

VECC-1

Ref: Exhibit 1 P14 Table 24

- a) Please provide the planned budgeted amounts for each of the years 2015 to 2018.
- b) Please provide 2018 actuals.

Response:

- a) Burlington Hydro provides the budgeted capital expenditure amounts by category for 2015 to 2018 in Table 1 below. The 2018 budget included a true-up for the Tremaine TS which is not expected until 2019.

Table 1 – Budgeted Expenditures by Category 2015-2018

Category	2015 Budget	2016 Budget	2017 Budget	2018 Budget
System Access	\$8,149,196	\$7,885,000	\$10,410,000	\$14,060,000
System Renewal	\$1,536,665	\$1,308,000	\$1,543,000	\$1,233,000
System Service	\$785,661	\$295,000	\$395,000	\$1,295,000
General Plant	\$1,085,000	\$1,023,158	\$2,152,000	\$1,396,471
Total Gross Capital	\$11,556,522	\$10,511,158	\$14,500,000	\$17,984,471
Contributed Capital	(\$3,696,000)	(\$3,205,000)	(\$4,260,000)	(\$3,675,000)
Total Net Capital	\$7,860,522	\$7,306,158	\$10,240,000	\$14,309,471

- b) Burlington Hydro has not completed all of its year end entries and therefore 2018 Actuals are not available. Burlington Hydro provides the latest estimate (November YTD plus December forecast) of its 2018 capital expenditure amounts by category in Table 2 below.

Table 2 – Forecasted Expenditures 2018

Category	2018 Updated Forecast
System Access	\$10,379,374
System Renewal	\$1,765,194
System Service	\$270,671
General Plant	\$1,413,732
Total Gross Capital	\$13,828,972
Contributed Capital	(\$3,149,123)
Total Net Capital	\$10,679,849

VECC-2

Ref: Exhibit 1 P38

Burlington Hydro states, “Each project is distinct and unrelated to a recurring annual capital project. Three projects are system access projects related to the provision of supply from Hydro One owned transformer stations. The fourth project is a general plant project involving the replacement of Burlington Hydro’s Customer Information System.

Please explain Burlington Hydro’s request in this application related to the fourth project: replacement of Burlington Hydro’s Customer Information System.

Response:

The sentence *“The fourth project is a general plant project involving the replacement of Burlington Hydro’s Customer Information System”* on page 38 of Exhibit 1 was included in this application in error. Burlington Hydro is not requesting any funding in this application for the replacement of its Customer Information System and there is no ICM request for a fourth project.

VECC-3

Ref: Appendix H P1

Based on an estimate of the fifth-year true-up using an updated demand forecast, Burlington Hydro has determined a shortfall in revenue to Hydro One of \$2.5 million as compared to the CCRA.

Please provide the calculation that underpins the \$2.5 million.

Response:

Burlington Hydro used an “unlocked” discounted cash flow model provided by Hydro One (*“Tremaine CCRA model”*) solely for the purpose of estimating the 5 year true-up for the Tremaine TS. All inputs were provided by Hydro One with the exception of Section E – Load Inputs at cell A73 on Tab “Project Inputs” which Burlington Hydro adjusted to incorporate its revised load forecast. It did not make any other changes to the model. Row 82 on Tab “Project Inputs” represents the difference between the original demand forecast and the revised demand forecast, and is equal to the results reported in Table 3 of Burlington Hydro’s response to VECC-5a).

The model generates an estimated 5th year true-up of \$2.8M as identified in cell G18 on Tab “Capital Cont Inputs”. Burlington Hydro applied for an ICM of \$2.5M with the intention that it would update for the actual true-up as calculated by Hydro One, prior to the OEB rendering a decision on this Application.

The Tremaine CCRA model is provided as a live excel file: Attachment VECC1_Tremaine CCRA Model_BHI_20190124.

VECC-4

Ref: Exhibit 1 P44

Burlington Hydro indicates it will make a subsequent update to the application for the actual true-up amount which is expected to be available from Hydro One prior to the Board rendering its Decision on this application.

