RATE BASE OVERVIEW

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3 In accordance with s. 2.2.1 of the OEB's Filing Requirements for Electricity Distribution

4 Rate Applications (July 12, 2018) (the "Filing Requirements"), this schedule provides an

overview of Toronto Hydro's rate base and year-over-year variance analysis of rate base

and distribution assets (also referred to as Property, Plant & Equipment ("PP&E")).

7 Continuity statements for Toronto Hydro's fixed assets, including interest during

construction and overhead costs, are filed at Exhibit 2A, Tab 1, Schedule 2.

10 Through previous applications, the OEB has approved planned investments in certain

assets that meet the OEB's definition for high voltage assets. This includes qualifying

assets at the Copeland TS and contributions paid to HONI for work conducted on the

transmission system. Toronto Hydro also proposes investments in high voltage assets in

its 2020-2024 application. Once incurred, actual costs of such assets are separately

reported in the utility's RRR (section 2.1.5.2).

1. RATE BASE

Table 1 summarizes Toronto Hydro's rate base values for the Historical (2015 to 2017),

Bridge (2018 and 2019), and Forecast (2020) years, including opening and closing PP&E

net book values ("NBV"), the average of opening and closing NBV, and the working

capital allowance ("WCA"). The difference between 2019 closing PP&E NBV and 2020

opening PP&E NBV is due to the addition of monthly billing asset balances.

Table 1: Rate Base Summary (\$ Millions)

	OEB						
	Approved ¹		Actual		Bric	lge	Forecast
	2015	2015	2016	2017	2018	2019	2020
Opening PP&E NBV	2,849.0	2,843.2	3,085.4	3,462.0	3,744.7	4,120.6	4,270.4
Closing PP&E NBV	3,134.7	3,085.4	3,462.0	3,744.7	4,120.6	4,269.0	4,489.8
Average PP&E NBV	2,991.8	2,964.3	3,273.7	3,603.4	3,932.7	4,194.8	4,380.1
Working Capital Allowance	240.2	247.9	275.8	247.4	273.6	287.2	235.2
Rate Base	3,232.0	3,212.2	3,549.5	3,850.8	4,206.3	4,482.0	4,615.3

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- For the forecast year revenue requirement (Exhibit 6, Tab 1, Schedule 1), rate base
- includes the average of the opening and closing PP&E NBV, and WCA. The NBV of PP&E
- includes all assets in PP&E, excluding construction work-in-progress ("CWIP"). WCA is
- 6 based on the cost of power and controllable expenses such as operations and
- 7 maintenance, billing, collections and administration expenses.

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1.1 Fixed Asset Continuity Statements

- The continuity statements are filed at Exhibit 2A, Tab 1, Schedule 2. Toronto Hydro confirms that:
 - The continuity statements provide year-end balance and include interest during construction, and all overheads;
 - The opening and closing balances of gross assets and accumulated depreciation
 that are used to calculate the fixed asset component of rate base correspond to
 the respective balances in the fixed asset continuity statements; and
 - The continuity statements reconcile to calculated depreciation expenses (Exhibit
 4B, Tab 1, Schedule 1) and are presented by asset account.

¹ OEB-approved as per EB-2014-0116.

1 1.2 Working Capital Allowance ("WCA")

- 2 As presented in Table 1, WCA increases from \$247.9 million in 2015 to \$287.2 million in
- 2019, primarily due to cost of power expenses. In 2020, Toronto Hydro's forecast WCA
- 4 of \$235.2 million is less than historical amounts due to a reduction in the allowance
- rates resulting from the utility's latest Lead/Lag Study performed by Navigant Consulting
- Inc. Further details on WCA are provided at Exhibit 2A, Tab 3, Schedule 1.

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2. RATE BASE VARIANCE ANALYSIS

9 2.1 2015 OEB-Approved versus 2015 Historical

- Actual rate base in 2015 was \$19.8 million less than the OEB-approved amount.
- 11 Average NBV of PP&E in 2015 was \$27.5 million less than the OEB-approved level,
- primarily due to lower in-service additions than forecasted. Toronto Hydro's actual
- 13 WCA was \$7.7 million more than approved because of higher than forecast cost of
- power expenses, mostly due to commodity cost increases.

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2.2 2015 Historical versus 2016 Historical

- 17 Rate base increased by \$337.4 million from 2015 to 2016. The increase in average PP&E
- NBV of \$309.4 million was primarily due to assets coming into service. WCA increased
- by \$27.9 million primarily due to rising commodity costs.

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2.3 2016 Historical versus 2017 Historical

- Rate base increased by \$301.2 million from 2016 to 2017. The increase in average PP&E
- NBV of \$329.7 million was primarily due to assets coming into service. WCA decreased
- by \$28.4 million primarily due to lower cost of power expenses stemming from declining
- 25 commodity costs.

2.4 2017 Historical versus 2018 Bridge Year

- 2 Rate base is forecasted to increase by \$355.6 million from 2017 to 2018. The \$329.3
- million increase in average PP&E NBV is primarily due to assets coming into service.
- 4 WCA is expected to increase by \$26.2 million primarily due to projected increases in
- 5 commodity costs.

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2.5 2018 Bridge versus 2019 Bridge Year

- Rate base is forecasted to increase by \$275.6 million from 2018 to 2019. The increase in
- 9 average PP&E NBV of \$262.1 million is primarily due to assets coming into service. WCA
- is expected to increase by \$13.5 million primarily due to projected increases in
- 11 commodity costs.

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2.6 2019 Bridge Year versus 2020 Test Year

- Rate base is forecasted to increase by \$133.3 million from 2019 to 2020. The \$185.3
- million increase in average PP&E NBV is primarily due to assets coming into service.
- WCA is expected to decrease by \$52.0 million primarily due to a lower WCA rate
- resulting from the utility's latest lead-lag study, which is partially offset by a projected
- increase in commodity costs.

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3. PROPERTY, PLANT AND EQUIPMENT

- Table 2 below presents a summary of Toronto Hydro's distribution asset (also referred
- to as PP&E below) balances, before and after accumulated depreciation and excluding
- 23 CWIP, for the Historical (2015 to 2017), Bridge (2018 to 2019), and Forecast (2020)
- 24 years.

