ONTARIO ENERGY BOARD
IN THE MATTER OF AN APPLICATION BY
HALTON HILLS HYDRO INC. ("HHHI")
2021 COST OF SERVICE APPLICATION
INTERROGATORY RESPONSES FROM HALTON HILLS HYDRO INC.

ENERGY PROBE INTERROGATORIES AND RESPONSES

1 - EP IRR - 1

1-EP- 1

Reference: Exhibit 1, Page 14 Table 1; Page 78, Table 34; Ex 2, Page 1085, Appendix F PEG 2018 Benchmarking Report; Exhibit 4 Appendix 4-2.

Preamble: "A key metric in utility cost efficiency and effectiveness is the annual Pacific Economics Group (PEG) performance benchmarking report. This report evaluates all Ontario LDCs to determine whether the LDC is spending more money than expected or less money than expected. The report uses data filed by the LDCs to predict how much each LDC should spend. On data filed for 2016, 2017 and 2018, HHHI was determined to be operating at 28.4% below predicted costs. (page 27)."

a) Please provide the calculation and references for the 2018 cost benchmarking result

b) Please provide the calculation and reference for the HHHI 2019 Forecast of 46.1%

c) Please provide the calculations and references for the HHHI 2020-2023 bridge and forecast

Response:

a) Please see the file Halton_Appl_2020-Benchmarking-Spreadsheet-Forecast-Model_2021_COS_20200827 submitted through RESS to the Board on August 27, 2020.

b) Please see HHHI's response 1 – EP IRR – 1 part a.

c) Please see HHHI's response 1 – EP IRR – 1 part a.

1 - EP IRR - 2

1-EP-2

Reference: Exhibit 1, Page 15, Table 2, and Page 65, Table 22

a) Please Confirm which year(s) the performance targets apply to

b) Please provide the average for each of the Metrics for the historic period 2015-2019.

c) Please provide the 2020 YTD estimate

Response:

a) The years for the performance targets are 2019.

b) Please see Table EP IRR – 1.

c) Please see Table EP IRR – 1.

Table EP IRR – 1 – Average and Year to Date Metrics

Performance Indicator	Target	2015 to 2019 Average	2020 YTD Estimate
Reliability - SAIDI	1.32 hours	1.74	0.85
Reliability - SAIFI	1.61 incidents	1.82	1.25
Customer Satisfaction	90%	91.20%	96%
Billing Accuracy	98%	99.87%	99.98%
PEG Report Benchmarking	Group 1	Group 1	Group 1
ESA Reg. 22/04	0 non-complaince	0	0
Substation Loading	Peak Demand <= Nameplate	1 of 12	Within threshold

1 - EP IRR - 3

1-EP-3

Reference: Exhibit 1, Page 16, Table 3; Exhibit 1, Page 120, Table 58; Exhibit 2, DSP Section 2.3.2.2, Page 165

a) Please file a chart of the 2016-2025 Capex data for each asset category, showing planned and actuals by year

b) Please provide trend lines.

c) Please discuss reasons for the major variation in System Access capital.

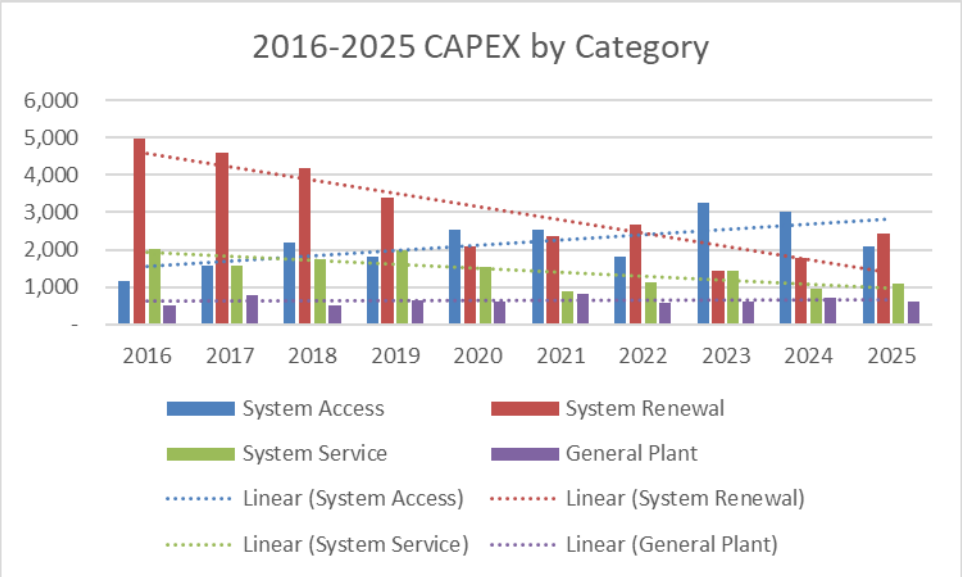
d) Please discuss the reasons for the major variations in General Plant capital

e) How will the DSS ensure the 2021-25 Capex will be spent as per the DSP? Please discuss.

Response:

a) Please see Table EP IRR – 2 – 2016-2025 CAPEX by Category.

Table EP IRR – 2 – 2016-2025 CAPEX by Category



b) Please see HHHI's response 1 – EP IRR – 3 part a.

c) System Access projects are modifications, including asset relocation, to the distribution system that a distributor is obligated to perform to provide a customer (including a generator customer) or group of customers with access to electricity services via the distribution system. Annual expenditures are largely related to customer driven work and can vary significantly from year-to-year.

There was a 68% reduction is capital expenditures related to System Access projects from 2016 to 2017. The primary driver for this reduction in expenditures is largely due to reduced spending on Technical Service Layouts and microFIT/ FIT projects.

- Capital expenditures for Technical Service Layouts in 2017 was $470,688 less that in 2016. This work is customer driven. Capital expenditures relating to such work can vary and are effected by customer work.
- MicroFIT/ FIT expenditures were $57,256 less in 2017 as compared to 2016. This is a result of the program termination. In 2017, HHHI processed the remainder of outstanding microFIT connections with valid contracts and NET metered services.
- In 2017, there was an increase of $73,337 in capital expenditures as compared to 2016 for residential and interval meter upgrades. The increase in expenditures relates to meters whose seals were to expire and failed meters. In 2017, 828 meters were replaced or re-verified while in 2016 HHHI replaced 651 meters.

There was a 494% increase in capital expenditures related to System Access in 2018 as compared to 2017. The increase in capital spending is largely related to Technical Service Layout and Meter Exchanges.

- Capital expenditures related to Technical Service Layouts in 2018 were $488,401 more than in 2017. This is largely due to the timing difference between expenditures and when customers make payments for the work. A significant investment was made to accommodate the expansion plans of Toronto Premium Outlets where much of the receivables were in 2017 and the construction work took place in 2018. This project included the addition of five (5) new transformers for which HHHI capitalized the expenditure.
- In 2018, there was an increase of $203,427 in capital expenditures as compared to 2017 for residential and interval meter upgrades. The increase in expenditures relates to meters whose seals were to expire and failed meters. In 2018, 874 meters were replaced or re-verified while in 2017 HHHI replaced 828 meters.

There was a 15% reduction in capital expenditures related to System Access in 2019 as compared to 2018. The reduction in capital spending can be attributed to reduced spending for Technical Service Layout.

- In 2019, there was a reduction of $238,116 in capital expenditures as compared to 2018 related to Technical Service Layouts.
- Recoverable amounts related to subdivision and generation connections were $79,937 greater in 2019 as compared to 2018.
- In 2019, there was an increase of $120,168 in capital expenditures as compared to 2018 related to meter exchanges and metering upgrades. The increase in expenditures relates to upgrades to general services customers greater than 50kW and primary meter unit upgrades. In 2019, 1,118 meters were replaced or re-verified while in 2018 HHHI replaced 874 meters.

Over the forecast period, HHHI anticipates expenditures for this driver to be similar to the historical period in that expenses may or may not coincide with the timing of customer driven work. HHHI is forecasting growth in Georgetown through the Vision Georgetown development and intends to have capital funding available to accommodate growth.

The significant increase in forecast for 2023 and 2024 is primarily related to the expected start of the Vision Georgetown development project. The Town of Halton Hills has established a Vision Georgetown Plan which, once implemented, will add about 20,000 people by 2033 to an area of 1,000 acres in southern Georgetown.

d) General Plant investments are modifications, replacements and additions to a distributor's assets that are not part of its distribution system including land, buildings, tools, equipment, rolling stock, electronic devices, and software used to support day to day business and operations activities.

Capital expenditures related to General Plant investments increased by 55% in 2017 as compared to 2016. The primary drivers for increased spending in 2017 relate to the purchase of a new fleet line truck and increased spending for tools and equipment related to field work to replace defective equipment that surpassed its usefulness.

Capital expenditures related to General Plant investments decreased by 35% in 2018 as compared to 2017. The primary drivers for decreased spending in 2018 relates to less expenditures related to tools and equipment and fleet vehicle purchased as compared to 2017.

Capital expenditures related the General Plant investments increased by 32% in 2019 as compared to 2018. The primary drivers for an increase in spending include building upgrades (roof over Engineering Department), additional vehicle expenses, and upgrades related to IT equipment and software to ensure our networks are secure.

In the forecast period, the primary driver for increased expenditures in general plant are in the Equipment and Tools category.

HHHI maintains a long-term vehicle maintenance strategy where smaller vehicles are replaced every ten (10) years and large trucks are replaced every twelve (12) years. Other equipment such as trailers and generators are evaluated every five (5) years once they reach twenty (20) years of age and are only replaced when necessary. This long-term strategy ensures a relatively even annual budget for vehicles.

In 2021, HHHI will complete the purchase of a new digger truck chassis that was ordered in 2020 and as well as complete the purchase of the boom and body. The total costs for this investment is $450,000. Truck purchases are typically spread over two (2) years to balance spending over a ten (10) year period for fleet purchasing. Also $45,000 is budgeted for a new 4x4 extended cab pickup truck for the Operations Department.

Historically chassis prices can range between $85,000 to $110,000 depending on the size of vehicle required. In 2022, HHHI will begin the process of replacing a bucket truck by ordering the chassis at an estimated cost of $130,000. As well, Operations will be replacing its dump truck at an estimated cost of $90,000 and a new pick-up truck for locates with an estimated cost of $35,000.

Following the twenty (20) year fleet replacement plan, HHHI will have a reasonably balanced dollar value budgeted for each year to avoid "hills and valleys" in spending while maintaining a ten (10) year replacement for small fleet vehicles and a twelve (12) year replacement for large fleet vehicle formula. If a budgeted purchase is deferred for any reason, the costs associated

with the deferred purchase are added to the following year's non-construction capital budget as these costs remain. Maintaining post end of life fleet vehicles directly affects our OM&A budget as well as creating downtime for the employees that rely on our fleet vehicles to perform their duties safely and efficiently.

In 2021, HHHI is forecasting $30,000 for new tools for the Operations staff to utilize in the field. From 2022 to 2025, HHHI is forecasting an annual capital expenditure of $40,000 for new tools and replacing old tools that have worn out and become otherwise unsafe to use. The additional expenses being forecast relate to many of the new tools being battery operated thereby reducing strain of field staff using the equipment, which can reduce the potential for long-term strain injuries to staff.

In 2023, HHHI forecasts the replacement of our mail insertion machine. The current machine is ten (10) years old and the maintenance of it has increased over the past five (5) years. HHHI recognizes that electronic billing (E-Billing) for customers has increased, however, approximately 65% of HHHI's customers still receive paper bills. The main insertion machine is also used to provide communication pamphlets to HHHI customers.

e) The DSS is a forecasting tool rather than a budgeting tool. The DSS provides insight into the impacts of budget on asset condition. It does not monitor actual budget expenditure. As assets are replaced, the DSS will be updated annually.

1 - EP IRR - 4

1-EP-4

Reference: Exhibit 1, Page 22, Load Forecast

Preamble: "General Service 1,000 to 4,999 kW class is expected to see a significant decrease in customers, consumption and demand and the General Service less than 50 kW which will see a modest decrease. This decrease is a result of: (i) customers either closing their business or moving production to other locations; or (ii) installing combined heat and power equipment to reduce consumption and demand requirements.
HHHI has utilized a variable in the load forecast to adjust for the implications of COVID-19."

a) Please provide the policy direction for the change to the Load Forecast

b) Please explain which classes are affected by the COVID-19 variable.

c) Has HHHI done "runs" without and with the COVID-19 variable? If the answer is no, please explain why not. If the answer is yes, please file the results of the runs.