- a) Please provide an update on the status of receiving the actual true-up from Hydro One.
- b) If available, please provide the actual true-up amount and the underlying calculation.

Response:

- a) Burlington Hydro expects Hydro One's initial calculation of the true-up amount in mid-February 2019.
- b) The actual true-up amount is not available.

VECC-5

Ref: Exhibit 1 P45

Burlington Hydro indicates the estimate of the fifth-year true-up for the Tremaine TS is based on an updated demand forecast.

- a) Please provide a schedule that outlines the annual forecast demand for the Tremaine TS at the time of the signing of the first Hydro One agreement compared to the updated demand forecast.
- b) For each annual period in part (a), please provide the average monthly unused capacity (MW) at Tremaine TS.
- c) Please identify the key assumptions in the original demand forecast and explain any variances in these key assumptions.
- d) Please provide the new key assumptions that underpin the revised forecasted demand.

Response:

- a) Burlington Hydro provides the annual forecast demand for the Tremaine TS at the time of the signing of the first Hydro One agreement compared to the updated demand forecast in Table 3 below. Burlington Hydro has also included the demand for the Palermo TS. Hydro One has confirmed that the Tremaine CCRA fifth year true-up will be calculated based on the combined demand at Tremaine TS and Palermo TS, not the Tremaine TS in isolation.

Table 3 - Original Demand vs. Revised Demand Forecast - Tremaine and Palermo Transformer Stations

Year	Original Demand Forecast (MW)			Revised Demand Forecast (MW)			Original Demand Forecast Over/(Under) MW		
	Total	Tremaine TS	Palermo TS	Total	Tremaine TS	Palermo TS	Total	Tremaine TS	Palermo TS
2012	67.9	37.2	30.7	39.6	0.0	39.6	(28.3)	(37.2)	8.9
2013	72.5	41.8	30.7	56.4	24.1	32.3	(16.1)	(17.7)	1.6
2014	77.1	46.4	30.7	73.5	50.0	23.5	(3.6)	3.6	(7.2)
2015	81.8	51.1	30.7	59.8	49.6	10.2	(22.0)	(1.5)	(20.5)
2016	86.4	55.7	30.7	83.0	63.8	19.2	(3.4)	8.1	(11.5)
2017	91.1	60.4	30.7	74.4	57.8	16.7	(16.7)	(2.6)	(14.0)
2018 Fcst	95.7	65.0	30.7	81.1	61.3	19.8	(14.6)	(3.7)	(10.9)
2019	100.3	69.6	30.7	90.6	65.6	25.0	(9.7)	(4.0)	(5.7)
2020	105.0	74.3	30.7	93.3	68.1	25.3	(11.7)	(6.2)	(5.5)
2021	109.6	78.9	30.7	96.1	70.6	25.5	(13.5)	(8.3)	(5.2)
2022	114.2	83.5	30.7	98.9	73.2	25.8	(15.3)	(10.3)	(4.9)
2023	118.7	88.0	30.7	101.8	75.8	26.0	(16.9)	(12.2)	(4.7)
2024	122.8	92.1	30.7	104.7	78.4	26.3	(18.1)	(13.7)	(4.4)
2025	126.5	95.8	30.7	107.6	81.0	26.5	(18.9)	(14.8)	(4.2)
2026	129.7	99.0	30.7	110.5	83.7	26.8	(19.2)	(15.3)	(3.9)
2027	132.5	101.8	30.7	113.5	86.4	27.1	(19.0)	(15.4)	(3.6)
2028	134.5	103.8	30.7	116.5	89.1	27.3	(18.0)	(14.7)	(3.4)
2029	136.1	105.4	30.7	119.5	91.9	27.6	(16.6)	(13.5)	(3.1)
2030	137.3	106.6	30.7	123.3	95.4	28.0	(14.0)	(11.2)	(2.7)
2031	138.3	107.6	30.7	127.2	98.9	28.3	(11.1)	(8.7)	(2.4)
2032	139.4	108.7	30.7	132.1	103.4	28.7	(7.3)	(5.3)	(2.0)
2033	140.4	109.7	30.7	137.9	108.9	29.0	(2.5)	(0.8)	(1.7)
2034	141.4	110.7	30.7	143.8	114.4	29.4	2.4	3.7	(1.3)
2035	142.5	111.8	30.7	149.8	120.0	29.8	7.3	8.2	(0.9)
2036	143.5	112.8	30.7	155.9	125.7	30.1	12.4	12.9	(0.6)
2037	144.5	113.8	30.7	162.0	131.5	30.5	17.5	17.7	(0.2)