Table 2: Gross and Net PP&E – Years Ending December 31 (\$ Millions)

	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Bridge	Bridge	Forecast
Land and Buildings	76.2	129.9	141.4	165.4	166.8	169.8
Other Distribution Assets	170.0	238.5	267.3	482.2	529.7	612.7
General Plant	127.7	185.2	247.5	239.5	240.5	243.0
TS Primary Above 50	5.8	6.0	36.9	38.9	39.0	39.1
Distribution System	149.9	156.8	184.5	228.8	251.0	277.9
Poles, Wires	2,172.2	2,430.6	2,663.8	2,902.8	3,151.0	3,426.9
Contributions and Grants	(58.2)	(90.5)	(118.0)	(182.1)	(254.4)	(322.6)
Line Transformers	412.4	465.3	515.4	574.4	645.6	714.2
Services and Meters	262.0	290.0	321.8	362.6	403.9	451.0
Equipment	61.5	100.4	120.8	129.7	135.7	145.9
IT Assets	27.3	47.2	58.7	70.2	77.9	89.0
Gross Assets	3,406.8	3,959.4	4,440.1	5,012.4	5,386.6	5,846.8
Accumulated Depreciation	(320.6)	(496.8)	(684.3)	(889.7)	(1,116.2)	(1,357.0)
Closing PP&E NBV	3,086.2	3,462.6	3,755.8	4,122.7	4,270.4	4,489.8
	<u> </u>					
Adjustments to Closing PP&E NBV						
Assets held for Sale	-	-	(8.7)	-	-	-
Monthly Billing	(0.7)	(0.6)	(2.3)	(2.0)	(1.4)	-
Closing PP&E NBV	3,085.4	3,462.0	3,744.7	4,120.6	4,269.0	4,489.8

Note:

Variances due to rounding may exist

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- 3 The PP&E NBV reported by Toronto Hydro pursuant to the OEB's Reporting and Record-
- 4 keeping Requirements ("RRR") and determined for rate base purposes are aligned, with
- the exception of two differences: (i) in 2015 to 2017, assets related to the monthly
- 6 billing program² were included in PP&E for RRR purposes but excluded in the
- 7 determination of rate base as these amounts are reported in the approved regulatory
- account;³ and (ii) in 2017, assets held for sale⁴ were included in PP&E for RRR but
- 9 excluded from the determination of rate base.

² See Exhibit 9.

³ Ibid.

⁴ See Exhibit 2B, Section E4.

- 1 The major drivers of the changes from 2015 to 2020 include:
- Continued investment in distribution assets;
- Completion of the Copeland TS Phase 1 project;
- Completion of the Operating Centre Consolidation Plan ("OCCP");
 - Completion of the Enterprise Resource Planning ("ERP") application project; and
 - Completion of the Hydro One Runnymede Station Expansion.

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3.1 2015 OEB-Approved versus 2015 Historical

- 9 At the end of 2015, Toronto Hydro received the decision related to its last rebasing
- application (EB-2014-0116), which resulted in OEB-approved rates and resulting revenue
- requirement.⁵ Toronto Hydro therefore provides its variance analysis between 2015
- OEB-approved and historical PP&E NBV on an aggregate basis.

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- OEB-approved NBV for 2015 was \$3,134.7 million compared to an actual of \$3,086.2
- million. The variance of \$48.5 million was primarily due to lower in-service additions
- than forecasted, partially offset by less derecognition and dispositions than forecasted.

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- For the reasons discussed in Exhibit 4B, Tab 1, Schedule 2, Toronto Hydro expected
- volatility in asset derecognition over the 2015-2019 period. In its EB-2014-0116
- decision, the OEB approved a variance account to track the differences in actual and
- forecasted derecognition. Toronto Hydro tracks the consequences of lower than
- 22 expected derecognition in this account.

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- 24 Actual asset dispositions were less than forecasted primarily due to the delayed
- disposition of the operating centre located at 5800 Yonge Street (Exhibit 2B, Section E4).

⁵ EB-2014-0116, Decision and Order (February 29, 2016), page 4.

3.2 2015 Historical versus 2016 Historical

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- 2 Actual asset NBV for 2016 was \$3,462.6 million compared to \$3,086.2 million in 2015.
- The increase of \$376.5 million is primarily due to assets coming into service.

Table 3: 2015 Historical versus 2016 Historical (\$ Millions)⁶

	2015	2016	Variance	Variance
	Actual	Actual	(\$)	(%)
Land and Buildings	76.2	129.9	53.7	70.4%
Other Distribution Assets	170.0	238.5	68.5	40.3%
General Plant	127.7	185.2	57.5	45.1%
TS Primary Above 50	5.8	6.0	0.2	2.6%
Distribution System	149.9	156.8	6.9	4.6%
Poles, Wires	2,172.2	2,430.6	258.4	11.9%
Contributions and Grants	(58.2)	(90.5)	(32.3)	55.5%
Line Transformers	412.4	465.3	52.9	12.8%
Services and Meters	262.0	290.0	28.0	10.7%
Equipment	61.5	100.4	38.9	63.4%
IT Assets	27.3	47.2	19.9	72.9%
Gross Assets	3,406.8	3,959.4	552.6	16.2%
Accumulated Depreciation	(320.6)	(496.8)	(176.2)	54.9%
Closing PP&E NBV (MIFRS)	3,086.2	3,462.6	376.5	12.2%

3.3 2016 Historical versus 2017 Historical

- 8 Actual asset NBV for 2017 was \$3,755.8 million compared to \$3,462.6 million in 2016.
- The increase of \$293.2 million is primarily due to assets coming into service.

⁶ Further breakdown of the categories and amounts presented in Tables 3 to 7 is provided in fixed asset continuity schedules provided in Exhibit 2A, Tab 1, Schedule 2, Appendix 2-BA.

Table 4: 2016 Historical versus 2017 Historical (\$ Millions)

	2016	2017	Variance	Variance
	Actual	Actual	(\$)	(%)
Land and Buildings	129.9	141.4	11.5	8.8%
Other Distribution Assets	238.5	267.3	28.8	12.1%
General Plant	185.2	247.5	62.3	33.6%
TS Primary Above 50	6.0	36.9	30.9	516.1%
Distribution System	156.8	184.5	27.7	17.7%
Poles, Wires	2,430.6	2,663.8	233.2	9.6%
Contributions and Grants	(90.5)	(118.0)	(27.5)	30.3%
Line Transformers	465.3	515.4	50.0	10.8%
Services and Meters	290.0	321.8	31.8	11.0%
Equipment	100.4	120.8	20.4	20.3%
IT Assets	47.2	58.7	11.4	24.2%
Gross Assets	3,959.4	4,440.1	480.7	12.1%
Accumulated Depreciation	(496.8)	(684.3)	(187.5)	37.7%
Closing PP&E NBV (MIFRS)	3,462.6	3,755.8	293.2	8.5%

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3.4 2017 Historical versus 2018 Bridge

- 4 Forecasted asset NBV for 2018 is \$4,122.7 million compared to \$3,755.8 million in 2017.
- 5 The increase of \$366.9 million is primarily due to assets coming into service.