Response:

a) HHHI is unaware of any known COVID-19 policy with respect to the direction of the load forecast by class.

b) Pages 25 and 26 of Exhibit 3 clearly explains the impact of COVID on each class.

c) HHHI did not run a scenario where COVID was used as a variable since it only affected a portion of 2020. Therefore, it was instead used as an adjustment to the non-weather corrected forecast.

1 - EP IRR - 5

1-EP-5

Reference: Exhibit 1, Page 33, Table 11
Preamble: "Based on the bill impacts noted above, there are no proposed changes in the Application at this time that will have a material impact on any customer class. However, HHHI is seeking approval to implement a Standby / Capacity Reserve Charge for General Service customers with a demand greater than 50 kW and load displacement generation."

a) What rate increase for 2021 was communicated to survey respondents?

b) Does HHHI agree that the distribution rate increase is excessive? If not, please explain why not.

c) Why has HHHI not examined the drivers of the rate increase and reduced the increase, particularly given current economic conditions?

d) Why does the Notice of Application (NOA) not directly address the distribution rate increases?

e) Why does the NOA not directly address the Standby/Capacity Reserve Charge for GS>50kw?

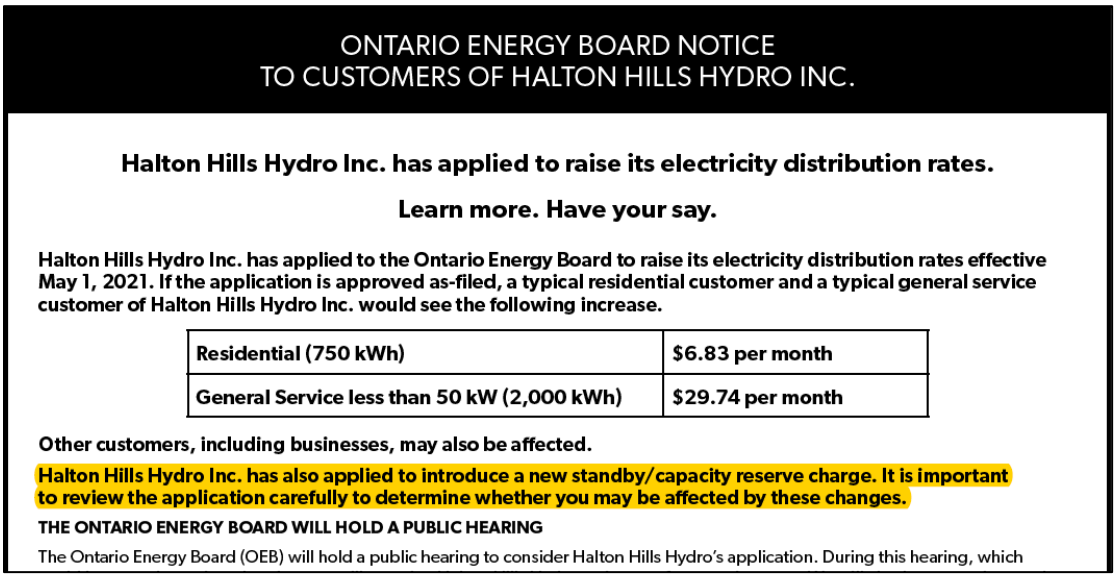
Response:

a) The 2021 rates were not known at the time of the customer engagement was undertaken. Customer engagement was necessary early in the planning process so that customer input could inform the plan going forward.

b) HHHI submits that while the increase is larger than usual, with the exception of OM&A costs, the increase is mechanistic in nature. The significant increase can be attributed to rate base increase, deemed interest, regulated return and depreciation costs.

c) HHHI has examined and discussed the drivers of the rate increase in great detail throughout the application. While the current economic conditions are unfortunate, HHHI must still remain financially viable and a Cost of Service application is the method by which HHHI undergoes a prudence review of proposed rates and charges. As seen in Exhibit 1, Table 37, HHHI's Return on Equity has declined to below the +/- 300 basis points requiring a Cost of Service review.

d) The Notice of Application **DOES** directly address the distribution rate increases. An excerpt from the Notice of Application that was published and sent to customers is shown below.



ONTARIO ENERGY BOARD NOTICE
TO CUSTOMERS OF HALTON HILLS HYDRO INC.

Halton Hills Hydro Inc. has applied to raise its electricity distribution rates.

Learn more. Have your say.

Halton Hills Hydro Inc. has applied to the Ontario Energy Board to raise its electricity distribution rates effective May 1, 2021. If the application is approved as-filed, a typical residential customer and a typical general service customer of Halton Hills Hydro Inc. would see the following increase.

Residential (750 kWh)	**$6.83 per month**
General Service less than 50 kW (2,000 kWh)	**$29.74 per month**

Other customers, including businesses, may also be affected.

Halton Hills Hydro Inc. has also applied to introduce a new standby/capacity reserve charge. It is important to review the application carefully to determine whether you may be affected by these changes.

THE ONTARIO ENERGY BOARD WILL HOLD A PUBLIC HEARING

The Ontario Energy Board (OEB) will hold a public hearing to consider Halton Hills Hydro's application. During this hearing, which

e) Please see section highlighted in yellow (part d) for the referenced Standby/Capacity Reserve Charge in the Notice of Application that was published and sent to customers, including the Customer who is has already approached HHHI about reserve capacity.

1 - EP IRR - 6

1-EP-6

Reference: Exhibit 1, Page 50, Table 13

a) Please indicate if HHHI provides services to Southwestern Energy Inc.

b) Please provide the reference to the affiliate service level agreement between HHHI and Southwestern Energy Inc. If unable to do so, please file the affiliate service level between HHHI and Southwestern Energy Inc.

c) Please indicate if HHHI procures services from 20008949 for Quality Tree Service or any other services.

d) If so, please provide/reference the service level agreement. If unable to do so, please file a copy of the service level agreement.

Response:

a) Please refer to Exhibit 4 Section 4.5 – Shared Services and Corporate Cost Allocation.

b) Please see HHHI's response 4 – SEC IRR – 36.

c) Please note that 2008949 Ontario Ltd. **IS** Quality Tree Service. Please refer to Exhibit 4 Section 4.5 – Shared Services and Corporate Cost Allocation for additional information on services procured.

d) As there are no services procured from 2008949 Ontario Ltd. for Quality Tree Service, no service level agreement exists and therefore cannot be provided.

1 - EP IRR - 7

1-EP-7

Reference: Exhibit 1Page 57, Table 17

a) Please provide the percentage increases from 2016-2021

b) Please prove the average compound annual growth rates.

c) Compare and discuss the % changes relative to GDDP

Response:

a) Table EP IRR – 3 – Percentage Increase provides the percentage increase from 2016 – 2021.

Table EP IRR – 3 – Percentage Increase

Application Summary	2016 Board Approved	2021 Test Year	% Increase
Net Fixed Assets (Average)	55,757,587	99,356,973	
Working Capital Allowance	5,664,968	4,892,243	
Rate Base	**61,422,555**	**104,249,216**	**70%**
Working Capital Allowance %	7.50%	7.50%	
Regulated Return on Capital	3,293,050	5,696,715	
OM&A Including Property Taxes	6,112,032	7,737,808	
PILs	1,508,054	3,611,342	
Service Revenue Requirements	10,913,136	17,045,865	56%
Less: Revenue Offsets	959,144	1,293,382	35%
Base Revenue Requirement	**9,953,992**	**15,752,483**	
Increase - $		5,798,491	
Increase - %		36.80%	
Average Annual Increase		7.36%	

b) The average compound annual growth rate from 2016 to 2021 is 9.62%.

c) As shown in the table above, the growth is attributable mostly to the increase in the rate of return and amortization expenses. The increase is a result of capital investments over the five (5) years period. The increase in OM&A expenses are presented in Exhibit 4, page 29, Table 12.

1 - EP IRR - 8

1-EP-8

Reference: Exhibit 1, Page 61, Table 19
Preamble: "With the assistance of Borden, Ladner and Gervais, LLP, HHHI used the same regression analysis methodology approved by the OEB in the 2016 HHHI Cost of Service ("COS") application (EB-2015-0074). The regression analysis has been updated to include actual data to the end of 2019."

a) Please indicate all changes made to the residential 2016 forecast model.

b) Indicate for each change, directionally, the effect on the 2021 forecast.

c) Please discuss why the 2020 and 2021 residential consumption per customer is increasing relative 2019. Specifically what factors are responsible for higher average consumption in 2020 and 2021?

d) What do the YTD 2020 residential data show relative to the forecast?

Response:

a) The evidence quoted was made to confirm and to reinforce that the utility used a regression analysis methodology which was approved not only in HHHI's previous cost of service but also in countless previous rate application. HHHI notes that the methodology is also a requirement of the OEB. The objective of the entire Exhibit 3 is to detail how the methodology, process and variables that are specific to this application differ from the 2016 Cost of Service.

b) This question cannot be answered.

c) The consumption per customer is increasing relative to the number of customers increasing

d) It is not a fair comparison to show 2020 year to date relative to the forecast for the Residential class for the following reasons:
   - The year to date values are not weather normalized. As the summer of 2020 was incredibly hot, this would skew the comparisons
   - The consumptions used in the load forecast are trending over the entire year (12 months of variable consumptions) to determine the final value. To take 9 months of that consumption in an effort to prorate the annual consumption and then compare it to 9 months of year to date consumption is not a proper representation of the time of year the consumption is utilized.

1 - EP IRR - 9

1-EP-9

Reference: Exhibit 1, Page 66, Table 23

a) Please extend the Table to show the 2016-2020 System Access expenditures.

b) For Municipally- Driven Projects, Please provide a schedule that shows the annual variation in capital and In-Service dates for 2016-2020.

Response:

a) Please see Table EP IRR – 4 – System Access Projects (2016-2025) below.

Table EP IRR – 4 – System Access Projects (2016-2025)

Projects	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
System Access	Actuals				Planned					
Technical Service Layouts	498615	27946	516348	278232	172435	538429	551890	565687	579829	594325
Subdivisions	9685	-64875	-53594	-83035	-22244	252604	257656	262809	268065	273427
Renewable Generation	84985	27729	50079	-419	-4439	39419	2000	2000	2000	2000
Wye-Delta Service Upgrades		0	0	3587	80788	79774	81369	82997	84657	86350
Municipally Driven Projects		492	40094	21469	791066	1366230	702845	2113350	1847792	889212
Make Ready work	13865	7122	14000	-27509	2697	21834	22926	24072	25276	26539
Metering	24252	152049	301016	421185	435914	231685	191684	191684	191684	226684
Substation Projects		0	294865	314998	0					
Miscellaneous	6324	52500	43177	95215	0					
Sub-Total	**$ 637,726**	**$ 202,963**	**$1,205,985**	**$1,023,723**	**$ 1,456,217**	**$ 2,529,975**	**$1,810,370**	**$ 3,242,599**	**$ 2,999,303**	**$2,098,537**
Contributed Capital	*-$ 522,959*	*-$ 1,384,355*	*-$ 976,276*	*-$ 772,461*	*-$ 1,068,167*	*-$ 1,135,176*	*-$ 885,392*	*-$ 1,479,197*	*-$ 1,391,127*	*-$ 997,281*
Total	**$ 114,767**	**-$ 1,181,392**	**$ 229,709**	**$ 251,262**	**$ 388,050**	**$ 1,394,799**	**$ 924,978**	**$ 1,763,402**	**$ 1,608,175**	**$1,101,255**

b) The following table describes the municipally driven projects outlined in the previous DSP for 2016 – 2020 and the actual in-service dates.

Table EP IRR – 5 – Municipally Driven Projects (2016-2020) In-Service

Project Name	Budget Year (DSP)	Actual Construction Year
Winston Churchill Blvd (5 Side Road to Mayfield Road)	2018	Not constructed. Region of Peel has not acquired land to enable relocations.
Trafalgar Road/ 10 Side Road	2016	Not constructed. Region of Halton deferred intersection widening and including the intersection in their environmental assessment report for Trafalgar Road road widening.
9th Line (Steeles Avenue to 10 Side Road).	2016	Deferred by Region until a date beyond 2020.

1 - EP IRR - 10

1-EP-10

Reference: Exhibit 1, Page 67 Table 24; Business Plan Page 145, Sample Condition Assessment Substation Assets
Preamble: "HHHI's goal with *system renewal* projects is to ensure the assets used in the delivery of power as well as the supporting infrastructure are in good condition, are safe to operate, and will continue providing reliability to customers. This category includes plans to replace defective, obsolete, and end-of-useful life assets."

a) Has HHHI had an independent third party Asset Condition Assessment (ACA) done, for example AESI? If so, please file a copy. If not, please explain why not.

b) Please extend Table 24 to show the asset replacements for the period 2016-2020.

c) Please show as separate item the MTS.

d) How did HHHI determine the *pace* of asset renewal in the 2021-2025 DSP?

e) Please provide examples for Overhead, Underground and Transformer assets.