- b) Burlington Hydro provides the average monthly unused capacity (MW) at Tremaine TS in Table 4 below, based on the contracted capacity of 114.75MW. Burlington Hydro has also included the average monthly unused capacity (MW) at Palermo TS. Hydro One has confirmed that the Tremaine CCRA fifth year true-up will be calculated based on the combined demand at Tremaine TS and Palermo TS, not the Tremaine TS in isolation.

Table 4 – Average Monthly Unused Capacity - Tremaine and Palermo Transformer Stations

Year	Contracted Capacity (MW)			Revised Demand Forecast (MW)			Unused/(Over) Capacity (MW)		
	Total	Tremaine TS	Palermo TS	Total	Tremaine TS	Palermo TS	Total	Tremaine TS	Palermo TS
2012	145.5	114.8	30.7	39.6	0.0	39.6	105.9	114.8	(8.9)
2013	145.5	114.8	30.7	56.4	24.1	32.3	89.0	90.7	(1.6)
2014	145.5	114.8	30.7	73.5	50.0	23.5	71.9	64.7	7.2
2015	145.5	114.8	30.7	59.8	49.6	10.2	85.6	65.1	20.5
2016	145.5	114.8	30.7	83.0	63.8	19.2	62.5	51.0	11.5
2017	145.5	114.8	30.7	74.4	57.8	16.7	71.0	57.0	14.0
2018 Fcst	145.5	114.8	30.7	81.1	61.3	19.8	64.3	53.4	10.9
2019	145.5	114.8	30.7	90.6	65.6	25.0	54.9	49.2	5.7
2020	145.5	114.8	30.7	93.3	68.1	25.3	52.1	46.7	5.5
2021	145.5	114.8	30.7	96.1	70.6	25.5	49.3	44.1	5.2
2022	145.5	114.8	30.7	98.9	73.2	25.8	46.5	41.6	4.9
2023	145.5	114.8	30.7	101.8	75.8	26.0	43.7	39.0	4.7
2024	145.5	114.8	30.7	104.7	78.4	26.3	40.8	36.4	4.4
2025	145.5	114.8	30.7	107.6	81.0	26.5	37.9	33.7	4.2
2026	145.5	114.8	30.7	110.5	83.7	26.8	34.9	31.0	3.9
2027	145.5	114.8	30.7	113.5	86.4	27.1	32.0	28.3	3.6
2028	145.5	114.8	30.7	116.5	89.1	27.3	29.0	25.6	3.4
2029	145.5	114.8	30.7	119.5	91.9	27.6	26.0	22.9	3.1
2030	145.5	114.8	30.7	123.3	95.4	28.0	22.1	19.4	2.7
2031	145.5	114.8	30.7	127.2	98.9	28.3	18.3	15.9	2.4
2032	145.5	114.8	30.7	132.1	103.4	28.7	13.4	11.3	2.0
2033	145.5	114.8	30.7	137.9	108.9	29.0	7.5	5.8	1.7
2034	145.5	114.8	30.7	143.8	114.4	29.4	1.6	0.3	1.3
2035	145.5	114.8	30.7	149.8	120.0	29.8	(4.4)	(5.3)	0.9
2036	145.5	114.8	30.7	155.9	125.7	30.1	(10.4)	(11.0)	0.6
2037	145.5	114.8	30.7	162.0	131.5	30.5	(16.5)	(16.7)	0.2

d) The key assumptions in the original demand forecast were that total demand of Tremaine TS and Palermo TS would be 477MW from 2012-2017. Actual demand for this time period was 387MW. The original demand forecast assumed the following:

- Strong economic growth
- Residential growth attributed to increase in single family homes
- Moderate reduction in demand due to conservation and demand management programs
- No Distributed Generation
- No Time of Use Pricing

The reduction in demand was a result of several factors. The recovery from the 2009 recession was slower than anticipated, contributing to a lack of economic momentum. Residential growth is driven by multi-unit residential buildings (condominiums) with lower demand and consumption than single family homes. Conservation and demand management programs were more successful than anticipated. Time of use pricing was introduced and distributed generation was implemented.

e) The Tremaine TS is expected to reach contracted capacity in 2034. Residential growth will primarily be the result of an increase in multi-unit residential buildings (condominiums) with lower demand and consumption than single family homes. System growth is forecast to be 1% per year.

VECC-6

Ref: Appendix G P1

- a) Please provide the total available capacity at the Tremaine TS.
- b) Please confirm 25% of the capacity of the Tremaine TS is allocated to Milton Hydro.
- c) Please provide Burlington Hydro's contracted capacity at Tremaine TS.
- d) Please provide the % of available capacity at the Tremaine TS at the end of 2017.
- e) Please provide the original capital contribution for Tremaine TS.

Response:

- a) The total contracted capacity at the Tremaine TS is 153MW.
- b) Burlington Hydro confirms that 25% of the contracted capacity or 38.25MW is allocated to Milton Hydro.
- c) Burlington Hydro's contracted capacity at Tremaine TS is 114.75MW.
- d) The % of available capacity at the Tremaine TS at the end of 2017 was 50%.
- e) The original capital contribution for the Tremaine TS was \$4,113,602 representing a Transformation Capital Contribution of \$3,796,100 and a one-time fixed charge of \$317,502 for revenue metering and feeder duct banks.

VECC-7

Ref: Appendix G Schedule A P8

Please complete the following table :

Existing Load Facility	Existing Load (MW)*	Normal Capacity (MW)*
Burlington TS		
Bronte TS (T2)		
Cumberland TS		
Palermo TS		
Tremaine TS		
Total		

- Definitions as per Appendix G Schedule A

Response

Burlington Hydro provides the existing load and normal capacity by transformer station in Table 5 below. Definitions are as per those on page 8 of Schedule A of the Tremaine CCRA Agreement.

Table 5 – Existing Load and Normal Capacity

Existing Load Facility	Existing Load (MW) ¹	Normal Capacity (MW) ²
Burlington TS	156.00	156.00
Bronte TS (T2)	30.00	30.00
Cumberland TS	148.20	148.20
Palermo TS	30.70	30.70
Tremaine TS	114.75	114.75
Total	479.65	479.65

1. Existing load = Customer's Assigned Capacity as at date of Tremaine CCRA Agreement

2. Normal Capacity = portion of facility's capacity which is available for supplying the customer

VECC-8

Appendix J P1

Please provide a breakdown of the \$2 million budget amount.

Response:

A breakdown of the \$2M budget amount is provided in Table 6 below.

Table 6 – Breakdown of \$2M Tremaine TS Additional Breakers

Category	\$000's
Project Management	\$100
Engineering	\$400
Equipment	\$380
Construction	\$400
Stations	\$240
Interest and Overhead	\$200
Contingency	\$280
Total	\$2,000

VECC-9

Appendix J P1

Please provide the forecast in-service date in 2019.

Response:

The forecasted in-service date is Q4 2019.