Table 5: 2017 Historical versus 2018 Bridge (\$ Millions)

	2017	2018	Variance	Variance
	Actual	Bridge	(\$)	(%)
Land and Buildings	141.4	165.4	24.0	17.0%
Other Distribution Assets	267.3	482.2	214.9	80.4%
General Plant	247.5	239.5	(8.0)	-3.2%
TS Primary Above 50	36.9	38.9	2.0	5.3%
Distribution System	184.5	228.8	44.2	24.0%
Poles, Wires	2,663.8	2,902.8	239.0	9.0%
Contributions and Grants	(118.0)	(182.1)	(64.1)	54.3%
Line Transformers	515.4	574.4	59.1	11.5%
Services and Meters	321.8	362.6	40.8	12.7%
Equipment	120.8	129.7	8.9	7.4%
IT Assets	58.7	70.2	11.5	19.7%
Gross Assets	4,440.1	5,012.4	572.3	12.9%
Accumulated Depreciation	(684.3)	(889.7)	(205.4)	30.0%
Closing PP&E NBV (MIFRS)	3,755.8	4,122.7	366.9	9.8%

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3.5 2018 Bridge versus 2019 Bridge

- 4 Forecasted asset NBV for 2019 is \$4,270.4 million compared to \$4,122.7 million in 2018.
- 5 The increase of \$147.7 million is primarily due to assets coming into service.

Table 6: 2018 Bridge versus 2019 Bridge (\$ Millions)

	2018	2019	Variance	Variance
	Bridge	Bridge	(\$)	(%)
Land and Buildings	165.4	166.8	1.4	0.8%
Other Distribution Assets	482.2	529.7	47.5	9.9%
General Plant	239.5	240.5	1.0	0.4%
TS Primary Above 50	38.9	39.0	0.1	0.3%
Distribution System	228.8	251.0	22.3	9.7%
Poles, Wires	2,902.8	3,151.0	248.1	8.5%
Contributions and Grants	(182.1)	(254.4)	(72.3)	39.7%
Line Transformers	574.4	645.6	71.2	12.4%
Services and Meters	362.6	403.9	41.2	11.4%
Equipment	129.7	135.7	6.0	4.6%
IT Assets	70.2	77.9	7.7	10.9%
Gross Assets	5,012.4	5,386.6	374.2	7.5%
Accumulated Depreciation	(889.7)	(1,116.2)	(226.5)	25.5%
Closing PP&E NBV (MIFRS)	4,122.7	4,270.4	147.7	3.6%

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3.6 2019 Bridge versus 2020 Forecast Year

- 4 Forecasted asset NBV in 2020 is \$4,489.8 million compared to \$4,270.4 million in 2019.
- 5 The increase of \$219.4 million is primarily due to assets coming into service. The 2020
- 6 NBV opening balance includes an adjustment of \$1.4 million for the addition of the
- assets resulting from the monthly billing program,⁷ as approved by the OEB.

⁷ See Exhibit 9.

Table 7: 2019 Bridge versus 2020 Forecast (\$ Millions)

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	2019	2020	Variance	Variance
	Bridge	Forecast	(\$)	(%)
Land and Buildings	166.8	169.8	3.0	1.8%
Other Distribution Assets	529.7	612.7	83.0	15.7%
General Plant	240.5	243.0	2.5	1.0%
TS Primary Above 50	39.0	39.1	0.1	0.3%
Distribution System	251.0	277.9	26.8	10.7%
Poles, Wires	3,151.0	3,426.9	275.9	8.8%
Contributions and Grants	(254.4)	(322.6)	(68.2)	26.8%
Line Transformers	645.6	714.2	68.6	10.6%
Services and Meters	403.9	451.0	47.1	11.7%
Equipment	135.7	145.9	10.3	7.6%
IT Assets	77.9	89.0	11.1	14.2%
Gross Assets	5,386.6	5,846.8	460.2	8.5%
Accumulated Depreciation	(1,116.2)	(1,357.0)	(240.8)	21.6%
Closing PP&E NBV (MIFRS)	4,270.4	4,489.8	219.4	5.1%

- From 2019 to 2020, "other distribution assets" are expected to increase by \$83.0 million
- 4 or 15.7 percent, primarily due to the in-service amount for Hydro One Contributions
- 5 (see Exhibit 2B, Section E7.4) and IT software additions (see Exhibit 2B, Section E8.4).
- 7 General Plant assets are expected to increase by \$2.5 million or 1.0 percent primarily
- 8 due to the in-service amounts for facilities-related assets. Refer to the Facilities
- 9 Management and Security program (Exhibit 2B, Section E8.2) for more information.
- Distribution system assets are expected to increase by \$26.8 million or 10.7 percent,
- primarily due to the forecasted completion of stations projects. Refer to the Stations
- 13 Renewal program (Exhibit 2B, Section E6.6) for details.

15 Capital investment in poles and wires is expected to increase by \$275.9 million or 8.8

percent and investment in line transformer assets are expected to increase by \$68.6

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- 1 million or 10.6 percent. The increase in these major plant categories is primarily
- attributed to the Underground System Renewal Horseshoe (Exhibit 2B, Section E6.2),
- 3 Underground System Renewal Downtown (Exhibit 2B, Section E6.3), Overhead System
- 4 Renewal (Exhibit 2B, Section E6.5), Reactive and Corrective Capital (Exhibit 2B, Section
- 5 E6.7) and Customer Connections (Exhibit 2B, Section E5.1) programs.
- 7 Contributions and grants are expected to increase by \$68.2 million or 26.8 percent on
- 8 account of realized contributions related to in-service assets, resulting in a reduction to
- 9 NBV.

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- Services and meter assets are expected to increase by \$47.1 million or 11.7 percent.
- The increase in services and meter assets is primarily related to the Metering program
- 13 (Exhibit 2B, Section E5.4).
- Equipment assets are expected to increase by \$10.3 million or 7.6 percent, primarily due
- to investment in fleet and facilities-related assets. Refer to the Fleet and Equipment
- 17 Services program (Exhibit 2B, Section E8.3) for details.
- 19 IT assets are expected to increase by \$11.1 million or 14.2 percent, primarily due to
- investment in computer hardware equipment. Refer to the IT/OT Systems program
- 21 (Exhibit 2B, Section E8.4) for more information.