Response:

a) HHHI's Asset Management Plan SP20-01 describes the inspection methodology HHHI uses in managing its assets. For many assets, HHHI performs visual inspections as prescribed by the OEB Distribution System Code. These inspections are sufficient to evaluate many assets and is cost effective to reduce the impact to customer rates. For some assets such as wood poles and primary cables, HHHI has employed qualified contractors to perform inspections services and report their findings.

Stated in section 4.3.2 of HHHI's Asset Management Plan SP20-01, HHHI employs the services of qualified contractors to perform non-destructive testing on approximately 1,100 poles each year. The pole testing contractor provides an annual report of the poles tested. HHHI uses the data provided to determine which poles were deemed defective and require replacement.

Stated in section 5.7.1 of HHHI's Asset Management Plan SP20-01, HHHI piloted a primary cable testing program employing Cable Q to test primary cable in various location of HHHI's underground distribution system. Cable Q provided a report to HHHI outlining the testing methods and results. The result provided a health score that can be used to forecast capital expenditures for cable replacements. In the forecast period of this DSP, HHHI intends to further develop an annual cable testing program to better understand the condition of HHHI's underground primary distribution system. Please see Appendix C of the Asset Management Plan SP20-01.

Stated in section 7.3.3 of HHHI's Asset Management Plan SP20-01 and 3.5.1.4 of HHHI's DSP, HHHI conducts annual oil sampling and testing from HHHI's substation transformers. Those samples are procured by HHHI staff and are sent to a laboratory for evaluation. The laboratory provides HHHI with an annual report of the standard oil tests and dissolved gas

analysis. HHHI uses the results to determine if more frequent testing or remedial action is required.

The report is considered proprietary and is not provided.

b) Please see Table EP IRR – 6 – System Renewal (2016-2020).

Table EP IRR – 6 – System Renewal (2016-2020)

	2016	2017	2018	2019	2020
System Renewal	Actuals				
Pole Replacements	2,141,311	1,864,536	1,947,990	1,321,301	715,864
Poletrans Replacement Program	655,716	996,718	895,811	1,640,316	1,026,848
Porcelain Insulator Replacement Program	20,614	44,544	8,921	62,443	49,132
Transformer Replacement Program	134,640	115,133	102,772	184,143	84,716
Pole Line Rebuild Program	0	0	0	0	0
Substation Equipment	677,093	524,904	0	0	143,037
Distribution Equipment Renewal	0	2,859	18,052	22,576	0
Feeder Reinforcement	0	196,398	0	0	0
Vintage Replacements	1,135,736	664,363	958,143	0	50,811
Miscellaneous	131,001	124,806	217,355	114,630	0
Contributed Capital	*95,306*	*66,572*	*47,172*	*60,999*	0
Sub-Total	$4,991,417	$4,600,833	$4,196,216	$3,406,408	$2,070,408

c) The MTS was not included in the System Renewal Budget due to the size of expenditure. It was handled through a separate ICM (EB-2018-0328).

d) Section 3.5 "Asset Lifecycle optimization policies and practices" of HHHI's DSP describes HHHI's practices for evaluating assets and the risk of failure. The asset condition assessment includes factors described in this section of the DSP and are used by HHHI to develop a pacing of planned capital expenditures over the forecast period of 2021 – 2025. The pacing of capital expenditures over this forecast period recognizes HHHI's desire to ensure it's distribution assets remain in good condition, are replaced prior to failure, and vintage obsolete assets are replaced in a proactive manner rather than reactively.

e) Examples of overhead, underground, and transformer assets can be found in HHHI's Asset Management Plan SP20-01, Appendix A of HHHI's DSP.

1 - EP IRR - 11

1-EP-11

Reference: Exhibit 1, Page 79 Table 35

a) Please provide the annual average compound annual growth rate (CACGR) for each O&M category.

b) Please provide the $ increase and percentage change from 2020-2021.

Response:

a) The annual average compound annual growth rate is 4.69%.

b) The dollar increase and percentage change from 2020-2021 is presented in Table EP IRR – 7.

Table EP IRR – 7 - Increase and Percentage Change in OM&A

Description	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Bridge Year	2021 Test Year		
Opening Balance (Excluding LEAP & Property Taxes)	**$5,995,565**	**$ 6,012,139**	**$5,976,346**	**$6,052,225**	**$6,288,183**	**$6,406,370**		**$5,995,565**
Salaries and benefits			-			-		
Pay Equity Adjustment			181,775					181,775
Increase in FTE		-	-	53,750	65,373	250,324		369,447
Increase in wages and staff progressions		-	-	-		103,906		103,906
Increase in benefit costs						82,967		82,967
Change in labour burden allocation						120,698		120,698
Training and staff development				58,645	(5,658)	-		52,987
Professional Service			38,500	-	(115,655)	-		(77,155)
Bad Debt expense	(114,548)	107,007	(12,500)	-	-	-		(20,041)
Climate Change (Admin)						279,700		279,700
Cybersecurity and IT Training			13,142	36,706	71,293	91,300		212,441
Transformer Station (Insurance, Control Room)				1,086	138,680	50,586		190,352
Mtce Operations (Switch Mtce)				-	-	23,535		23,535
Trucking costs			-	65,730	(20,891)	37,608		82,447
Underground cable testing (ENG)					(39,940)	25,000		(14,940)
Metering (wireless communication costs)						24,680		24,680
Regulatory						16,000		16,000
Materials and other cost increases					31,357	7,138		38,495
Vegetation Management	84,855	(181,855)	6,567	(34,174)	72,259	25,000		(27,348)
Other	46,267	39,055	(151,605)	54,215	(78,631)	16,560		(74,139)
Closing Balance (Excluding LEAP & Property Taxes)	**$6,012,139**	**$ 5,976,346**	**$6,052,225**	**$6,288,183**	**$6,406,370**	**$7,561,372**		**$7,561,372**
Increase - $		**(35,793)**	**75,879**	**235,958**	**118,187**	**1,155,002**		
Increase - %		**-0.6%**	**1.3%**	**3.9%**	**1.9%**	**18.0%**		

1 - EP IRR - 12

1-EP-12
Reference: Exhibit 1, Page 86 Table 40
Preamble: "The 2021 cost allocation study indicates the revenue to cost ratios for the General Service 1,000 to 4,999 kW class, Street Lighting class, Sentinel Light class and Unmetered Scattered Load class are outside the OEB's range. For 2021 and onward, HHHI proposes to maintain the revenue to cost ratios similar to what was approved in HHHI's 2016 COS (EB-215-0074). This methodology will move the customer classes that are currently outside of the range back within the Board's Target Range. In addition, this adjustment helps to mitigate any large rate increases. Specifically, moving the Residential class from 95.09% to 105.67% would cause a significant rate increase for that class."

a) What other options did HHHI consider to keep R/C ratios inside the Board ranges?

b) What cost change would be required to move the Residential R/C to 100%? What would be the impact on other rate classes?

Response:

a) HHHI did consider the option of moving the Revenue to Cost ratios as per the OEB policy but this resulted in a large rate increase to the Residential rate class.

b) The impact on other rate classes resulting from moving the Residential Revenue to Cost ratio to 100% is presented in Table EP IRR – 8 - Impact of Residential 100% Ratio on Other Classes.

Table EP IRR – 8 - Impact of Residential 100% Ratio on Other Classes

	As Filed		As per EP-12 (b		
Rate Class	**Proposed Revenue to Cost Ratio**	**Proposed Base Revenue**	**Proposed Revenue to Cost Ratio**	**Proposed Base Revenue**	**Difference**
Residential	95.412%	9,292,387	100.000%	9,780,772	488,386
General Service less than 50 kW	120.000%	1,899,419	111.540%	1,756,937	(142,482)
General Service 50 to 999 kW	96.600%	2,952,052	94.669%	2,889,347	(62,705)
General Service 1,000 to 4,999 kW	120.000%	1,333,596	94.669%	1,037,381	(296,216)
Sentinel Lights	95.412%	47,966	120.000%	61,545	13,579
Street Lighting	120.000%	161,526	120.000%	161,526	-
Unmetered Scattered Load	95.412%	65,536	94.669%	64,974	(562)
TOTALS		**15,752,482**		**15,752,482**	(0)

1 - EP IRR - 13

1-EP-13

Reference: Exhibit 1, Page 89
Preamble: The Standby / CRC charge would be based on the applicable General Service 50 to 999 kW or General Service 1,000 to 4,999 kW Distribution Volumetric Charge applied to the contracted amount (e.g. nameplate rating of generation facility multiplied by Capacity Factor).

Please provide a copy of the communication with the prospective customer regarding the Standby/CRC charges (names omitted).

Response:

There was no written communication between the customer and HHHI related to the Standby/CRC charge. The customer was notified at the time of the application that Standby/CRC charges could apply. HHHI's President and CEO discussed the Standby charge directly with the customer prior to the Cost of Service filing. The customer had no comments after discussing the estimated charges.

1 - EP IRR - 14

1-EP-14

Reference: Exhibit 1, Page 115 Table 56; Scorecard Page 149 of Business Plan

a) Please provide a copy showing the years.

b) If not provided, please add the averages.

c) Please provide the 2021 metrics/targets.

d) Please confirm that SAIDI and SAIFI are increasing as shown on the Scorecard.

e) Please provide the latest HHHI ranking for SAIDI and SAIFI using OEB yearbook data.

Response:

a) Please see Table EP IRR – 9 – Operational Effectiveness (2015-2019).

Table EP IRR – 9 - Operational Effectiveness (2015-2019)

Performance Outcomes	Performance Categories	Measures		2015	2016	2017	2018	2019	Average
Operational Effectiveness	Safety	Level of Public Awareness		83.00%	83.00%	85.00%	85.00%	83.00%	83.80%
		Level of Compliance with Ontario Regulation 22/04		C	C	C	C	C	C
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0	-
			Rate per 10, 100, 1000 km of line	0.000	0.000	0.000	0.000	0.000	-
	System Reliability	Average Number of Hours that Power to a Customer is		2.58	1.38	1.65	1.48	1.60	1.74
		Average Number of Times that Power to a Customer is		3.02	1.65	1.13	1.60	1.70	1.82
	Asset Management	Distribution System Plan Implementation Progress		On-track	Over budget	Over-budget	123.38%	114.56%	
	Cost Control	Efficiency Assessment		1	1	1	1	1	1
		Total Cost per Customer		$744	$770	$763	$794	$817	$778
		Total Cost per Km of Line		$10,490	$ 10,557	$ 10,295	$10,860	$10,917	$ 10,624

b) Please see HHHI's response 1 – EP IRR – 14 part a.

c) Metric targets are created with business plans at the end of the year. As such, the 2021 targets have not been decided upon at this time.

d) The SAIDI and SAIFI have fluctuated over the last five (5) years. As per 1 – EP IRR - 2, HHHI's current year to date SAIDI and SAIFI are 0.85 and 1.25 respectively. These values are expected to increase significantly with the November 15, 2020 wind storm that saw most of Southern Ontario affected by outages. HHHI would also like to note that while the SAIDI and SAIFI fluctuate, many of the causes are outside the control of HHHI. For example, vehicle accidents in 2019 accounted for 25% of all outage hours. Vehicle accidents are outside the control of HHHI.

e) According to the 2019 OEB Yearbook, HHHI is ranked 43rd in the province for SAIDI and 49th in the province for SAIFI.

1 - EP IRR - 15

1-EP-15

Reference: Exhibit 1, Page 117/118 Table 57; Exhibit 2, DSP Section 3.3.4page 178

a) Please provide a copy of Table 57 with the 2015-2019 averages and standard deviation.

b) Please provide a discussion on
- high number of scheduled outages in 2016 and 2019
- high number of unknown outages in 2019

c) Please provide a chart showing outages due to defective equipment

d) Please provide the 2020 YTD data.

e) With regard to the second reference- please indicate why Arrestor failures are not highlighted. What is the action plan for this problem?

Response:

a) Please see Table EP IRR – 10 Average Outages by Cause Code (2015-2019).