VECC-10

Ref: Appendix J P1

The evidence states “In late 2017, Burlington Hydro determined it needed to construct two (2) more breakers to allow for full utilization of its capacity at the Tremaine TS to:

- i. accommodate future growth in the North-East area of Burlington which is served by the Tremaine TS and the Palermo TS.
 - ii. take load off the Bronte TS which is operating over capacity; and
 - iii. take load off the Cumberland TS for which capacity needs to be freed up to accommodate future growth in the downtown core.
- a) Please provide the capacity at the Tremaine TS that will be utilized through the construction of the two new breakers.
 - b) For each of the above needs (i-iii), please provide the corresponding load.
 - c) For each of the above needs (i-iii), please provide the forecast timing.

Response:

- a) The capacity at the Tremaine TS that will be utilized through the construction of the two new breakers is 29MW.
- b) Burlington Hydro provides the corresponding load and forecasted timing for the above needs in Table 7 below.

Table 7 - Load Requirements at Tremaine TS

Need	Load	Timing
i. Accommodate Future Growth North East Burlington	1-3MW/year	2019-2037
ii. Take Load off Bronte TS	5MW	2022-2031
iii. Take Load off Cumberland TS	15MW	2022-2031

- c) Please refer to Burlington Hydro’s response to VECC-10b).

VECC-11

Ref: Appendix J P1

The evidence indicates that if Burlington Hydro defers purchase of breakers until a later date and the breaker positions were no longer available (Option #2), Burlington Hydro's options to acquire additional capacity are (i) to build out the Tremaine TS structure to accommodate more breakers, which cannot be guaranteed by HONI or (ii) build a new TS; both of which are significantly more expensive than the capital cost of constructing two breakers.

- a) Please provide the cost estimate (i) to build out the Tremaine TS structure to accommodate more breakers and (ii) build a new TS.
- b) Are there any provisions in Burlington Hydro's agreement with Hydro One, for Hydro One to provide advance notice to Burlington Hydro of any potential requests from load customers for available capacity? If yes, please provide details.
- c) Is Burlington Hydro aware of any near-term or long-term requests from load customers seeking available capacity? If yes, please provide details.

Response:

- a) The cost estimate to build out the Tremaine TS structure to accommodate more than 12 breakers at the Tremaine TS is approximately \$1.5M/breaker in today's dollars. The cost of building a new TS is \$25-30M.
- b) No, there are no provisions in Burlington Hydro's agreement with Hydro One for Hydro One to provide advance notice to Burlington Hydro of any potential requests from load customers for available capacity.
- c) Yes, Burlington Hydro was made aware of a near-term request from another load customer seeking available capacity. Another LDC expressed interest in constructing the two breakers which Burlington Hydro has since contracted with Hydro One to construct.

VECC-12

Ref: Appendix L

In 2006, Burlington Hydro requested that Hydro One install two 27.6kV feeder breaker positions Hydro One's Bronte TS #2. Hydro One conducted the 5th-year true-up in 2013 at which time it was determined that Burlington Hydro did not owe monies in excess of the original capital contribution. HONI will be conducting the 10th-year true-up in Q4 2018. Burlington Hydro is estimating a shortfall in revenue to Hydro One of \$0.35M as compared to the CCRA. Burlington Hydro expects to make this payment to HONI in Q1 2019.

- a) Please provide Hydro One's 10th-year true-up provided in Q4 2018 and provide the documentation and calculation.
- b) Please provide a schedule that outlines the annual forecast demand (load) for the Bronte TS Breakers at the time of the signing of the first Hydro One agreement compared to the updated demand forecast.
- c) Please identify the key assumptions in the original demand forecast (load) for the Bronte TS Breakers and explain any variances in these key assumptions.
- d) Please provide the new key assumptions that underpin the revised forecasted demand (load) for the Bronte TS Breakers.