Year 2015

		Γ				Cost (Historical)						Accui	mulated Depreciation (Histo	orical)			
CCA Class	OEB Account	t Description	Opening Balance	Street Lighting Transfer	ICM Transfer	Revised Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Street Lighting Transfer	ICM Transfer	Revised Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$ 86.730.750	Ś -	Ś -	\$ 86,730,750	\$ 14.918.812	Š -	\$ 101,649,562	(\$ 18,749,189)	Ś -	Ś -	(\$ 18,749,189) (\$ 19,290,957)	-	(\$ 38.040.146) \$	63,609,416
N/A	1612	Land Rights	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Ś -	\$ -	Ś -	Ś -	-	\$ - \$	-
N/A	1805	Land	\$ 7,580,501	\$ -	\$ -	\$ 7,580,501	\$ -	(\$ 479,479)	\$ 7,101,021	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ - \$	7,101,021
1	1808	Buildings	\$ 30,080,459	\$ -	\$ 541,000	\$ 30,621,459	\$ 22,289,048	(\$ 1,509,643)	\$ 51,400,864	(\$ 1,515,028)	\$ -	\$ 428,292)	(\$ 1,943,320) (\$ 2,636,758)	56,974	(\$ 4,523,104) \$	\$ 46,877,760
47	1815	Transformer Station Equipment >50 kV	\$ 5,839,979	\$ -	\$ -	\$ 5,839,979	\$ -	\$ -	\$ 5,839,979	(\$ 404,102)	\$ -	\$ -	(\$ 404,102) (\$ 404,102)	-	(\$ 808,204) \$	5,031,775
47	1820	Distribution Station Equipment <50 kV	\$ 134,114,373	\$ -	\$ 8,952,275	\$ 143,066,649	\$ 6,822,070	(\$ 25,572)	\$ 149,863,147	(\$ 6,601,880)	\$ -	\$ 196,886)	(\$ 6,798,766) (\$ 7,285,185)	3,667	(\$ 14,080,284) \$	3 135,782,863
47	1830	Poles, Towers & Fixtures	\$ 206,672,063	\$ 32,890,358	\$ 39,732,874	\$ 279,295,295	\$ 38,385,574	(\$ 6,683,227)	\$ 310,997,642	(\$ 6,467,264)	(\$ 1,140,413)	\$ 684,719)	(\$ 8,292,396) (\$ 9,290,599)	424,895	(\$ 17,158,100) \$	\$ 293,839,542
47	1835	Overhead Conductors & Devices	\$ 208,749,780	\$ 347,129	\$ 44,500,791	\$ 253,597,699	\$ 48,487,450	(\$ 2,715,716)	\$ 299,369,433	(\$ 5,949,068)	(\$ 8,828)	\$ 593,918)	(\$ 6,551,814) (\$ 7,893,309)	172,996	(\$ 14,272,127) \$	\$ 285,097,306
47	1840	Underground Conduit	\$ 667,352,848	\$ 2,761,033	\$ 185,457,995	\$ 855,571,876	\$ 96,834,638	(\$ 445,355)	\$ 951,961,159	(\$ 30,105,457)	(\$ 86,995)	\$ 3,145,682)	(\$ 33,338,134) (\$ 37,556,567)	34,817	(\$ 70,859,884) \$	\$ 881,101,275
47	1845	Underground Conductors & Devices	\$ 424,854,218	\$ 4,035,888	\$ 99,938,482	\$ 528,828,588	\$ 85,845,120	(\$ 4,802,856)	\$ 609,870,852	(\$ 13,490,852)	(\$ 325,228)	\$ 2,135,287)	(\$ 15,951,367) (\$ 18,848,584)	339,808	(\$ 34,460,143) \$	\$ 575,410,709
47	1850	Line Transformers	\$ 320,260,115	\$ -	\$ 48,562,880	\$ 368,822,995	\$ 52,697,845	(\$ 9,112,493)	\$ 412,408,347	(\$ 17,183,898)	\$ -	\$ 1,306,409)	(\$ 18,490,307) (\$ 19,940,274)	1,003,088	(\$ 37,427,493) \$	374,980,854
47	1855	Services (Overhead & Underground)	\$ 64,883,849	\$ -	\$ 10,367,537	\$ 75,251,386	\$ 18,367,060	(\$ 313,812)	\$ 93,304,634	(\$ 1,544,089)	\$ -	\$ 147,571)	(\$ 1,691,660) (\$ 2,012,677)	21,569	(\$ 3,682,767) \$	\$ 89,621,860
47	1860	Meters	\$ 39,116,124	\$ -	\$ 11,936,242	\$ 51,052,366	\$ 10,745,470	(\$ 121,146)	\$ 61,676,690	(\$ 2,174,873)	\$ -	\$ 232,576)	(\$ 2,407,450) (\$ 3,131,803)	13,658	(\$ 5,525,595) \$	56,151,095
47	1860	Meters (Smart Meters)	\$ 99,475,578	\$ -	\$ 2,387,522	\$ 101,863,100	\$ 6,712,905	(\$ 1,555,137)	\$ 107,020,868	(\$ 9,979,926)	\$ -	\$ 133,661)	(\$ 10,113,587) (\$ 10,252,844)	204,307	(\$ 20,162,124) \$	86,858,745
N/A	1905	Land	\$ 18,498,515	\$ -	\$ -	\$ 18,498,515	\$ -	(\$ 760,437)	\$ 17,738,078	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ - \$	17,738,078
1	1908	Buildings & Fixtures	\$ 85,714,280	\$ -	\$ -	\$ 85,714,280	\$ 45,213,438	(\$ 4,019,379)	\$ 126,908,339	(\$ 5,853,773)	\$ -	\$ -	(\$ 5,853,773) (\$ 6,451,486)	1,166,767	(\$ 11,138,491) \$	115,769,847
13	1910	Leasehold Improvements	\$ 753,840	\$ -	\$ -	\$ 753,840	(\$ 0)	\$ -	\$ 753,840	(\$ 285,120)	\$ -	\$ -	(\$ 285,120) (\$ 234,715)	-	(\$ 519,835) \$	234,005