Table EP IRR – 10 – Average Outages by Cause Code (2015-2019)

Cause Code	Cause Code	Average Number of Incidents	Average Number of Customer Interruptions	Average Number of Customer Hours of Interruptions
0	Unknown	5	4,289	1,475
1	Scheduled Outage	26	546	1,328
2	Loss of Supply	3	5,377	2,150
3	Tree Contacts	9	4,159	1,979
4	Lightning	2	1,132	1,768
5	Defective Equipment	25	11,044	12,761
6	Adverse Weather	15	13,056	15,867
7	Adverse Environment	3	3,872	4,443
8	Human Element	1	568	95
9	Foreign Interference	14	7,391	7,186
Totals		**104**	**51,433**	**49,054**

b) Scheduled outages are related to maintenance and capital builds. The number of incidents is dependent on the what and where of the maintenance or capital builds. In 2016, 2017 and 2019, there were more projects in residential areas resulting in increased numbers of scheduled outages.

The number of unknown outages in 2019 is the same as in 2016 and only one incident higher than 2018. Unknown outages are usually related to animal contacts that trip the switch but have fallen to the ground along the lines. As such, and especially in rural areas where the lines traverse large treed areas, it is not always possible to locate the dead or stunned animal when the crews patrol the lines to determine the cause of the outage. This inability to see a direct

cause leads to the unknown cause. If a dead animal is found electrocuted, the outage is reported as foreign interference.

c) HHHI is unsure as to what is being requested.

d) Please see Table EP IRR – 11 – Year to Date Outages by Cause Code.

Table EP IRR – 11 – Year to Date Outages by Cause Code

Cause Code	Cause Code	Number of Incidents	Number of Customer Interruptions	Number of Customer Hours of Interruptions
0	Unknown	8	9,127	774
1	Scheduled Outage	20	338	461
2	Loss of Supply	1	3,003	350
3	Tree Contacts	10	4,899	9,784
4	Lightning	3	66	360
5	Defective Equipment	30	8,212	1,417
6	Adverse Weather	2	14	31
7	Adverse Environment	1	155	90
8	Human Element	4	332	77
9	Foreign Interference	8	5,626	6,431
2020	**Year to Date**	**87**	**31,772**	**19,776**

e) HHHI's DSP section 3.3.4 "Historical period data on customer interruptions caused by equipment failure", identifies asset failures for a variety of distribution assets owned by HHHI. HHHI chose to highlight broken insulators and switch failures in support of the System Renewal programs for porcelain insulator and switch replacements as these two (2) asset types fail more frequently than arresters.

2 - EP IRR - 16

2-EP-16

Reference: Exhibit 2, DSP Section 3.4.4, Page 182

a) Please link the table of assets managed to the DSP asset replacement plan 2021-2025 by showing for each major category the number of assets to be replaced in each year and indicate specifically if the replacement is planned or run to failure.

b) Please provide an estimate of the unit cost for each type of asset.

Response:

a) Please see Table EP IRR – 12 - Assets Managed & DSP Asset Replacement Plan (2021-2025).

Table EP IRR – 12 - Assets Managed & DSP Asset Replacement Plan (2021-2025)

Asset Type	Quantity	TUL[1]	Average Age	Average Unit Cost	# of assets to be replaced per year	Replacement Strategy
Wood Poles	9354	50	29	$ 8,536	80	Proactive
Sectionalizing Switches (gang operated)	41	40	~15	$ -	0	Run to Failure
Voltage Regulators	9	40	23	$ 13,513	3	Run to Failure
Circuit Reclosers	9	40	~18			Run to Failure
Conductor (km)	932	50	n/a	$ -	0	Run to Failure
Polemount Transformers	2299	40	32	$ 5,864	15	Run to Failure
Padmount Single Phase Transformers	1509	40	17			Run to Failure
Padmount Three Phase Transformers	194	40	15	$ -	0	Run to Failure
Live-Front Transformers	3	40	55	$ 106,050	3	Proactive
Vault Transformers	7	40	~30	$ 217,265	2	Proactive
Poletrans Transformers	39	40	35	$ 166,510	3 (avg).*	Proactive
Underground Cable (km)	754	40	n/a	$ -	0	Run to Failure
Padmount Switchgear	37	30	15	$ 34,996	1	Run to Failure
Substation Power Transformers	12	35	30	$ 639,170	2	Proactive
Substation Switchgear/ Reclosers	12	40	35	$ 377,035	2	Proactive
Substation DC Service	9	20	11	$ -	0	Proactive
PMU Instrument Transformers	8	45	~30	$ -	0	Run to Failure

'* The average cost / year for poletrans transformers is based on an average of 3 units replaced per year and is based on four years of replacements, 2021 – 2024. HHHI has excluded 2025 from this analysis as in 2025 HHHI will be undertaking a design for future replacements, no actual replacements are forecasted to occur in 2025. HHHI's forecasted capital expenditures varies from year-to-year to reflect the level of investment HHHI anticipates will be required.

b) Please see part a.

2 - EP IRR - 17

2-EP-17

Reference: Exhibit 2, DSP Section 3.5.1.3, Page 206
Preamble: "Along with regular inspection and maintenance of equipment as outlined in the Asset Management Plan Appendix A, HHHI maintains a three-year vegetation management schedule to trim trees throughout the service territory."

a) Please provide the historic VM cycle(s) and annual cost 2015-2020.

b) Does VM include both tree and brush trimming? Please delineate in annual number of km for each year.

c) Does HHHI procure VM services from its affiliate? If so please provide the Service level Agreement.

Response:

a) Please see HHHI's response 4 - Staff IRR – 55.

b) Yes, VM includes tree trimming and limited brush trimming. Low growing brush that does not reach overhead lines is left, however higher growing brush that would pose a future threat of growing into the lines is cleared. VM is not delineated by km/year. Rather it is delineated by three (3) geographic zones with one (1) zone completed per year for a three (3) year overall schedule.

c) Please see HHHI's response 4 - SEC IRR – 36.

2 - EP IRR - 18

2-EP-18

Reference: Exhibit 2, DSP Section 4.9.2, Table 52, Figure 53, Historical Capex by Category; Section 4.11, Page 249, Table 58.

a) Please discuss why System Renewal expenditures have materially reduced in 2018-2020?

b) Please project Figure 53 data to 2021-2025 using Table 58 data.

c) Please reconcile the DSP to the planned asset replacement categories in response to interrogatory 1-EP-10 and to Table 61 by providing a table showing the number of SR assets planned to be replaced from 2021-2025.

d) Why are the planned Poletrans Replacement and Substation Equipment investments "volatile/lumpy"?

Response:

a) System Renewal investments involve replacing and/or refurbishing system assets to extend the original service life of the assets and thereby maintain the ability of the distributor's distribution system to provide customers with electricity services.

There was a reduction of 7% in capital expenditures from 2016 to 2017 relating to System Renewal projects.

- The small reduction in capital expenditures relates to a reduction to pole replacements and deferring substation projects at Cross MS and Silvercreek MS in 2017. However, the reduction is offset by an increased level of spending in 2017 relating to underground rebuilds in the Lakeview, Acton and John Street, Georgetown areas as well as capital expenditures made at Mountainview MS and Willow MS as compared to 2016.

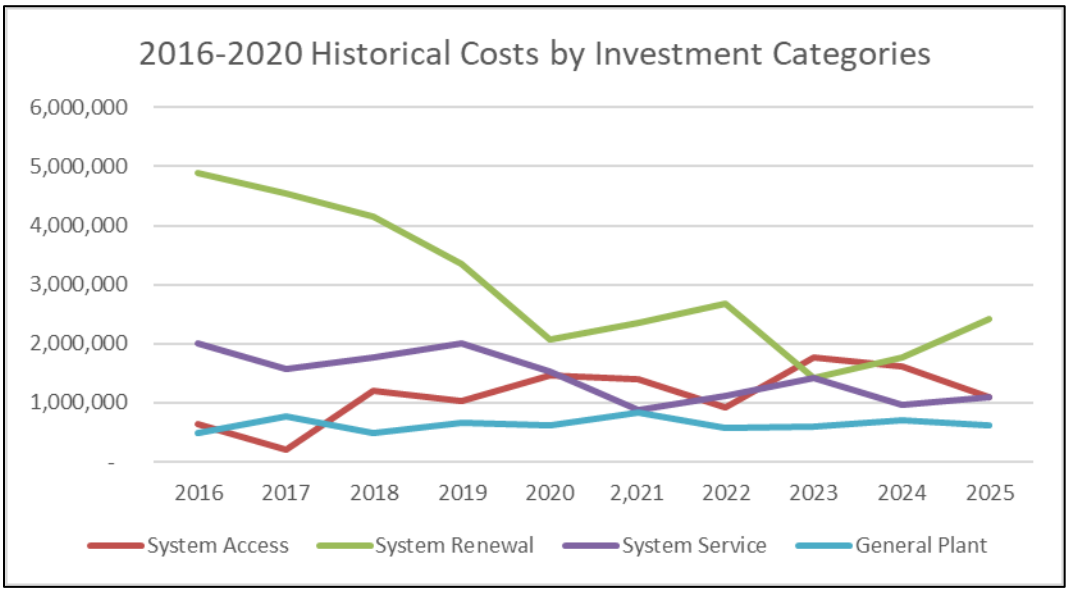
There was a reduction of 16% in capital expenditures from 2018 to 2017 relating to System Renewal projects.

- In 2018, capital expenditures relating to pole replacements increased as well as expenditures related to Poletrans replacements and underground rebuilds on John Street, Georgetown. These costs were not offset significantly by other System Renewal projects in 2018, however, as compared to 2017, capital investments in System Renewal projects were less than 2017. HHHI had to continue investing in underground rebuild projects which are costly as the projects were in progress and could not be stopped without completing the work.

There was a reduction of 8% in capital expenditures from 2019 to 2018 relating to System Renewal projects.

- In 2019, capital expenditures related to pole replacements were $628,688 less than in 2018 due to a reduction in contract labour expenses.
- Projects related to feeder rebuilds and reinforcement, substations and vault transformers did not proceed as planned in 2019 resulting in $1,191,260 of planned capital expenditures being allocated for poletrans replacements as part of HHHI's annual budgeting process.

b) The figure below projects Figure 53 from the DSP out to 2025 using Net values for System Access for consistency with the original table.



c) Please see Table EP IRR – 13 – System Renewal Assets (2021-2025).

Table EP IRR – 13 – System Renewal Assets (2021-2025)

Projects	2021 Test Year	QTY 2021	2022	QTY 2022	2023	QTY 2023	2024	QTY 2024	2025	QTY 2025
System Renewal										
Pole Replacements	624,199	80	647,375	80	679,744	80	713,731	80	749,418	80
Poletrans Replacement Program	809,294	5	790,157	5	165,000	1	382,177	2	50,000	0
Porcelain Insulator Replacement Program	51,459	40-50	53,003	40-50	54,593	40-50	56,231	40-50	57,918	40-50
Transformer Replacement Program***	222,791	16	435,329	17	187,889	16	120,525	15	443,241	17
Pole Line Rebuild Program	0		0		25,000	0	378,020	• 25 poles • 8 transformers • 7,605m of conductor*	407,907	• 17 poles • 5 transformers • 2,940m of conductor**
Substation Equipment	615,397	1	700,253	1	242,444	1	83,760	1	674,760	1
Distribution Equipment Renewal	38,950	3	42,649	3	72,600	3	41,334	3	42,160	3
Total	**2,362,090**		**2,668,766**		**1,427,270**		**1,775,778**		**2,425,404**	

'* Quantity of conductor is based on 2 – 3-phase circuits.
'** Quantity of wire is based on 1 – 3-phase circuit.
'*** In 2021, 2022, and 2025 HHHI's transformer replacement program includes live-front transformers and vault transformers. Replacement of these vintage assets includes replacing underground cabling, installing new foundations, resulting in higher costs as compared to like-for-like distribution transformer replacements. Hence the increased budgeted in these years.

d) HHHI's forecasted capital expenditures for poletrans replacement projects varies over the five (5) years to suit the locations where poletrans transformers need to be replaced. Over the course of the next five (5) years, HHHI has identified that some locations described is HHHI's

Asset Management Plan SP20-01 contain only one (1) or two (2) poletrans transformers and hence the budget for those years reflects a smaller quantity of replacements.

HHHI's forecasted System Renewal capital expenditures related to substation investments over the forecast period reflects the estimated cost of substation assets to be replaced. In years one, two, and five of the forecast period, HHHI intends to make significant investments in new transformers and switchgear to replace aged vintage units thus mitigating the risk of failure. HHHI also forecasts capital expenditures in System Service related to substations from 2021 through 2023 to address community growth through in-fill development by adding additional feeders at two (2) urban substations in Georgetown and as discussed in HHHI's DSP, Section 4.12.4.2.3. In-fill development can be seen in HHHI's DSP section 4.2 "Load Growth".