Response:

- a) Hydro One's 10th-year true-up is not available. Burlington Hydro expects Hydro One's initial calculation of the true-up amount in mid-February 2019. Hydro One could not provide an unlocked CCRA model for the Bronte TS and was unable to provide an estimate for the tenth year true-up. Burlington Hydro used the Tremaine CCRA model as a proxy to estimate the tenth year true-up for the Bronte TS.
- b) Burlington Hydro provides the annual forecast demand for the Bronte TS at the time of the signing of the first Hydro One agreement compared to the updated demand forecast in Table 8 below. Burlington Hydro has also included the demand for the Palermo TS. Hydro One has confirmed that the Bronte CCRA tenth year true-up will be calculated based on the combined demand at Bronte TS and Palermo TS, not the Bronte TS in isolation.

Table 8 - Original Demand vs. Updated Demand Forecast - Bronte and Palermo Transformer Stations

Year	Original Demand Forecast (MW)			Revised Demand Forecast (MW)			Original Demand Forecast Over/(Under) MW		
	Total	Bronte TS	Palermo TS	Total	Bronte TS	Palermo TS	Total	Bronte TS	Palermo TS
2008	60.7	30.0	30.7	85.5	43.4	42.0	24.8	13.4	11.3
2009	60.7	30.0	30.7	73.8	39.9	33.9	13.1	9.9	3.2
2010	60.7	30.0	30.7	79.8	43.4	36.3	19.1	13.4	5.6
2011	60.7	30.0	30.7	90.8	52.2	38.5	30.1	22.2	7.8
2012	60.7	30.0	30.7	80.7	41.1	39.6	20.0	11.1	8.9
2013	60.7	30.0	30.7	79.8	47.4	32.3	19.1	17.4	1.6
2014	60.7	30.0	30.7	68.1	44.5	23.5	7.4	14.5	(7.2)
2015	60.7	30.0	30.7	46.1	36.0	10.2	(14.6)	6.0	(20.5)
2016	60.7	30.0	30.7	57.0	37.8	19.2	(3.7)	7.8	(11.5)
2017	60.7	30.0	30.7	60.9	44.3	16.7	0.2	14.3	(14.0)
2018 Fcst	60.7	30.0	30.7	56.5	36.7	19.8	(4.2)	6.7	(10.9)
2019	60.7	30.0	30.7	55.0	30.0	25.0	(5.7)	-	(5.7)
2020	60.7	30.0	30.7	55.3	30.0	25.3	(5.5)	-	(5.5)
2021	60.7	30.0	30.7	55.5	30.0	25.5	(5.2)	-	(5.2)
2022	60.7	30.0	30.7	55.8	30.0	25.8	(4.9)	-	(4.9)
2023	60.7	30.0	30.7	56.0	30.0	26.0	(4.7)	-	(4.7)
2024	60.7	30.0	30.7	56.3	30.0	26.3	(4.4)	-	(4.4)
2025	60.7	30.0	30.7	56.5	30.0	26.5	(4.2)	-	(4.2)
2026	60.7	30.0	30.7	56.8	30.0	26.8	(3.9)	-	(3.9)
2027	60.7	30.0	30.7	57.1	30.0	27.1	(3.6)	-	(3.6)
2028	60.7	30.0	30.7	57.3	30.0	27.3	(3.4)	-	(3.4)
2029	60.7	30.0	30.7	57.6	30.0	27.6	(3.1)	-	(3.1)
2030	60.7	30.0	30.7	58.0	30.0	28.0	(2.7)	-	(2.7)
2031	60.7	30.0	30.7	58.3	30.0	28.3	(2.4)	-	(2.4)
2032	60.7	30.0	30.7	58.7	30.0	28.7	(2.0)	-	(2.0)

- c) The key assumptions in the original demand forecast were that Bronte TS and Palermo TS would be operating at full capacity from 2008-2032. The two new breakers were required at Bronte to utilize its full contracted capacity.