8	1915	Office Furniture & Equipment	\$ 9,835,750	\$ -	\$ -	\$ 9,835,750	\$ 921,298	\$ -	\$ 10,757,047	(\$ 2,010,665)	\$ -	\$ -	(\$ 2,010,665) (\$ 1,762,299)	-	(\$ 3,772,964) \$	6,984,08
50	1920	Computer Equipment - Hardware	\$ 19,972,019	\$ -	\$ -	\$ 19,972,019			\$ 27,318,767	(\$ 5,437,312)		\$ -	(\$ 5,437,312) (-	(\$ 11,049,391) \$	16,269,375
10	1930	Transportation Equipment	\$ 24,098,391	\$ -	\$ -	\$ 24,098,391	7 2/022/020	(\$ 39,845)	,,.	(\$ 6,326,069)		\$ -	(\$ 6,326,069) (7 0/00-/.00/	39,845	(7,,, 7	3 14,441,867
8	1935	Stores Equipment	\$ 7,066	\$ -	\$ -	\$ 7,066		\$ -	\$ 7,066	(\$ 7,066)		\$ -	(\$ 7,066)		-	(\$ 7,066) \$	\$ -
8	1940	Tools, Shop & Garage Equipment	\$ 12,859,818	\$ 2,406	\$ -	\$ 12,862,224		(\$ 45,333)	, , , , , , , , , , , , , , , , , , , ,	(\$ 2,314,441)		\$ -	(\$ 2,314,708)	\$ 2,401,040)	-	(\$ 4,715,748) \$	9,980,621
8	1945	Measurement & Testing Equipment	\$ 480,004	\$ -	\$ -	\$ 480,004	\$ 239	\$ -	\$ 480,243	(\$ 72,070)		\$ -	(\$ 72,070) (\$ 67,711)	-	(\$ 139,781) \$	340,461
8	1950	Service Equipment	\$ 636,435	\$ -	\$ -	\$ 636,435	\$ -	Ÿ	\$ 636,435	(\$ 162,018)	7	\$ -	(\$ 162,018)	7,0-0,	-	(\$ 284,541) \$	351,89
8	1955	Communications Equipment	\$ 7,513,965	\$ -	\$ -	\$ 7,513,965	\$ 511,863	\$ -	\$ 8,025,828	(\$ 2,036,278)		\$ -	(\$ 2,036,278) (, , , , , ,	-	(\$ 4,238,682) \$	3,787,14
8	1960	Miscellaneous Equipment	\$ 267,071	\$ -	\$ -	\$ 267,071	\$ -	\$ -	\$ 267,071	(\$ 36,919)	\$ -	\$ -	(\$ 36,919) (-	(\$ 73,838) \$	193,232
47	1970	Load Management Controls Customer Premises	\$ 3,022,834	\$ -	\$ -	\$ 3,022,834	\$ -	\$ -	\$ 3,022,834	(\$ 1,082,077)	\$ -	\$ -	(\$ 1,082,077) (\$ 1,067,310)	-	(\$ 2,149,387) \$	\$ 873,447
47	1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ - \$	<u>-</u>
47	1980	System Supervisor Equipment	\$ 20,313,701	\$ -	\$ 2,749,133	\$ 23,062,835	\$ 3,137,694	(\$ 775,450)	\$ 25,425,079	(\$ 1,945,616)	\$ -	\$ 112,694)	(\$ 2,058,310) (\$ 2,253,207)	63,608	(\$ 4,247,910) \$	21,177,169
47	1985	Miscellaneous Fixed Assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ - \$	
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$ 28,510,489)	\$ -	\$ -	(\$ 28,510,489)	(\$ 30,083,801)	\$ 396,808	(\$ 58,197,482)	\$ 710,656	\$ -	\$ -	\$ 710,656	\$ 2,210,580 (21,616)	\$ 2,899,620 (\$	55,297,862
N/A	1609	Capital Contributions Paid	\$ 19,966,787	\$ -	\$ -	\$ 19,966,787	\$ 1,763,500	\$ -	\$ 21,730,287	(\$ 898,450)	\$ -	\$ -	(\$ 898,450) (\$ 1,127,378)	-	(\$ 2,025,829) \$	\$ 19,704,458
N/A	2005	Property Under Capital Leases	\$ 18,170,834	\$ -	\$ -	\$ 18,170,834	\$ -	\$ -	\$ 18,170,834	(\$ 3,776,496)	\$ -	\$ -	(\$ 3,776,496) (\$ 2,254,564)	-	(\$ 6,031,060) \$	12,139,774
		Sub-Total	\$ 2.509.311.456	\$ 40,036,813	\$ 455.126.733	\$ 3.004.475.002	\$ 435,318,773	(\$ 33.008.072)	\$ 3,406,785,703	(\$ 145,699,340)	(\$ 1.561.732)	(\$ 9.117.695)	(\$ 156,378,767) ((\$ 167,779,494)	3.524.383	(\$ 320.633.879) \$	3.086.151.824
		Less Socialized Renewable Energy Generation Investments (input as negative)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	š -	\$ -	š -	\$ -	\$ -	\$ -	-	s - s	· -
		Less Other Non Rate-Regulated Utility Assets (input as negative)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ - \$	<u> </u>
		Total PP&E	\$ 2,509,311,456	\$ 40,036,813	\$ 455,126,733	\$ 3,004,475,002	\$ 435,318,773	(\$ 33,008,072)	\$ 3,406,785,703	(\$ 145,699,340)	(\$ 1,561,732)	\$ 9,117,695)	(\$ 156,378,767) (\$ 167,779,494)	3,524,383	(\$ 320,633,879) \$	\$ 3,086,151,824
		Depreciation Expense adj. from gain or loss on the retiren	nent of assets (pool of like asset	s)										\$ -			
		Total	<u> </u>										- 1	(\$ 167,779,494)			