2 - EP IRR - 19

2-EP-19

Reference: Exhibit 2, DSP Section 4.12.4.3, Figure 63, Table 63, Page 264-265, Ex 2, Appendix F 2025-2027 Fleet Vehicle Replacement Schedule

a) Please clarify which GP category includes Fleet Equipment.

b) Please provide historic vehicle replacement costs 2015-2020.

c) Confirm Appendix F shows a current profile of the Fleet.

d) Please indicate for light duty vehicles, why the life expectancy is 10-12 years. Is there also a km ceiling?

e) Please provide
   i. the number of units to be replaced (by light and heavy duty if possible).
   ii. the annual budgets for Fleet replacement 2021-2025.

Response:

a) Fleet Equipment is included in General Plant – Equipment and Tools.

b) Please see HHHI's response 2 – Staff IRR - 7 part d.

c) Up to date fleet profile (as of Sept. 30, 2020) is presented in Table EP IRR – 14 – Fleet Profile.

Table EP IRR – 14 – Fleet Profile

#	Make	Model	Year	License Fees	Description	PURCHASE YEAR	AGE IN BUDGET YEAR 2019	LIFE EXPT	Dept
102	JEEP	CHEROKEE	2014	$120.00	PASSENGER 4X4	2013	6	10	ENG
103	FORD	F150	2016	$120.00	PICK UP 4X4 EXT. CAB	2016	3	10	OPER
104	CHEVROLET	BOLT	2019	$120.00	EV PASSENGER	2018	1	12	ENG
106	FORD	F150	2010	$120.00	PICK UP 4X4 EXT. CAB	2010	9	10	OPER
107	INTERNATIONAL	POSI PLUS	2014	$882.25	68' DOUBLE BUCKET	2014	5	12	OPER
108	INTERNATIONAL	WAJAX	2008	$958.75	SMALL RBD	2008	11	12	OPER
109	FREIGHTLINER	WAJAX	2017	$958.75	LARGE RBD	2017	2	12	OPER
111	FREIGHTLINER	POSI PLUS	2016	$547.75	46 SINGLE MHAD	2015	4	12	OPER
113	INTERNATIONAL	POSI PLUS	2008	$547.75	46 SINGLE MHAD	2008	11	12	OPER
115	FORD	RANGER EXT	2011	$120.00	PICK UP 4X4 EXT. CAB	2011	8	10	LOCATES
117	INTERNATIONAL	POSI PLUS	2010	$882.25	68' DOUBLE BUCKET	2010	9	12	OPER
119	INTERNATIONAL	POSI PLUS	2012	$547.75	46 SINGLE MHAD	2012	7	12	OPER
121	FORD	Transit	2018		Transit van	2018	1	10	ENG
122	JEEP	LIBERTY	2010	$120.00	JEEP 4X4	2010	9	10	ENG
126	FORD	F250	2016	$265.25	PICK UP 4X4 CAB 1/2	2016	3	10	OPER
130	FORD	F250	2013	$265.25	PICK UP 4X4 CREW	2013	6	10	OPER
131	FORD	F450	2011	$1,167.00	DUMP TRUCK	2011	8	12	OPER
169	FORD	Transit	2019		Transit van	2019	1	10	SUBSTATIONS
170	FORD	Transit	2019		Transit van	2019	1	10	METER
		TOTAL LICENSE FEE		**$7,742.75**					
	TRAILERS								
202	BOBCAT	SKID STEER							OPER
204	LIFT KING	FORKLIFT			LARGE FORKLIFT				OPER
206	TIMBERLAND	TRAILER	2009		REEL TRAILER	2010	9	20	OPER
208	GENERATOR	GEN TRAILER	1985		43 Alice St backup generator	1985	34	30	OPER
209	POLE TRAILER	TRAILER	2007		POLE TRAILER - LARGE	2008	11	20	OPER
210	NISSAN	FORKLIFT	1992		SMALL FORKLIFT	1992	27	25	OPER
211	POLE TRAILER	TRAILER	2011		POLE TRAILER - SMALL	2011	8	20	OPER
212	COLEMAN	POWER SPORT	2000		SMALL GENERATOR	2000	19	20	OPER
214	KUBOTA		2000		LARGE GENERATOR	2000	19	20	OPER
215	FMG Contracting	TRAILER	2011		Material/Reel Trailer	2011	8	20	OPER
216	RIGID 7000	Honda GX390 motor	2013		LARGE GENERATOR	2013	6	20	OPER
218	TIMBERLAND	TRAILER	2018		REEL TRAILER	2018	1	20	OPER

d) Please refer to Exhibit 2, Page 1165, Table F-2 from the Kinectrics Report, Useful Life Range. Life expectancy is also based on subjective comparison with other LDC's. HHHI does not use a km ceiling.

e) Please provide:

i. Replacements are as follows:

- Light duty units = 4
- Heavy duty units = 4

ii. Please refer to Exhibit 2, Appendix 2-1 (DSP), Appendix E, page 684 for the capital budget project sheets relating to annual Fleet Replacements for each of the years 2021-2025.

2 - EP IRR - 20

2-EP-20

Reference: Exhibit 2, DSP Page 393, Appendix A, HHHI Scorecard; Exhibit 2, Appendix G Scorecard

a) Please update/provide the latest HHHI Scorecard up to and including 2019 data.

b) Please provide the 5-year averages for each metric.

c) Specifically clarify the 2021 targets for the following metrics
   i. System Reliability SAIDI/SAIFI
   ii. Cost control: Total cost/ customer, Total cost/km
   iii. Conservation and Demand management

Response:

a) The latest HHHI Scorecard is provide in Appendix EP IRR – A.

b) The five (5) year average for each metric is provided in Table EP IRR 15 – Five year OEB Scorecard Averages (2015-2019).

Table EP IRR - 15 – Five year OEB Scorecard Averages (2015-2019)

Performance Outcomes	Performance Categories	Measures		Average
Customer Focus Services are provided in a manner that responds to identified customer preferences.	Service Quality	New Residential/Small Business Services Connected on Time		100%
		Scheduled Appointments Met On Time		100%
		Telephone Calls Answered On Time		95%
	Customer Satisfaction	First Contact Resolution		100%
		Billing Accuracy		100%
		Customer Satisfaction Survey Results		91%
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	Safety	Level of Public Awareness		84%
		Level of Compliance with Ontario Regulation 22/04 [1]		
		Serious Electrical Incident Index	Number of General Public Incidents	0
			Rate per 10, 100, 1000 km of line	0
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted [2]		1.738
		Average Number of Times that Power to a Customer is Interrupted [2]		1.82
	Asset Management	Distribution System Plan Implementation Progress		
	Cost Control	Efficiency Assessment		1
		Total Cost per Customer [3]		$ 767.75
		Total Cost per Km of Line [3]		$ 10,550.50
Public Policy Responsiveness Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	Conservation & Demand Management	Net Cumulative Energy Savings		
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time		100%
		New Micro-embedded Generation Facilities Connected On Time		100%
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)		0.85
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio		1.55
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	9.12%
			Achieved	6.35%

c) 2021 Target metrics

i. The 2021 target metrics for SAIDI and SAIFI have not been decided upon at this time.

ii. The 2021 target metrics for Cost control have not been decided upon at this time.

iii. The 2021 target metrics for CDM are no longer valid as CDM is no longer an LDC activity.

2 - EP IRR - 21

2-EP-21

Reference: Exhibit 2, DSP Page 415, Appendix B, Customer Engagement Results

a) What information was provided to customers on future rates e.g. were they informed about what is meant by reasonable rates.

b) Specifically, were respondents informed rates will be stable or will need to increase? Please point to the information.

c) Were customers informed that distribution rates would have to increase by 25% in 2021?

d) How does the lack of information on future rates influence the outcome and specifically the balance between rates and reliability? Please discuss.

e) Please point to the information customers were given regarding whether reliability was getting worse, or improving.

Response:

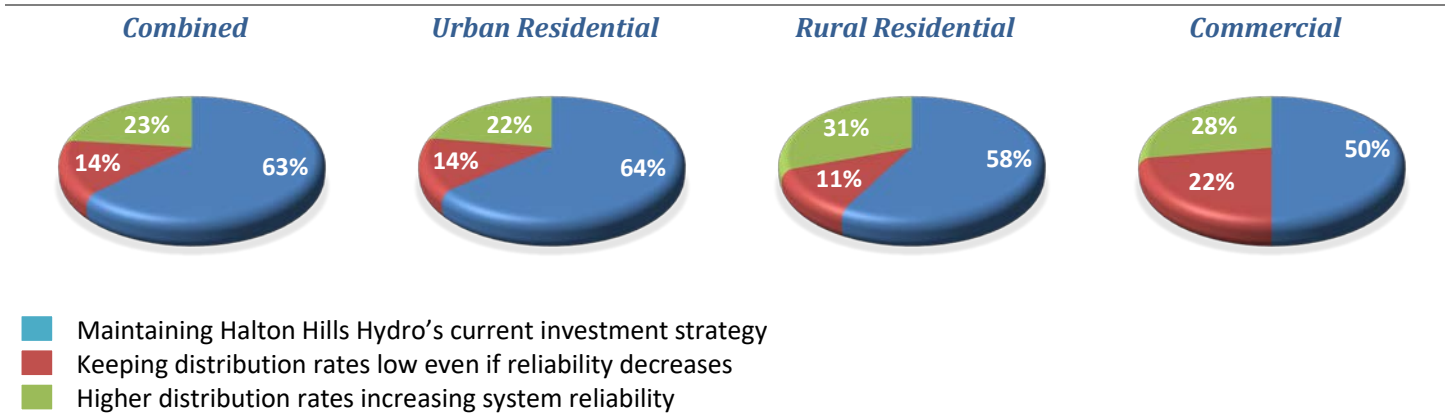
a) Customers were not given specifics regarding rate increases, as the specific information was not available at the time of the survey. Customers were provided with information regarding proactive replacement strategies and automation to help them understand that certain choices could result in increased costs, but no specific costs were provided.

b) Customers were not given specifics regarding rate increases, as the specific information was not available at the time of the survey. Customers were provided with information regarding proactive replacement strategies and automation to help them understand that certain choices could result in increased costs, but no specific costs were provided.

c) The 2021 rates were not known at the time customer engagement was undertaken. Customer engagement was necessary early in the planning process so that customer input could inform the plan going forward.

d) Reliability information was provided here: https://haveyoursay.haltonhillshydro.com/learn-about-us/news_feed/understanding-power-outages-and-reliability .This document discusses reliability and cost.

Survey results ranked affordability and reliability very closely, demonstrating that customers want both reliability and affordable rates. Customers were asked to comment specifically on reliability vs cost. Rural customers and commercial customers were the two groups most likely to support increased cost to improve reliability.



e) HHHI's annual performance scorecard is a public document and is available on HHHI's website. This document includes reliability statistics. HHHI's most recent scorecard is provided in Appendix EP IRR – A.

3 - EP IRR - 22

3-EP-22

Reference: Exhibit 3, Page 16, Table 4; CDM Participation and Cost Report Halton Hills Hydro

a) Please indicate by annotation which values in the Table 4 are verified by IESO and which are estimates by HHHI.

b) Why are the persistence levels for 2015-2017 CDM programs in 2021 so high?

c) Please provide a listing of programs/measures and demonstrate why the 2021 persistence levels are at 98.57%.

d) The IESO Excel Report chart shows 2020 Annual Persisting Energy Savings of 31,773, 107 kwh. Please discuss.

Response:

a) The years 2006 through 2018 are verified by the IESO. The years 2019, 2020 and 2021 include persistence from the IESO verified reports and reports provided by HHHI's CDM consultants which are based on IESO approved contracts.

b) Values for 2015-2017 CDM programs persistence to 2021 are the figures provided by the IESO in "2017 Final Verified Annual LDC CDM Program Results_Halton Hills Hydro Inc."

c) Attachment Halton_Att_3-EP-22c_CDM_20201125 provides the IESO's 2017 Final Verified Results and an additional "3-EB-22" tab which shows calculations consistent with the IESO Annual CDM Results 2015 to 2017 Programs (kWh) column in Table 4.

d) HHHI cannot locate the referenced figure.

3 - EP IRR - 23

3-EP-23

Reference: Exhibit 3, Page 16, Tables 15 and 16; Appendix 3-2 IESO Presentation
Preamble: What evidence does HHHI have that the residential and commercial demand is following the IESO forecast.

a) What policy direction has HHHI been given by the OEB regarding Covid-19 impacts on the Load forecast?

b) Has HHHI discussed changes to the Load Forecast with its peer utilities? How have these utilities addressed the issue?

c) Please provide the HHHI 2020 YTD demand for the residential sector on a weather normalized basis. Compare to the same period in the prior year and to the 5% IESO forecast increase.

d) Please provide the 2020 YTD normalized consumption for the commercial sector<50kw taking into account changes to commercial connections.

e) Compare to the prior year and to the IESO 2020 6% commercial forecast.

f) Please provide the 2020 YTD normalized consumption for the commercial sector 50-999 kw taking into account changes to commercial connections.

g) Please compare to the prior year and to the IESO 2020 9% commercial forecast.