Bronte and Palermo TS ended up operating over-capacity for 2008-2014 to accommodate growth (Tremaine TS was not in service until 2013 and the infrastructure was not in place to fully transfer load to the Tremaine TS in 2013 and 2014). As a result there was no fifth year true-up for the Bronte TS breakers. The Bronte TS will operate at capacity in 2019 to 2032. Future load at the Palermo TS is expected to be lower than capacity due to slower economic growth than anticipated, residential growth is attributed to multi-unit residential buildings instead of single family homes, stronger uptake of conservation and demand management programs, and an increase in distributed generation.

- d) There is no change to the revised demand forecast for the Bronte TS from 2019 to 2032. It is forecast to be operating at capacity. The Palermo TS will be operating between 2-6MW under capacity over the period from 2019-2032 for the reasons identified above.

VECC-13

Ref: Appendix L

Please discuss if the 5 year true-up payment was discussed in Burlington Hydro's 2014 Cost of Service application and if any amount was approved in 2014 rate base.

Response:

No, a 5-year true-up payment was not discussed in Burlington Hydro's 2014 Cost of Service application. At the time of filing the 2014 Cost of Service application, Burlington Hydro expected no 5-year true-up payment. No amount was approved in 2014 rate base.

The demand forecast underpinning the Tremaine TS CCRA was completed July 30, 2013. Burlington Hydro filed its 2014 Cost of Service application EB-2013-0115 on October 1, 2013 and received a Decision and Order on May 15, 2014. Burlington Hydro did not anticipate any changes to the demand forecast underpinning the CCRA within the nine months between finalizing the Tremaine TS CCRA agreement and receiving a decision on its Cost of Service application. Therefore a 5-year true-up payment was not expected.

VECC-14

Appendix N

- a) Please provide Burlington Hydro's vegetation management strategy.
- b) Please provide Burlington Hydro's vegetation management cycle.
- c) Please provide Burlington Hydro's vegetation management accomplishments for each of the years 2013 to 2018 compared to plan.
- d) Please provide Burlington Hydro's vegetation management budget vs. actuals for each of the years 2013 to 2018.
- e) Please provide the total number of hours worked on the Z-factor event.
- f) Please provide the number of hours in part (e) at Regular Time and Overtime.
- g) Please provide the vegetation management amount approved in base rates.
- h) Please provide storm budget vs. actuals for each of the years 2013 to 2018.
- i) Please provide the storm budget amount approved in base rates.

Response:

- a) Burlington Hydro divides its service area into 3 areas and 16 zones for the purposes of managing vegetation. The practice of dividing Burlington Hydro's service area into 16 zones commenced in 2017 to manage costing, scheduling and completion assessment on a more granular basis. Burlington Hydro currently trims trees to within three meters of the conductor.
- b) Burlington Hydro's vegetation management cycle is three years.

- c) Burlington Hydro's vegetation management accomplishments for each of the years 2013 to 2018 compared to plan are provided in Table 9 below. Table 10 identifies the areas and zones in Burlington Hydro's service territory for the purposes of vegetation management. Burlington Hydro provides a map of its service areas by area and zone as Attachment VECC2_Vegetation Management Zones_BHI_20190124.

Table 9 – Vegetation Management Accomplishments

Year	Planned Areas/Zones	Actual Areas/Zones
2013	Area A - West Burlington and area North of Britannia Road	100% completed
2014	Area C - East Burlington	80% completed
2015	Area B - Central Burlington	Area B 100% completed plus remainder of Area C
2016	Area A - West Burlington and area North of Britannia Road	100% completed
2017	Area C (Zones 1-5)	Zones 1-4 completed; 30% of Zone 5
2018	Area B (Zones 6-12)	Zones 8, 9,10,12 completed; remainder of Zone 5; 50% of Zone 6 and Zone 12 completed; 0% of Zone 7 (so that Zone 5 could be completed)