10	Transportation
8	Stores Equipment

 Interest Component
 Component

Notes:
Street Lighting Transfer and ICM Transfer as per EB-2014-0116
Fixed Asset Continuity Schedule includes monthly billing and assets held for sale

Year 2016

				Cost (Histor	ical)			Accumulated Depre	ciation (Historical)		
CCA Class	OEB Account	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$ 101,649,562	\$ 11,914,202	\$ -	\$ 113,563,764	(\$ 38,040,146) (\$	19,291,705)	\$ -	(\$ 57,331,851)	\$ 56,231,912
N/A	1612	Land Rights	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -	\$ -
N/A	1805	Land	\$ 7,101,021	\$ -	(\$ 1,874)	\$ 7,099,147	\$ - \$	-	\$ -	\$ -	\$ 7,099,147
1	1808	Buildings	\$ 51,400,864	\$ 53,726,576	(\$ 59,398)	\$ 105,068,042	(\$ 4,523,104) (\$	2,404,722)	\$ 7,282	(\$ 6,920,544)	\$ 98,147,498
47	1815	Transformer Station Equipment >50 kV	\$ 5,839,979	\$ 152,667	\$ -	\$ 5,992,646	(\$ 808,204) (\$	404,897)	\$ -	(\$ 1,213,101)	\$ 4,779,545
47	1820	Distribution Station Equipment <50 kV	\$ 149,863,147	\$ 7,439,750	(\$ 530,454)	\$ 156,772,442	(\$ 14,080,284) (\$	7,479,328)	\$ 155,598	(\$ 21,404,014)	\$ 135,368,428
47	1830	Poles, Towers & Fixtures	\$ 310,997,642	\$ 34,585,346	(\$ 6,099,647)	\$ 339,483,342	(\$ 17,158,100) (\$	10,031,935)	\$ 556,652	(\$ 26,633,382)	\$ 312,849,959
47	1835	Overhead Conductors & Devices	\$ 299,369,433	\$ 52,320,421	(\$ 2,202,383)	\$ 349,487,472	(\$ 14,272,127) (\$	9,360,888)	\$ 227,463	(\$ 23,405,552)	\$ 326,081,920
47	1840	Underground Conduit	\$ 951,961,159	\$ 99,687,834	(\$ 664,426)	\$ 1,050,984,568	(\$ 70,859,884) (\$	40,921,100)	\$ 68,646	(\$ 111,712,339)	\$ 939,272,229
47	1845	Underground Conductors & Devices	\$ 609,870,852	\$ 86,622,401	(\$ 5,868,977)	\$ 690,624,276	(\$ 34,460,143) (\$	21,057,038)	\$ 721,411	(\$ 54,795,769)	\$ 635,828,507
47	1850	Line Transformers	\$ 412,408,347	\$ 63,107,081	(\$ 10,209,843)	\$ 465,305,585	(\$ 37,427,493) (\$	21,221,738)	\$ 1,660,821	(\$ 56,988,410)	\$ 408,317,175
47	1855	Services (Overhead & Underground)	\$ 93,304,634	\$ 16,333,002	(\$ 543,999)	\$ 109,093,637	(\$ 3,682,767) (\$	2,418,759)	\$ 27,890	(\$ 6,073,637)	\$ 103,020,000
47	1860	Meters	\$ 61,676,690	\$ 13,064,420	(\$ 1,845,001)	\$ 72,896,109	(\$ 5,525,595) (\$	3,742,156)	\$ 262,127	(\$ 9,005,624)	\$ 63,890,485
47	1860	Meters (Smart Meters)	\$ 107,020,868	\$ 4,596,069	(\$ 3,589,882)	\$ 108,027,055	(\$ 20,162,124) (\$	10,474,655)	\$ 840,109	(\$ 29,796,669)	\$ 78,230,386
N/A	1905	Land	\$ 17,738,078	\$ 301	\$ -	\$ 17,738,379	\$ - \$	-	\$ -	\$ -	\$ 17,738,379
1	1908	Buildings & Fixtures	\$ 126,908,339	\$ 57,613,894	(\$ 65,519)	\$ 184,456,714	(\$ 11,138,491) (\$	7,898,271)	\$ 1,343	(\$ 19,035,419)	\$ 165,421,294
13	1910	Leasehold Improvements	\$ 753,840	\$ -	\$ -	\$ 753,840	(\$ 519,835) (\$	184,054)	\$ -	(\$ 703,889)	\$ 49,951
8	1915	Office Furniture & Equipment	\$ 10,757,047	\$ 4,541,011	\$ 54,066	\$ 15,352,125	(\$ 3,772,964) (\$	1,688,533)	\$ 1,205	(\$ 5,460,292)	\$ 9,891,832
50	1920	Computer Equipment - Hardware	\$ 27,318,767	\$ 19,919,107	\$ -	\$ 47,237,874	(\$ 11,049,391) (\$	8,721,873)	\$ -	(\$ 19,771,265)	\$ 27,466,609
10	1930	Transportation Equipment	\$ 26,580,871	\$ 3,390,059	(\$ 71,045)	\$ 29,899,885	(\$ 12,139,003) (\$	5,294,930)	\$ 71,045	(\$ 17,362,888)	\$ 12,536,997
8	1935	Stores Equipment	\$ 7,066	\$ -	\$ -	\$ 7,066	(\$ 7,066) \$	-	\$ -	(\$ 7,066)	\$ -
8	1940	Tools, Shop & Garage Equipment	\$ 14,696,369	\$ 3,129,240	\$ -	\$ 17,825,609	(\$ 4,715,748) (\$	2,248,169)	\$ -	(\$ 6,963,917)	\$ 10,861,692
8	1945	Measurement & Testing Equipment	\$ 480,243	\$ -	\$ -	\$ 480,243	(\$ 139,781) (\$	67,711)	\$ -	(\$ 207,492)	\$ 272,751
8	1950	Service Equipment	\$ 636,435	\$ 22,000	\$ -	\$ 658,435	(\$ 284,541) (\$	102,041)	\$ -	(\$ 386,583)	\$ 271,852
8	1955	Communications Equipment	\$ 8,025,828	\$ 27,860,758	\$ -	\$ 35,886,586	(\$ 4,238,682) (\$	2,100,612)	\$ -	(\$ 6,339,294)	\$ 29,547,292
8	1960	Miscellaneous Equipment	\$ 267,071	\$ 3,907	\$ -	\$ 270,978	(\$ 73,838) (\$	37,245)	\$ -	(\$ 111,083)	\$ 159,895
47	1970	Load Management Controls Customer Premises	\$ 3,022,834	\$ -	\$ -	\$ 3,022,834	(\$ 2,149,387) (\$	836,068)	\$ -	(\$ 2,985,455)	\$ 37,379
47	1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -	\$ -
47	1980	System Supervisor Equipment	\$ 25,425,079	\$ 3,264,626	(\$ 517,048)	\$ 28,172,657	(\$ 4,247,910) (\$	2,273,836)	\$ 76,034	(\$ 6,445,711)	\$ 21,726,945
47	1985	Miscellaneous Fixed Assets	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -	\$ -
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$ 58,197,482)	(\$ 32,842,749)	\$ 534,698	(\$ 90,505,533)	\$ 2,899,620 \$	3,765,318	(\$ 33,067)	\$ 6,631,871	\$ 83,873,661
N/A	1609	Capital Contributions Paid	\$ 21,730,287	\$ 53,844,210	\$ -	\$ 75,574,497	(\$ 2,025,829) (\$	2,056,028)	\$ -	(\$ 4,081,857)	\$ 71,492,640
N/A	2005	Property Under Capital Leases	\$ 18,170,834	\$ -	\$ -	\$ 18,170,834	(\$ 6,031,060) (\$	2,254,564)	\$ -	\$ 8,285,624)	\$ 9,885,210
		Sub-Total	\$ 3,406,785,703	\$ 584,296,135	(\$ 31.680.732)	\$ 3.959.401.106	(\$ 320.633.879) (\$	180.807.538)	\$ 4.644.560	(\$ 496.796.857)	\$ 3,462,604,249
		Less Socialized Renewable Energy Generation Investments (input as negative)	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ -	\$ -
		Less Other Non Rate-Regulated Utility Assets (input as	\$ -	\$ -	\$ -	\$ -	\$ - \$	_	\$ -	\$ -	\$ -
		Total PP&E	\$ 3.406.785.703	\$ 584,296,135	(\$ 31.680.732)	\$ 3.959.401.106	(\$ 320.633.879) (\$	180,807,538)	\$ 4,644,560	Ÿ	\$ 3,462,604,249
		Depreciation Expense adj. from gain or loss on the retirement of	.,,,		,,,	,,,	\$	-	,,		,,,
		Total	(Feet and Education)				(\$	180,807,538)	t		