Response:

a) There are no known, policies, references or direction from the OEB as to how COVID-19 should be factored into the determination of the Load Forecast in a Cost of Service application.

b) Irrespective of the methodology (i.e. regression analysis) which is dictated by the OEB, the specific adjustments to the Load Forecast are individual and specific to each utility. HHHI confirms that it did not discuss its adjustments with other utilities and relied on the expertise of BLG when determining its Load Forecast.

c) Please see Table EP IRR – 16 for the various scenarios requested.

d) Please see Table EP IRR – 16 for the various scenarios requested.

e) Please see Table EP IRR – 16 for the various scenarios requested.

f) Please see Table EP IRR – 16 for the various scenarios requested.

g) Please see Table EP IRR – 16 for the various scenarios requested.

Table EP IRR – 16 – Various Load Forecast Scenarios

Scenarios	Residential	General Service less than 50 kW	USML	General Service 50 to 999 kW	WMP	General Service 1,000 to 4,999 kWs	Street Lighting	Sentinel Lights	Totals
2020 YTD Jan-Sept	168,292,474	35,472,460	718,613	107,041,911	2,834,581	68,412,272	797,818	185,277	383,755,405
2019 YTD Jan-Sept	153,445,085	38,028,942	722,405	112,654,534		66,542,955	683,138	189,010	372,266,068
Covid % impact	5%	6%		9%		9%			
Covid Impact	7,672,254	2,281,737		65,016		10,138,908			
2020 YTD incl. Covid Impact	175,964,728	37,754,197	718,613	107,106,927	2,834,581	78,551,180	797,818	185,277	403,913,321

3 - EP IRR - 24

3-EP-24

Reference: Exhibit 3, Pages 27-33, Tables17, 20, 22;
Preamble: HHHI has actual 2020 consumption data March October 2020

a) Without necessarily re running the models please provide an update to the 2020 Bridge year data.

b) Please revise Table 17 and the 2021 Test year forecast for weather and changes in 2020 consumption.

c) Please revise Table 20 as necessary.

d) Please confirm Table 22 includes the COVID-19 adjustment and update as necessary.

Response:

a) Please see HHHI's response 3 – Staff IRR – 44.

b) Please see HHHI's response 3 – VECC IRR – 19.

c) Please see HHHI's response 3 – VECC IRR – 19.

d) HHHI confirms that Table 22 includes COVID-19 adjustments.

3 - EP IRR - 25

3-EP-25

Reference: Exhibit 3, Page 50, Table 31, Appendix 2-H

Please explain the change in the following Other Revenues:

i. USoA 4375 Revenues from Non-Utility Operations 2020 vs 2019
ii. USoA 4380 Expenses of Non-Utility Operations 2020 vs 2019
iii. UsoA 4210 Rent from Electric Property 2021 vs 2020.

Response:

i. The change in revenue for USoA 4375 - Revenues from Non-Utility Operations, is related to CDM. In 2019, $686,707 of CDM revenue was recorded in Account 4375 and no amount was budgeted for 2020.

ii. The change in expense for USoA 4380 - Expenses of Non-Utility Operations, is related to CDM. In 2019, $686,707 of CDM cost was recorded in Account 4375 and no amount was budgeted for 2020.

iii. The increase for USoA 4210 - Rent from Electric Property for 2021 versus 2020 is related to pole rental. The increase in pole rental rates is recorded in DVA Account 1508 in 2020 and from 2021 onwards, the increase is recorded as Other Operating Revenues.

4 - EP IRR - 26

4-EP-26

Reference: Exhibit 4, Page 15, Table 3

a) Please provide the % Compound Annual Growth Rate in OM&A for 2016-2020

b) Please provide the annual growth rate 2020-2021.

Response:

a) The Compound Annual Growth Rate in OM&A from 2016 to 2020 is 1.67%.

b) The growth rate from 2020 to 2021 is 18%.

4 - EP IRR - 27

4-EP-27

Reference: Exhibit 4, Page 19, Table 8, Page 27, Table 11, and Page 29, Table 12

a) Please provide a version of Table 8 that shows the 2020 Opening Balance (rather than 2016) and the 2020 to 2021 Test Year changes.

b) Please provide more detail on the Administrative Expense increase, resulting in the 2021 $31/ per customer and $12.4 /FTE increase.

c) Please clarify the basis of the Climate Change cost increase:
- Is HHHI providing staff support?(provide FTE/costs)?
- Is HHHI funding external resources? If so provide details.
- Is HHHI providing capital for infrastructure (detail costs/year)?

d) Is the Climate Change coordinator a HHHI staff hire or hired by Halton Hills?

Response:

a) Please refer to Exhibit 4, page 29, Table 12.

b) Details on Administrative Expense increase in 2021 is presented in Table EP IRR - 17. For additional information on in 2021 vs 2020, please refer to Exhibit 4, Page 29, Table 12.

Table EP IRR – 17 – Administrative Expense Increase

Description	2021 Test Year	2020 Bridge Year	Change
Operations	1,440,803	1,211,047	229,756
Maintenance	458,000	415,550	42,450
Billing and Collections	1,177,856	1,171,162	6,694
Administrative & General	4,484,712	3,608,611	876,101
Total	**7,561,372**	**6,406,370**	**1,155,002**
O&M	1,898,803	1,626,597	272,206
Administration Expense	5,662,569	4,779,773	882,796
Total Recoverable OM&A	**7,561,372**	**6,406,370**	**1,155,002**

c) HHHI is working collaboratively with the Town of Halton Hills in addressing climate change actions. HHHI staff sit on a number of climate change committees with the Town and provide in kind support and expertise, where appropriate, to furthering these initiatives.

HHHI is not funding external resources.

HHHI is not providing capital for infrastructure.

d) This is a cost sharing position. It is yet to be determined whether the individual would be an employee of HHHI or the Town of Halton Hills.

4 - EP IRR - 28

4-EP-28

Reference: Exhibit 4, Page 30
Preamble: "In addition, HHHI incurred a material pay equity cost increase for which HHHHI attempted to recover the pay equity costs as a 'Z-Factor' recovery request (EB-2017-0045). The OEB Decision and Rate Order (EB-2017-0045), dated April 26, 2018 denied HHHI's Z-Factor Pay Equity Application (Appendix 4-3)."

Please clarify the status of the pay equity cost claim. Is HHHI reinstating the claim for 2021 or does the Board's Decision stand?

Response:

a) The Board Decision stands.

4 - EP IRR - 29

4-EP-29

Reference: Exhibit 4, Page 49, Performance Pay
Preamble: "In 2020, HHHI implemented SMART (Specific, Measurable, Achievable, Relevant, Time-bound) Goals performance system. Goals are intended to challenge the Leadership Team to consider how they can improve overall and with individual skills to maximize HHHI's potential and further enhance its contribution to the community and shareholder."

a) What was the prior performance pay scheme? Please provide a comparison of the prior and current schemes (scorecard eligibility range etc.).

b) How many staff (including COO and CEO) receive performance pay.

c) Please provide the historic amounts and percentages of base pay.

d) Please compare the aggregate bonus pay for 2019 and 2020 assuming similar performance.

Response:

a) Previous measurements were based on individual contributions within the department, whereas the new scheme aligns individual measurements against strategies that contribute to corporate goals. The enhancement of the performance system has become more robust with how performance is measured.

b) Thirteen (13) positions are eligible for performance pay.

c) Percentages have remained unchanged.

d) Aggregate bonus pay for 2019 and 2020, assuming similar performance, would be the same as there are no changes to the eligible amounts. The change is in how the performance pay eligibility is measured.

4 – EP IRR - 30

4-EP-30

Reference: Exhibit 4, Pages 65-69, Tables 35, 36 and 37, Shared Services and Corporate Allocation

a) Please provide more detail on the Civil and electrical services provided to HHHI's affiliate Southwestern Energy Inc.

b) Please explain the major reduction in Services provided from HHHI to Southwestern Energy Inc in 2020/ 2021. Specifically explain if there was a scope change and the impact of the change to a bid process.

c) If HHI bid for Civil and Electrical Services in 2020 please provide the HHHI bid compared to other bids (names omitted).

d) Please confirm that HHHI procures its Arborist Services from its Affiliate 2008949 Ontario Ltd.

e) Have the 2020/2021 services been charged at cost plus or bid?

Response:

a) Civil and electrical is a department in SouthWestern Energy Inc., therefore, no services are provided.

b) There is no change to services provided from HHHI to SouthWestern Energy Inc. in 2020 and 2021. Actually, the dollar value of the services are going up. Please refer to Exhibit 4 Tables 36 and 37 as compared to Table 35.

c) HHHI did not bid for any civil and electrical services.

d) Confirmed.

e) The 2020 services are charged at cost plus basis. The 2021 services are budgeted at cost plus basis as well.

4 - EP IRR - 31

4-EP-31

Reference: Exhibit 4, Page 71, HHI Services to/from HHCEC-Parent Company

a) Please provide the basis for charging services to HHCEC, for example, number of accounts, time etc..

b) Please provide a breakdown of the services HHCEC provides to HHHI. Include the basis for each of the charges e.g. number of meetings, time, direct expenses etc.

c) Are there Services Level Agreements for all services to/from affiliates? If so, please provide copy(ies) for 2021 services.

Response:

a) HHHI allocate a percentage of its back office costs to its affiliates based on the amount of support HHHI provide. The back office costs consist of:
- Accounting and Payroll Services
- IT Support
- Human Resources

b) HHCEC provides strategic and financial planning, governance, risk management, employee management, and mentoring along with Board meeting preparation and attendance to the HHHI. HHCEC allocate its costs based on a percentage basis to the affiliates based on the services provided.

c) Please see HHHI's response 1 - EP IRR – 6.

5 - EP IRR - 32

5-EP-32

Reference: Exhibit 5, Pages 15-16, Cost of Debt

a) Please confirm the $16,141,970 Promissory Note bears interest at the OEB Long Term Debt Rate.

b) What options did HHI/HHCEC consider to provide Long Term Financial/Debt requirements?

c) Please provide a copy of the Report to the Board of Directors.

d) Please explain the reasons for choosing the Commercial Banking Interest Rate Swap.

e) Please explain the different interest rates applicable to Interest Rate Swap#1 and Interest Rate Swap #2.

Response:

a) Please see HHHI's response 5 - Staff IRR – 67.

b) Please see HHHI's response 5 – Staff IRR – 64.

c) Please see HHHI's response 5 – Staff IRR – 64.

d) Please see HHHI's response 5 - Staff IRR – 64.

e) Please see HHHI's response 5 – Staff IRR – 64.

6 - EP IRR - 33

6-EP-33

Reference: Exhibit 6, Pages 16-17 and Table 11
Preamble: "The Revenue Deficiency by Revenue Requirement Component shows that the causes for the revenue deficiency stem from an increase in Rate Base of $42,826,661 higher than the 2016 Board-approved amount which was discussed in detail at Exhibit 2. Based on a 5.46% overall cost of capital, the increase in the rate base drives an increase in the revenue requirement."

a) Does HHHI agree that the 2020/2021 revenue deficiency results in part from the larger HHHI Capital Investment program, including the MTS Transformer Station? Please discuss.

b) When did HHHI realize that the incremental investment in the MTS could result in financial issues, including failure to make the OEB- allowed return and a material revenue deficiency?

c) Please provide any reports or materials provided to the HHCEC Board regarding the potential revenue deficiency.

Response:

a) HHHI agrees that that the 2020/2021 revenue deficiency results in part from Capital Investment programs from 2017 to 2020, including the MTS. HHHI capital investment programs for 2016 to 2020 was presented to intervenors and the OEB in HHHI's 2016 Cost of Service Rate Application DSP. The MTS costs were not included in 2016 as the budgeted costs for the MTS was not available at that time.

b) HHHI was always aware that constructing the MTS would required a significant capital investment and informed intervenors and the OEB of its plan in its 2016 Cost of Service Rate Application. HHHI filed an ICM Application for MTS related costs in 2018. Intervenors participated in the proceeding (EB-2018-0328) in which the OEB issued a decision. HHHI is of the view that intervenors and the OEB were well informed of its plan to construct this major asset and would require significant capital investment.

c) HHHI did not provide any communication to HHCEC's Board regarding the potential revenue deficiency.

