2 2015-2019. Consistent with the Chapter 2 Filling Requirement 2.7.3.6 Low-Income Energy
- 3 Assistance Programs, Horizon Utilities has calculated the LEAP amounts at 0.12% of the
- 4 distribution revenue requirement. The LEAP amounts are provided at Exhibit 4, Tab 4,
- 5 Schedule 7.

Page 1 of 3

8-SIA-32

Ref: Exhibit 8 Tab 1 Schedule 7

- a) Has Horizon reviewed the rates currently being charged for all currently approved specific service charges to determine their appropriateness (in terms of continued applicability, cost recovery, etc)? If not, why not?
- b) Please recalculate all currently approved specific service charges, using the calculation methodology included in Schedule 11-2 of the Distribution Rate Handbook and updating for Horizon's current actual vehicle and labour rates.
- c) By how much would Horizon's total revenue offsets increase or decrease if its revenue offset forecast amount reflected the actual cost-based charges as calculated in b) above?

Response:

- a) Horizon Utilities did review the applicability of the specific service charges as they are
- contained in its pre-filed evidence and was satisfied that they continued to be appropriate.
- With respect to the rates, page 107 of the Distribution Rate Handbook ("DRH") states: "The
- 4 applicant may choose one of the following four approaches to define the level of the charge
- 5 to bill the customer:
- the standard amount, as specified in Schedule 11-1;
- the standard formula, as specified in Schedule 11-2, with adjustments If the applicant
- 8 elects to adjust the level determined by the standard formula, it must provide additional
- 9 evidence of cost justification for the adjustments;
- the level determined on a basis other than the standard formula. The applicant must
- provide evidence to justify the use of a non-standard formula; and
- A distributor may specify in its Conditions of Service that the specific service being
- provided will be charged on an actual cost, time and materials basis, or a pass-through of
- third party costs. On this basis, approval of the Board is not required, but the applicant must
- maintain records that demonstrate that the actual cost was charged to the customer."
- Horizon Utilities followed the first option of using the "standard amount, as specified in
- 17 Schedule 11-1 of the DRH."

In preparation for responding to this interrogatory, Horizon Utilities has reviewed the specific service charge rates of other LDCs in the Golden Horseshoe area, and found that 21 out of 25 have rates that fully correspond to the standard amounts in Schedule 11-1 of the DRH. In Horizon Utilities' view, the its proposed rates are appropriate in that they are aligned with many of its peers.

b) The following table shows currently approved service charge rates and the results of the calculation methodology included in Schedule 11-2 of the DRH with Horizon Utilities' current actual vehicle and labour rates.

Table 1: Service Charge Rates

Specific Service Charge	Current Rate	Calculated Rate
Arrears certificate; Statement of Account; Pulling Post-Dated cheques; Duplicate invoices for previous billing; Request for other billing information; Easement Letter; Income Tax Letter; Notification charge; Account History; Returned cheque charge (plus bank charges); Charge to certify cheque; Legal letter charge	\$15.00	\$20.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable); Special meter reads; Meter dispute charge plus Measurement Canada fees (if meter found correct); Collection of account charge - no disconnection; Service call - customer owned equipment	\$30.00	\$45.00
Disconnect/Reconnect at meter - during regular hours	\$65.00	\$90.00
Collection of account charge - no disconnection - after regular hours; Service call - after regular hours	\$165.00	\$290.00
Disconnect/Reconnect at meter - after regular hours	\$185.00	\$320.00
Disconnect/Reconnect at pole - during regular hours	\$185.00	\$230.00
Temporary Service - Install & remove - underground - no transformer	\$300.00	\$385.00
Disconnect/Reconnect at pole - after regular hours	\$415.00	\$660.00
Temporary Service - Install & remove - overhead - no transformer	\$500.00	\$525.00
Temporary Service - Install & remove - overhead - with transformer	\$1,000.00	\$1,085.00

c) Horizon Utilities estimates that the total revenue offsets would increase by \$716,786 if the rates calculated above were used to determine the revenue offsets forecast.

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1	However, Horizon Utilities observes that the calculated rates only incorporate the
2	updated vehicle and labour rates, as requested in the interrogatory above. It does not
3	incorporate updates to all other elements of the calculation.
4	In any event, Horizon Utilities has followed the Board's policy as articulated in Schedule
5	11-1 of the DRH with respect to setting its specific service charges.

8-SIA-33

Ref: Exhibit 8 Tab 1 Schedule 7

- a) Would the Paymentus credit card service charge apply only to those customers who use it to voluntarily make ongoing regular bill payments, or all credit card payments including the emergency collection payments as described under Distribution System Code 4.2.5?
- b) Does Horizon offer alternatives to credit card payments when making disconnection/collection calls such that customers could avoid this proposed fee?
- c) Is Horizon aware of any other institutions that apply a surcharge for bill payments made by credit card?