١	10	Transportation
	8	Stores Equipment

Less: Fully Allocated Depreciation

Transportation 1,721,911) Stores Equipment
Net Depreciation 179,085,627)

Notes: Fixed Asset Continuity Schedule includes monthly billing

Year 2017

					Cost (Historie	-al)				Accumulated Depre	sistion (Historical)		
CCA Class	OEB Account	Description		Opening Balance	Additions	Disposals	Closing Balance	- -	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$	113,563,764	\$ 23,396,902		\$ 136,960,66	5 (\$	\$ 57,331,851) (\$			(\$ 77,314,695) \$	59,645,971
N/A	1612	Land Rights	Ś	-	\$ -	\$ -	\$ 150,500,00	\$	\$ - \$	-	\$ -	\$ - \$	-
N/A	1805	Land	Ś	7.099.147	\$ -	(\$ 92,714)	\$ 7,006,43	3 5	\$ - \$	_	\$ -	\$ - \$	7.006.433
1	1808	Buildings	\$	105,068,042	7	(\$ 149,670)			\$ 6,920,544) (\$	2,796,835)	\$ 27,925	(\$ 9,689,454) \$	106.943.156
47	1815	Transformer Station Equipment >50 kV	Ś	5,992,646	\$ 30,938,545	(\$ 13,224)			\$ 1,213,101) (\$	651,800)	\$ 1.746	(\$ 1,863,155) \$	35,054,811
47	1820	Distribution Station Equipment <50 kV	\$	156,772,442	\$ 28,828,722	(\$ 1,087,981)			\$ 21.404.014) (\$	7,811,055)	\$ 370,544	(\$ 28,844,525) \$	155,668,658
47	1830	Poles, Towers & Fixtures	\$	339,483,342	\$ 26,137,523	, , ,			\$ 26,633,382) (\$	10,443,048)	\$ 407,308	(\$ 36,669,123) \$	325,808,890
47	1835	Overhead Conductors & Devices	Ś	349,487,472	\$ 43.677.626	(\$ 2,617,603)	\$ 390,547,49		\$ 23,405,552) (\$	10,246,549)	\$ 326,967	(\$ 33,325,134) \$	357,222,360
47	1840	Underground Conduit	Ś	1.050,984,568	\$ 77.448.153	(\$ 494,065)			\$ 111,712,339) (\$	42,854,989)	\$ 89,336	(\$ 154,477,992) \$	973,460,664
47	1845	Underground Conductors & Devices	\$	690,624,276	\$ 98.821.342				\$ 54,795,769) (\$	23,402,291)	\$ 654,498	(\$ 77,543,562) \$	705,300,858
47	1850	Line Transformers	\$	465,305,585	\$ 66,492,438	(\$ 16,443,839)			\$ 56,988,410) (\$	22,739,608)	•	(\$ 77,429,407) \$	437,924,777
47	1855	Services (Overhead & Underground)	\$	109,093,637	\$ 14,283,272	, , ,			\$ 6,073,637) (\$	2,723,949)		(\$ 8,668,122) \$	113,466,303
47	1860	Meters	\$	72,896,109	\$ 8,019,209	(\$ 1,020,166)		_	\$ 9,005,624) (\$	4,133,564)	•	(\$ 12,964,895) \$	66,930,258
47	1860	Meters (Smart Meters)	\$	108,027,055	\$ 15,926,835	(\$ 4,145,643)	\$ 119,808,24	7 (\$	\$ 29,796,669) (\$	10,822,444)	\$ 1,410,494	(\$ 39,208,620) \$	80,599,628
N/A	1905	Land	\$	17,738,379	\$ -	\$ -	\$ 17,738,37	9 \$	\$ - \$	-	\$ -	\$ - \$	17,738,379
1	1908	Buildings & Fixtures	\$	184,456,714	\$ 65,192,176	(\$ 2,938,498)	\$ 246,710,39	2 (\$	\$ 19,035,419) (\$	10,714,877)	\$ 427,264	(\$ 29,323,031) \$	217,387,360
13	1910	Leasehold Improvements	\$	753,840	\$ -	\$ -	\$ 753,84) (\$	\$ 703,889) (\$	30,736)	\$ -	(\$ 734,624) \$	19,216
8	1915	Office Furniture & Equipment	\$	15,352,125	\$ 3,731,695	(\$ 130,601)	\$ 18,953,21	3 (\$	\$ 5,460,292) (\$	1,898,974)	\$ 63,688	(\$ 7,295,578) \$	11,657,640
50	1920	Computer Equipment - Hardware	\$	47,237,874	\$ 11,445,468	\$ -	\$ 58,683,34	1 (\$	\$ 19,771,265) (\$	9,195,801)	\$ -	(\$ 28,967,065) \$	29,716,276
10	1930	Transportation Equipment	\$	29,899,885	\$ 4,044,806	(\$ 225,966)	\$ 33,718,72	4 (\$	\$ 17,362,888) (\$	4,455,106)	\$ 225,966	(\$ 21,592,028) \$	12,126,696
8	1935	Stores Equipment	\$	7,066	\$ -	\$ -	\$ 7,06	5 (\$	\$ 7,066) \$	-	\$ -	(\$ 7,066) \$	
8	1940	Tools, Shop & Garage Equipment	\$	17,825,609	\$ 3,325,955	\$ -	\$ 21,151,56	4 (\$	\$ 6,963,917) (\$	2,100,269)	\$ -	(\$ 9,064,186) \$	12,087,378
8	1945	Measurement & Testing Equipment	\$	480,243	\$ -	\$ -	\$ 480,24	3 (\$	\$ 207,492) (\$	67,053)	\$ -	(\$ 274,545) \$	205,697
8	1950	Service Equipment	\$	658,435	\$ 187,338	\$ -	\$ 845,77	3 (\$	\$ 386,583) (\$	95,035)	\$ -	(\$ 481,618) \$	364,155
8	1955	Communications Equipment	\$	35,886,586	\$ 9,471,460	\$ -	\$ 45,358,04	5 (\$	\$ 6,339,294) (\$	4,010,158)	\$ -	(\$ 10,349,452) \$	35,008,594
8	1960	Miscellaneous Equipment	\$	270,978	\$ -	\$ -	\$ 270,97	8 (\$	\$ 111,083) (\$	37,310)	\$ -	(\$ 148,393) \$	122,585
47	1970	Load Management Controls Customer Premises	\$	3,022,834	\$ -	\$ -	\$ 3,022,83	4 (\$	\$ 2,985,455) (\$	37,379)	\$ -	(\$ 3,022,834) \$	-
47	1975	Load Management Controls Utility Premises	\$	-	\$ -	\$ -	\$ -	\$	\$ - \$	-	\$ -	\$ - \$	-
47	1980	System Supervisor Equipment	\$	28,172,657	\$ 7,882,436	(\$ 468,059)	\$ 35,587,03	3 (\$	\$ 6,445,711) (\$	2,364,096)	\$ 74,643	(\$ 8,735,164) \$	26,851,869
47	1985	Miscellaneous Fixed Assets	\$	-	\$ -	\$ -	\$ -	\$	\$ - \$	-	\$ -	\$ - \$	-
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$	90,505,533) (\$ 28,704,350)	\$ 1,250,776	(\$ 117,959,10	5) \$	\$ 6,631,871 \$	4,710,955	(\$ 137,608)	\$ 11,205,218 (\$	106,753,888)
N/A	1609	Capital Contributions Paid	\$	75,574,497	\$ -	\$ -	\$ 75,574,49	7 (\$	\$ 4,081,857) (\$	3,140,006)	\$ -	(\$ 7,221,863) \$	68,352,635
N/A	2005	Property Under Capital Leases	\$	18,170,834	\$ -	\$ -	\$ 18,170,83	4 (\$	\$ 8,285,624) (\$	2,064,349)	\$ -	(\$ 10,349,973) \$	7,820,862
		Sub-Total	\$	3,959,401,106	\$ 522,261,787	(\$ 39,563,788)	\$ 4,442,099,10	5 (\$	\$ 496,796,857) (\$	194,109,167)	\$ 6,545,139	(\$ 684.360.885) \$	3,757,738,220
		Less Socialized Renewable Energy Generation Investments	Ť	5,555, 157,166		(+ 00,000,100)	, , ,	- (*		,,	5,5.5,100	ψ σσ.,σσσ,σσσ,	5,. 5. ,. 55,226
		(input as negative)	\$	-	\$ -	\$ -	\$ -	\$	\$ - \$	-	\$ -	\$ - \$	-
		Less Other Non Rate-Regulated Utility Assets (input as	\$	- (\$ 2,002,023)	\$ -	(\$ 2,002,02		\$ - \$	33,367	\$ -	\$ 33,367 (\$	1,968,656)
		Total PP&E	\$	3,959,401,106	\$ 520,259,765	(\$ 39,563,788)	\$ 4,440,097,08	2 (\$	\$ 496,796,857) (\$	194,075,800)	\$ 6,545,139	(\$ 684,327,518) \$	3,755,769,564
		Depreciation Expense adj. from gain or loss on the retirement	of assets	s (pool of like assets)					\$				
		Total							(\$	194,075,800)			