6 – EP IRR - 34

6-EP-34

Reference: Exhibit 6, Pages
Preamble: HHHI is a member of Utilities Standards Forum ("USF"). Currently, a USF member is bringing forth a USF load profiling model in their 2021 COS application. HHHI expects the OEB will thoroughly vet the USF model during the COS process. HHHI intends to utilize the USF load profile model, with any necessary revisions that arise from the COS process, at its next COS."

a) Has HHHI reviewed the USF load profiling Model?

b) If so, outline material changes that could affect the load profile compared to the Hydro One method.

Response:

a) HHHI has not reviewed the USF load profiling model.

b) Not applicable.

APPENDIX EP IRR – A

HHHI 2019 OEB Scorecard

Scorecard - Halton Hills Hydro Inc.

9/29/2020

Performance Outcomes	Performance Categories	Measures		2015	2016	2017	2018	2019	Trend	Target: Industry	Target: Distributor
Customer Focus Services are provided in a manner that responds to identified customer preferences.	**Service Quality**	New Residential/Small Business Services Connected on Time		100.00%	100.00%	100.00%	100.00%	100.00%	⇨	90.00%	
		Scheduled Appointments Met On Time		100.00%	100.00%	100.00%	99.98%	97.66%	⇩	90.00%	
		Telephone Calls Answered On Time		93.10%	94.40%	95.85%	96.63%	96.43%	⇧	65.00%	
	Customer Satisfaction	First Contact Resolution		99.99%	99.98%	99.99%	99.98%	99.98%			
		Billing Accuracy		99.96%	99.84%	99.77%	99.89%	99.88%	⇩	98.00%	
		Customer Satisfaction Survey Results		90%	88%	88%	95%	95%			
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	**Safety**	Level of Public Awareness		83.00%	83.00%	85.00%	85.00%	83.00%			
		Level of Compliance with Ontario Regulation 22/04 [1]		C	C	C	C	C	⇨		C
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0	⇨		0
			Rate per 10, 100, 1000 km of line	0.000	0.000	0.000	0.000	0.000	⇨		0.000
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted [2]		2.58	1.38	1.65	1.48	1.60	⇧		1.32
		Average Number of Times that Power to a Customer is Interrupted [2]		3.02	1.65	1.13	1.60	1.70	⇧		1.61
	Asset Management	Distribution System Plan Implementation Progress		On-track	Over budget	Over-budget	123.38%	114.56%			
	Cost Control	Efficiency Assessment		1	1	1	1	1			
		Total Cost per Customer [3]		$744	$770	$763	$794	$817			
		Total Cost per Km of Line [3]		$10,490	$10,557	$10,295	$10,860	$10,917			
Public Policy Responsiveness Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	**Conservation & Demand Management**	Net Cumulative Energy Savings [4]		17.78%	33.84%	63.29%	77.00%	84.00%			30.94 GWh
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time		100.00%	100.00%						
		New Micro-embedded Generation Facilities Connected On Time		100.00%	100.00%	100.00%	100.00%		⇨	90.00%	
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	**Financial Ratios**	Liquidity: Current Ratio (Current Assets/Current Liabilities)		0.95	0.91	1.08	0.46	0.86			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio		1.07	1.13	1.31	1.88	2.34			
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	8.82%	9.19%	9.19%	9.19%	9.19%			
			Achieved	6.70%	6.76%	6.98%	7.07%	4.24%			

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).
2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
3. A benchmarking analysis determines the total cost figures from the distributor's reported information.
4. The CDM measure is based on the now discontinued 2015-2020 Conservation First Framework. 2019 results include savings reported to the IESO up until the end of February 2020.

Legend:

5-year trend
⇧ up ⇩ down ⇨ flat

Current year
target met target not met

2019 Scorecard Management Discussion and Analysis ("2019 Scorecard MD&A")

The link below provides a document titled "Scorecard - Performance Measure Descriptions" that has the technical definition, plain language description and how the measure may be compared for each of the Scorecard's measures in the 2019 Scorecard MD&A:

http://www.ontarioenergyboard.ca/OEB/_Documents/scorecard/Scorecard_Performance_Measure_Descriptions.pdf

Scorecard MD&A - General Overview

Halton Hills Hydro Inc. ("HHHI") is a progressive electric distribution utility which owns and operates the electricity distribution system within its licensed service area (281 square kilometres extending mainly to the municipal boundaries of the Town of Halton Hills, of which 255 square kilometres or 91% is a rural distribution system).

HHHI's Mission Statement, "*provide Halton Hills with Electricity Distribution Excellence in a safe and reliable manner*", is supported by eight strategic objectives:

- Safety
- Reliability
- Competitive Rates
- Financial Metrics
- Conservation
- Environment
- Community Focus
- Smart Grid Implementation

HHHI management undertakes an annual review of its business strategy and objectives. The purpose of this review is to ensure a direct alignment between the OEB's Renewed Regulatory Framework for Electricity Distributors (RRFE) and HHHI's strategic objectives.

HHHI places a strong focus on providing customers with distribution excellence. HHHI has continuously exceeded the OEB's minimum standards. In most areas measured, HHHI has met or exceeded its controllable internal and OEB targets in 2019.

Service Quality

- **New Residential/Small Business Services Connected on Time**

  In 2019, HHHI connected 100% of 414 (2018 – 678, 2017 – 541) eligible low-voltage residential and small business customers (those utilizing connections under 750 volts) to its system within the five-day timeline prescribed by the Ontario Energy Board (OEB). 2019 is the tenth (10^{th}) straight year that HHHI has maintained 100% and is consistently above the OEB-mandated threshold of 90%. The 2019 connections are a decrease of 39% over 2018. HHHI maintains its dedication to distribution system excellence through efficient crew scheduling, thereby allowing HHHI to connect customers within the five (5) day window and in fact, usually within one (1) day of all requirements being completed.

- **Scheduled Appointments Met On Time**

  HHHI scheduled 5,755 appointments with its customers in 2019 (2018 – 5624, 2017 – 5,803) to complete work requested by customers including disconnections for upgrades, customer service meetings, reconnections, trench inspections and locates. HHHI met the internal target of 100% for 2019, and significantly exceeded the industry target of 90%. HHHI continues to maintain its commitment to customer service by maintaining its high target for scheduled appointments.

- **Telephone Calls Answered On Time**

  In 2019, HHHI Customer Care agents received 18,332 (2018 – 17,165, 2017 – 20,379) calls from its customers. The year 2019 saw a new uptake in calls from 2018 but still less than any of the previous years. An increase in available web-based forms and lack of collections/disconnections during the winter has contributed to the lower number of customer calls. An agent answered a call in thirty (30) seconds or less 96.43% of the time. A comparison of the past five (5) years shows HHHI performance has steadily increased from the 2014 measure. These results significantly exceed the OEB-mandated 65% target for timely call response.

Customer Satisfaction

- **First Contact Resolution**

  First Contact Resolution can be measured in a variety of ways and further regulatory guidance is necessary in order to achieve meaningful and comparable information across electricity distributors. The process that HHHI used for first contact resolution resulted in three (3) unresolved first contacts. The unresolved issues included collection agreements that were not met by the customer, Ontario Energy Support Program cancellation and meter installation error. Of these three (3) incidents, HHHI was able to find a resolution to the meter installation error. The OEB deemed HHHI to be compliant in the other two (2) cases and no further action was required by HHHI.

  Given the number of contacts (18,332) in 2019, the first contact resolution percentage is 99.98% (2018 – 99.98%, 2017 – 99.99%).

HHHI defines First Contact Resolution as a measure of customer calls satisfied without escalation. Starting in 2015, all escalated calls from Customer Care were directed to the Customer Care Supervisor (CCS). The CCS determines whether the escalation is due to no resolution or if the customer is not willing to accept the resolution (i.e. customer has a high bill, confirms consumption but still wants to discuss with the CCS). If the CCS determines that the call was not resolved, then a specific call type is entered into HHHI's Customer Information System and summarized for reporting. All OEB complaints are included as unresolved first contacts.

- **Billing Accuracy**

In 2019, HHHI issued 276,856 bills (2018 – 277,895, 2017 – 271,641) and achieved a billing accuracy of 99.88% (2018 – 99.89%, 2017 – 99.77%). This compares favourably to the prescribed OEB target of 98%.

HHHI continues to monitor its billing accuracy results and processes to identify opportunities for improvement.

- **Customer Satisfaction Survey Results**

The Ontario Energy Board (OEB) introduced the Customer Satisfaction Survey Results measure beginning in 2013. At a minimum, electricity distributors are required to measure and report a customer satisfaction result at least every other year. At this time the OEB is allowing electricity distributor's discretion as to how they implement this measure.

Customer satisfaction is an important measure of customer loyalty and trust. In an environment where the electricity sector receives a high amount of attention in the media, maintaining customer satisfaction is a priority for HHHI. HHHI engages our customers throughout the year at community events, online through social media and through bill inserts and website messaging. HHHI strives to maintain customer satisfaction through ongoing efforts to communicate relevant and timely customer information.

In 2012, 2014, 2016 and 2018 HHHI engaged a third party to conduct customer satisfaction surveys. These customer satisfaction surveys provide information that supports discussions surrounding improving customer service at all levels and departments within HHHI. The survey asks customers questions on a wide range of topics, including: overall satisfaction with HHHI, reliability, customer service, outages, billing and corporate image. In addition, HHHI provides input to this third party to enable them to develop questions that will aid in gathering data about customer expectations and needs. This data is then incorporated into HHHI's planning process and forms the basis of plans to improve customer satisfaction and meet the needs of customers. The final report on these customer satisfaction surveys evaluates the level of customer satisfaction and identifies areas of improvement. It also helps identify the most effective means of communication.

The overall results of the 2018 Customer Service Survey reported 95% of customers were "very or fairly" satisfied and is above the National and Ontario average of 91%.

Safety

- **Public Safety**

The Ontario Energy Board (OEB) introduced the Safety measure in 2015. This measure looks at safety from a customers' point of view as safety of the distribution system is a high priority. The Safety measure is generated by the Electrical Safety Authority (ESA) and includes three components: Public Awareness of Electrical Safety, Compliance with Ontario Regulation 22/04, and the Serious Electrical Incident Index.

Safety for HHHI employees and the community is HHHI's number one priority, always. HHHI actively promotes the ESA's safety messaging through our website and social media, including annual participation in Powerline Safety Week. As well, HHHI has an ongoing education program in local public schools to educate children on the importance of electrical safety and energy conservation.

Our Contractor Compliance program ensures that subcontractors adhere to the same levels of safety as HHHI. HHHI's Empower safety program ensures ongoing staff understanding and compliance with safety policies, training and procedures.

o Component A – Public Awareness of Electrical Safety

The Public Awareness of Electrical Safety measure is determined by public survey. The purpose of the survey is to monitor the effort and impact LDCs are having on improving public electrical safety for the Distribution Network. This public safety survey is intended to be conducted every two (2) years. This survey differs from HHHI's customer satisfaction survey in that it targets the general public regardless of whether they were an LDC customer. The questions on the survey are standardized across the province.

HHHI's Public Awareness of Electrical Safety survey result was 83% and was conducted in early 2020. This result was a 2% decrease over the previous Safety survey in 2018.

o Component B – Compliance with Ontario Regulation 22/04

The past nine (9) annual Ontario Regulation 22/04 Audits have concluded that HHHI is compliant with Ontario Regulation 22/04 (Electrical Distribution Safety). This was achieved by our strong commitment to safety, and adherence to company procedures & policies. Ontario Regulation 22/04 - Electrical Distribution Safety establishes objective based electrical safety requirements for the design, construction, and maintenance of electrical distribution systems owned by licensed distributors. Specifically, the regulation requires the approval of equipment, plans, specifications and inspection of construction before they are put into service.

o Component C – Serious Electrical Incident Index

HHHI has had zero (0) Serious Electrical Incidents and works diligently with staff and the public to maintain the highest degree of safety and education.

System Reliability

The OEB had undertaken to standardize the System Reliability reporting related to the removal of Major Event incidents. As a result of the OEB's undertaking, five (5) year historical system reliability was restated using the new standardized methodology as part of the 2016 reliability submissions. Historically, HHHI removed any event HHHI defined as a Major Event and therefore, was not included in the original numbers reported. The new methodology uses a calculated daily threshold based on a five (5) year historical average. As required, HHHI and all other LDCs restated their System Reliability measures to provide for a consistent definition and calculation of Major Events. This consistent information will allow for more accurate benchmarking across the province.