Table 10 – Areas and Zones – Vegetation Management

Area/Zone	Street Borders
Area A	West Burlington (Brant St to Highway 6 and all area north of Britannia Rd)
Area B	Central Burlington (Brant St to Walkers Line; Lakeshore Rd to Britannia Rd)
Area C	East Burlington (Walkers Line to Burloak Drive; Lakeshore Rd to Britannia Rd)
Zone 1 - Area C	Walkers to Appleby; Lakeshore to Fairview (mostly rear lot)
Zone 2 - Area C	Appleby to Burloak; Lakeshore to Fairview (mostly rear lot)
Zone 3 - Area C	Appleby to Burloak; Fairview to Dundas
Zone 4 - Area C	Burloak to Walkers; Fairview to Dundas
Zone 5 - Area C	Walkers to Tremaine; Dundas to Britannia
Zone 6 - Area B	Lakeshore to Fairview, Walkers to Guelph
Zone 7 - Area B	Guelph to Brant, Lakeshore to Fairview
Zone 8 - Area B	Fairview to Upper Middle; Walkers to Guelph
Zone 9 - Area B	Guelph to Brant, Fairview to Upper Middle
Zone 10 - Area B	Upper Middle to Dundas, Walkers to Guelph
Zone 11 - Area B	Guelph to Brant, Upper Middle to Dundas
Zone 12 - Area B	Walkers to Brant, Dundas to Britannia

- d) Burlington Hydro's vegetation management budget vs. actuals for each of the years 2013 to 2018 is provided in Table 11 below. Table 12 identifies the vegetation management actuals compared to that which was approved in base rates.

Table 11 – Vegetation Management Expenditures – Actual vs. Budget

Vegetation Management Actuals vs. Budget			
Year	Budget	Actual	Over/(Under)
2013	\$408,900	\$383,494	(\$25,406)
2014	\$639,650	\$381,080	(\$258,570)
2015	\$652,443	\$647,315	(\$5,128)
2016	\$666,797	\$598,624	(\$68,173)
2017	\$680,133	\$574,272	(\$105,861)
2018 Nov YTD	\$377,711	\$481,807	\$104,096
Total	\$3,425,634	\$3,066,592	(\$359,042)

Table 12 – Vegetation Management Expenditures – Actual vs. Rates

Vegetation Management Actuals vs. Rates			
Year	Approved in Rates	Actual	Over/(Under)
2014	\$547,000	\$381,080	(\$165,920)
2015	\$547,000	\$647,315	\$100,315
2016	\$547,000	\$598,624	\$51,624
2017	\$547,000	\$574,272	\$27,272
2018 Nov YTD	\$501,417	\$481,807	(\$19,610)
Total	\$2,689,417	\$2,683,098	(\$6,319)

- e) Please refer to Burlington Hydro's response to Staff IR-15a
- f) Please refer to Burlington Hydro's response to Staff IR-15a
- g) The vegetation management amount approved in base rates was \$547,000 as identified in Table 12 above.
- h) Burlington Hydro does not separately budget for storms or record actuals for all storms. In the event of a major storm (one with the potential for qualifying for a major event as defined by the OEB; and measured as exceeding a certain daily SAIDI threshold), Burlington Hydro will create a work order to track operating and capital expenditures specifically attributable to that storm. Work orders were created for three storms in 2018, one of which was the Z-factor event on May 4. Burlington Hydro incurred \$978K for these three events in 2018. The costs associated with two additional major events as

well as minor storm activity in 2018 are not included in this total. Burlington Hydro's actual storm expenditures in 2018 are well in excess of \$1MM.

- i) Burlington Hydro did not identify a separate storm budget amount in base rates.

Operating: Base rates would have inherently included some amount for emergencies expected as part of Burlington Hydro's normal course of business. These emergencies would include minor storms, the expenditures for which would have been included in distribution operating and maintenance expenses. Burlington Hydro manages the expenditures associated with these types of emergencies within its board-approved amounts. The extent and intensity of the May 4th windstorm was beyond Burlington Hydro's normal course of business and the OM&A approved in base rates did not include expenditures associated with a storm of this magnitude.

Capital: There was no capital storm budget included in base rates.