Response:

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- a. The Paymentus Credit Card Charge applies to those customers who choose to utilize this payment option to provide a regular bill payment or an emergency collection payment.
- b. Horizon Utilities provides customers with a number of alternatives beyond credit card payments. These include payment receipt by cash, certified cheque, money order, online banking, or telebanking; or commitment to an arrears management program with provision of an initial down payment.
 - Horizon Utilities also temporarily postpones customer disconnection for non-payment of account for a period of 20 days where the customer engages a social agency to determine if they qualify for low-income financial assistance.
- c. Horizon Utilities understands that a number of Ontario LDCs also use Paymentus, or similar organizations, as a third party credit card processing facility. Each of the organizations charges a service fee; typically around \$6.00 per transaction. Historically the service fee has been charged directly by the service provider (such as Paymentus) to the customer utilizing the service. Ontario LDCs (including Horizon Utilities) have typically provided a disclaimer of this transaction fee on their website, providing explanation to the customer that the service fee is collected directly by the credit card processing facility and is not remitted to the LDC.
 - Paymentus advised Horizon Utilities that VISA would disallow Paymentus from applying a transactional service charge to the customer's payment on December 18, 2013. A

copy of Paymentus' VISA Notice to Canadian Customers is attached as 8-SIA-33_Attch 1 – Paymentus Letter.

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As credit card services are utilized by customers as a method to conveniently pay their bills on-line, Horizon Utilities has applied for a Service Fee, as identified in Exhibit 8, Tab 1, Schedule 7, which represents a slightly different approach to the collection and remittance of this fee. Under this approach Horizon Utilities will collect the service fee on behalf of the processing facility and remit these amounts to Paymentus on a monthly basis. While Horizon Utilities is not aware of any other Ontario LDC that collects and remits the service fee in this way, the customer impact is not different than the many LDCs where the credit card processing facility charges the customer directly. Please also see Horizon Utilities' response to Interrogatory 8.0 VECC-61.

EB-2014-0002 Horizon Utilities Corporation Responses to Sustainable Infrastructure Alliance of Ontario Interrogatories Delivered: August 1st, 2014 8-SIA-33_Attch 1_Paymentus Letter

8-SIA-33_Attch 1_Paymentus Letter

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Paymentus

Dear Paymentus Canada Customer:

We have recently been informed by VISA Canada that the payment transactions processed on your behalf are no longer permitted under the Visa International Operating Regulations (the "Visa Rules"). Visa Canada alleges that such transactions involve the application of a surcharge, contrary to Visa's Rules. Visa Canada has informed us that we are required to discontinue processing such transactions effective January 15, 2014 or we and our customers face potential fines and other penalties. This recent announcement has been a surprise to us given that the Paymentus system has been in operation for several years, was previously reviewed by VISA Canada and is, in fact, used by VISA Canada to make various bill payments.

For clarity, this only impacts VISA and not MasterCard, AMEX and Interac Online. All of these other forms of payment will continue to be supported under our system.

We are working very hard to find a resolution of this issue that will be acceptable to Visa Canada. At present we appear to have the following two options:

1. Discontinue accepting Visa credit cards and only accept MasterCard, AMEX and Interac Online:

On January 15, 2014, midnight, stop accepting Visa as a method of Payments through our service. We anticipate that a substantial portion of the Visa Card volume will move to MasterCard and AMEX.

2. OEB regulation superseding Visa Rules:

The Visa Rules permit service providers to surcharge on VISA cards where a local law or regulation requires that such service providers be permitted to surcharge. VISA Canada has informed us that a local law or regulation can supersede the Visa Rules. Indeed, several agencies in Canada surcharge on credit cards relying upon local laws that permit such practices. One option would be to seek a regulation from the Ontario Energy Board or other public commission or in case of a municipality, have your council approve a by-law that specifically permits surcharging on VISA cards when used to make payments to utilities or your agency as the case may be.

We will also attempt to reach out to OEB to see if a regulation such as this can be passed. We encourage you to do the same with the OEB or any entities you are governed by, such as your local utility board or local municipal council to pass a regulation or a by-law as the case may be which permits a surcharge for the use of credit cards.

We will also continue to try and work with Visa Canada to find a solution and ensure that 'no stone is left unturned'.

We are continuing to explore the options above and hope to have a solution that will permit us to continue to process VISA transactions before the January 15, 2014 deadline. In the event that we have not been able to achieve that solution before January 15, 2014, we will notify you via our Agent Dashboard and discontinue accepting VISA temporarily to avoid any potential fines and penalties until we are able to find a solution or a local regulation by OEB or other utility boards, and in case of a municipality, a local by-law is passed.

We regret that VISA Canada has taken this position.

We will continue to keep you posted via Agent Dashboard if there is any change. Please feel free to contact me if you have any questions.

Regards,

Michael Hughes

Director, Customer Service

Paymentus Canada Corporation

MS. Hugh.

1-888-476-8910 x236