HHHI had no qualifying Major Events in 2019.

HHHI is an embedded distributor to Hydro One and as such, will experience loss of supply. Loss of Supply is not a variable that HHHI can alter in an effort to improve reliability.

For the purposes of the Scorecard reporting, Major Events and Loss of Supply are excluded from the reported numbers.

- **Average Number of Hours that Power to a Customer is Interrupted**

HHHI experienced at total of 37,141 customer hours of outages in 2019. The longest outages were a result of foreign interference and adverse weather. These two causes accounted for 60% of total outage time.

Foreign Interference – Thirty-five percent (35%) of all outages were related to foreign interference. There were only two (2) difference reasons within the foreign interference; vehicle accidents (72% of foreign interference) and animal contacts (28% of foreign interference). HHHI customers experienced 9,261 hours of outages due to eight (8) vehicle accidents. These vehicle accidents resulted in 25% of all outage hours. HHHI is unable to prevent vehicle accidents. Animal contacts (3,690 outage hours) are an unfortunate cause as they are difficult to prevent with overhead infrastructure.

Adverse Weather – In November 2019, HHHI experienced a severe wind storm that caused galloping lines and broken poles. The storm was throughout HHHI's territory and lasted for an extended period of time. HHHI attempted to re-close tripped switches but as the wind continued for an extended period, most reclosed switches tripped immediately after re-closure. Due to the duration and size of the wind storm, this incident contributed to 25% of the total hours of outages. Methods of mitigating future galloping lines include increased tension on the lines and reducing span lengths between poles. HHHI has been proactively reducing span lengths when rebuilding rural pole lines with the expected result of few outages related to galloping lines.

As the 2015 year of SAIDI has been restated, HHHI would like to further explain the reason for the "bump" in the number reported for 2015. In 2015, HHHI had multiple pole fires over the course of two (2) days due to salt spray. HHHI had removed these from the reporting as a Major Event due to the number of customers affected and the duration of the outage (over 10% of customers). As each of these pole fires were considered separate incidents and were over a couple of days, the new methodology, using a calculated daily threshold, indicated these pole fires did not qualify as a Major Event and therefore should be included in the reporting. Had the salt spray incidents been deemed a Major Event, the SAIDI reported would have decreased from 2.58 to 1.67.

In an effort to decrease the duration of outages, HHHI continues to work towards a more automated and integrated distribution system. Substation re-closers, SCADA remote operated switches, SCADA wireless faulted circuit indicators and automated switches enable the Control Room to locate faulted portions of the system quicker, dispatch crews more efficiently and effectively and remotely sectionalize faulted sections allowing crews to focus their time on repairing the fault, instead of manually sectionalizing before beginning repairs.

In addition to the automation, HHHI continues to optimize its Control Room partnership with Oakville Hydro Distribution Inc. by increasing the availability of distribution system maps. Additionally, HHHI has provided each line truck with a tablet that will enable operational crews to access the up to date mapping and to ensure information provided to the Control Room and crews is consistent.

- **Average Number of Times that Power to a Customer is Interrupted**

In 2019, HHHI had a total of 63 outage incidents; a significant decrease from the 106 incidents in 2018. HHHI's greatest frequency of outages in 2019 was a result of unknown causes, foreign interference and adverse weather.

Unknown Causes - There were seven (7) unknown cause incidents that resulted in outages longer than a minute in length contributing to 35% of all the customer frequency outages. Of the seven (7), only five (5) were longer than four (4) minutes. Many unknown causes are related to animal contact, but without the evidence of the animal in question, it is difficult to determine conclusively. Additionally, the unknown cause outages affected many customers each time, thus increasing the average number of times that power to a customer was interrupted.

Foreign Interference - As discussed above, vehicle accidents and known animal contacts resulted in multiple outages in 2019 resulting in 20% of all customer frequency outages. There were fifteen (15) total outages related to foreign interference. Ten (10) of those outages were vehicle accident related that did not affect large numbers of customers with the exception of an April 4, 2019 accident that affected 2,992 customers.

Adverse Weather – In November 2019, HHHI experienced a wind storm that caused galloping lines. These galloping lines resulted in 7,635 customers experiencing an outage. This one wind storm accounting for 99% of customer frequency of outages in this class and 18% of all the customer frequency outages.

As the 2014-2015 years of SAIFI have been restated, HHHI would like to further explain the reason for the "bump" in the number reported for 2015. In 2015, HHHI had multiple pole fires over the course of two (2) days due to salt spray. HHHI had removed these from the reporting as a Major Event due to the number of customers affected and the duration of the outage (over 10% of customers). As each of these pole fires were considered separate incidents and were over a couple of days, the new methodology, using a calculated daily threshold, indicated these pole fires did not qualify as a Major Event and therefore should be included in the reporting. Had the salt spray incidents been deemed a Major Event, the SAIDI reported would have decreased from 3.02 to 2.26. A value of 2.26 is still high and is a result of twenty-eight (28) incidents of defective equipment.

Asset Management

- **Distribution System Plan Implementation Progress**

  HHHI's estimated total capital expenditures for 2016 to 2019 as presented in HHHI's 2016 Cost of Service Distribution System Plan (DSP) total is $30,798,847. HHHI's capital additions for 2016 to 2019 totalled $35,282,481 (net of contributed capital and construction work in progress). HHHI is currently at 114.56% of its DSP.

Cost Control

- **Efficiency Assessment**

  The total costs for Ontario local electricity distribution companies are evaluated by the Pacific Economics Group LLC on behalf of the OEB to produce a single efficiency ranking. The electricity distributors are divided into five (5) groups based on the magnitude of the difference between their respective individual actual and predicted costs. In 2019, for the eighth (8^{th}) year in a row, HHHI was placed in Group 1 where a Group 1 distributor is defined as having actual costs (opposite of excess but not shortage) of predicted costs. Group 1 is considered the "Most Efficient". Prior to 2012, the OEB benchmarked LDCs by comparing similar distributors and using OM&A unit cost per customer.

  Since the benchmarking has changed to a solely econometric approach, HHHI has consistently placed in the top six (6) in the province. The updated methodology includes weighting factors for costs associated with overhead versus underground infrastructure in addition to the inclusion of both capital and OM&A costs

- **Total Cost per Customer**

  Total cost per customer is calculated as the sum of HHHI's capital and operating costs and dividing this cost figure by the total number of customers that HHHI serves. The cost performance result for 2019 is $817/customer (2018 - $794, 2017 - $763).

  Similar to all distributors in the province, HHHI has experienced increases in its total costs required to deliver quality and reliable services to customers. Province wide programs such as Time of Use pricing, growth in wage and benefits costs for employees, as well as investments in aggressive line clearing programs, new information systems technology, cyber-security and the renewal and growth of the distribution system, have all contributed to increased operating and capital costs. HHHI will continue to replace distribution assets proactively along a carefully managed timeframe in a manner that balances system risks and customer rate impacts as demonstrated in HHHI's 2016 rate application. Additionally, HHHI completed a number of capital projects that enhanced reliability and efficiencies related to the building of HHHI's new municipal Transformer Station. Customer engagement initiatives will continue in order to ensure customers have an opportunity to share their viewpoint on HHHI's capital spending plans.

HHHI has actively engaged staff through the Creative and Critical Thinking initiative to find additional cost efficiencies throughout the LDC. A new program that HHHI began in 2017 focussed on "**Relentless Incrementalism**". Relentless incrementalism – small steps that make a difference and help pave the way for more significant change – involves all staff members examining processes and procedures and implementing changes that would create cost savings, efficiencies or benefit customers.

- **Total Cost per Km of Line**

Total cost per km of Line is calculated as the sum of HHHI's capital and operating costs and dividing this cost figure by the total kilometer of line. The 2019 total km of lines in HHHI's distribution system was 1,641 km (2018 – 1,641, 2017 – 1,645km). The cost performance result for 2019 is $10,917/km of line (2018 - $10,860, 2017 – 10,295).

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Conservation & Demand Management

- **Net Cumulative Energy Savings**

Up until March 21, 2019, LDCs had been delivering conservation programs under the Conservation First Framework (CFF). The CFF required the IESO to coordinate, support and fund the delivery of Conservation and Demand Management (CDM) programs through LDCs to achieve a total of seven (7) TWhs of reductions in electricity consumption between January 1, 2015 and December 31, 2020. LDCs could deliver their CDM obligations through use of IESO province-wide programs and/or their own (or regional) programs (both of which are IESO funded); and were permitted to do so individually or in a joint plan with one or more LDCs. HHHI entered into a Joint CDM Plan with Milton Hydro and Burlington Hydro to deliver 30.94 net GWh in total energy savings over the CFF.

On March 21, 2019, the Minister of Energy, Northern Development and Mines introduced Bill 87 – *Fixing the Hydro Mess Act*, which, among other regulatory initiatives, refocused and uploaded electricity conservation programs to the IESO. The Minister issued a Ministerial Directive terminating the CFF and the Energy Conservation Agreements (ECAs) with LDCs.

Upon termination of the CFF, the IESO was directed to provide centralized delivery of a reduced scope of programs under an Interim Framework. The following programs were cancelled outright, generally as of April 1, 2019:

- Heating and Cooling Program
- Deal Days (Instant Discount)
- Residential New Construction Program
- Business Refrigeration Incentive Program
- High Performance New Construction Program
- Existing Building Commissioning Program
- Audit Funding Program
- Monitoring & Targeting Program

The following programs continue, and will be delivered centrally by the IESO, from April 1, 2019 to December 31, 2020:

- Retrofit
- Small Business Lighting
- Process and Systems Upgrade Program
- Home Assistance Program (already run by IESO)
- Local Indigenous Programs
- Energy Performance Program
- Energy Manager Program

HHHI will continue to deliver its PoolSaver Program locally through to December 31, 2020.

Cancellation of the ECA relieved HHHI of its obligation to deliver its 30.94 GWh savings target, although HHHI was on track to exceed its target. To the end of 2019, HHHI had achieved 84% of its six (6) year target.

Connection of Renewable Generation

- **Renewable Generation Connection Impact Assessments Completed on Time**
  With the end of the Feed-in-Tariff program, Connection Impact Assessments (CIAs) request reporting is no longer required after 2016.

- **New Micro-embedded Generation Facilities Connected On Time**
  With the end of the Feed-in-Tariff program, micro-embedded generation connection request reporting is no longer required after 2018.

Financial Ratios

- **Liquidity: Current Ratio (Current Assets/Current Liabilities)**

  As an indicator of financial health, a current ratio that is greater than 1 is considered good as it indicates that the company can pay its short term debts and financial obligations. Companies with a ratio of greater than 1 are often referred to as being "liquid". The higher the number, the more "liquid" and the larger the margin of safety to cover the company's short-term debts and financial obligations.

  HHHI's Liquidity for 2019 is 0.86 (2018 – 0.46). Upon completion of construction, the construction loan was termed out and reflected accordingly on the balance sheet.

- **Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio**

  The OEB uses a deemed capital structure of 60% debt, 40% equity for electricity distributors when establishing rates. This deemed capital mix is equal to a debt to equity ratio of 1.5 (60/40). A debt to equity ratio of more than 1.5 indicates that a distributor is more highly levered than the deemed capital structure. A high debt to equity ratio may indicate that an electricity distributor may have difficulty generating sufficient cash flows to make its debt payments. A debt to equity ratio of less than 1.5 indicates that the distributor is less levered than the deemed capital structure. A low debt-to-equity ratio may indicate that an electricity distributor is not taking advantage of the increased profits that financial leverage may bring.

  HHHI's 2019 debt to equity ratio is 2.34 as compared to the 2018 value of 1.88.

- **Profitability: Regulatory Return on Equity – Deemed (included in rates)**

  HHHI's distribution rates were approved by the OEB in the 2019 Incentive Rate Mechanism Application (EB-2018-0037), effective May 1, 2019, and included an expected (deemed) regulatory return on equity of 9.19%. The OEB allows a distributor to earn within +/- 3% of the expected return on equity. When a distributor performs outside of this range, the actual performance may trigger a regulatory review of the distributor's revenues and costs structure by the OEB.

- **Profitability: Regulatory Return on Equity – Achieved**

  In 2019, HHHI's achieved regulatory return on equity was 4.24% (2018 – 7.07%, 2017 – 6.98%), which is outside the +/- 3% range allowed by the OEB.

Note to Readers of 2019 Scorecard MD&A

The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the distributor regarding their future performance. Some of the factors that could cause such differences include legislative or regulatory developments, financial market conditions, general economic conditions and the weather. For these reasons, the information on future performance is intended to be management's best judgement on the reporting date of the performance scorecard, and could be markedly different in the future.