10	Transportation
8	Stores Equipment

Notes:

Fixed Asset Continuity Schedule includes monthly billing and assets held for sale
Other Non Rate-Regulated Utility Assets includes Generation Protection, Monitoring, and Control

program
Precapitalized Inventory transfer included in the continuity schedule

Less: Fully Allocated Depreciation

 Transportation
 (\$ 1,622,598)

 Stores Equipment
 \$

 Net Depreciation
 (\$ 192,453,202)

Year 2018

20 A Class			Cost (Br										
CCA Class	OEB Account	Description	Oper	ning Balance	Additions	Disposals	Closing Balance	Op	pening Balance	Additions	Disposals	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$	136,960,666	\$ 96,165,279	(\$ 422,839	\$ 232,703,106	(\$	77,314,695) (\$ 24,791,002)	\$ 147,994	\$ 101,957,703) \$	130,745,403
N/A	1612	Land Rights	\$	-	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ - \$	-
N/A	1805	Land	\$	7,006,433	\$ -	(\$ 4,601	\$ 7,001,832	\$	-	\$ -	\$ -	\$ - \$	7,001,832
1	1808	Buildings	\$	124,836,400	\$ 16,455,257	(\$ 264,582	\$ 141,027,076	(\$	9,689,454) (\$ 3,351,463)	\$ 258,702	\$ 12,782,215) \$	128,244,861
47	1815	Transformer Station Equipment >50 kV	\$	37,562,593	\$ 1,310,327	\$ -	\$ 38,872,920	(\$	1,863,155) (\$ 1,291,156)	\$ -	\$ 3,154,311) \$	35,718,609
47	1820	Distribution Station Equipment <50 kV	\$	184,513,183	\$ 44,518,078	(\$ 269,973	\$ 228,761,288	(\$	28,844,525) (\$ 8,890,469)	\$ 79,273	\$ 37,655,722) \$	191,105,567
47	1830	Poles, Towers & Fixtures	\$	362,478,012	\$ 29,326,949	(\$ 5,262,273	\$ 386,542,689	(\$	36,669,123) (\$ 10,881,638)	\$ 910,954	\$ 46,639,807) \$	339,902,882
47	1835	Overhead Conductors & Devices	\$	390,547,495	\$ 43,657,910	(\$ 1,970,376	\$ 432,235,028	(\$	33,325,134) (\$ 10,809,893)	\$ 251,121	\$ 43,883,906) \$	388,351,122
47	1840	Underground Conduit	\$	1,127,938,656	\$ 98,322,508	(\$ 537,951	\$ 1,225,723,213	(\$	154,477,992) (\$ 44,902,816)	\$ 96,339	\$ 199,284,469) \$	1,026,438,744
47	1845	Underground Conductors & Devices	\$	773,996,003	\$ 88,499,944	(\$ 4,192,027	\$ 858,303,920	(\$	77,543,562) (\$ 24,982,566)	\$ 404,411	\$ 102,121,717) \$	756,182,203
47	1850	Line Transformers	\$	515,354,184	\$ 67,842,711	(\$ 8,759,744	\$ 574,437,151	(\$	77,429,407) (\$ 24,107,411)	\$ 1,233,359	\$ 100,303,459) \$	474,133,693
47	1855	Services (Overhead & Underground)	\$	122,134,425	\$ 17,736,555	(\$ 271,457	\$ 139,599,522	(\$	8,668,122) (\$ 3,057,508)	\$ 15,661	\$ 11,709,970) \$	127,889,553
47	1860	Meters	\$	79,895,152	\$ 17,692,914	(\$ 514,932	\$ 97,073,135	(\$	12,964,895) (\$ 4,618,567)	\$ 70,849	\$ 17,512,613) \$	79,560,522
47	1860	Meters (Smart Meters)	\$	119,808,247	\$ 8,399,704	(\$ 2,261,208	\$ 125,946,743	(\$	39,208,620) (\$ 11,305,147)	\$ 491,170	\$ 50,022,597) \$	75,924,147
N/A	1905	Land	\$	17,738,379	\$ -	(\$ 382,322	\$ 17,356,057	\$	-	\$ -	\$ -	\$ - \$	17,356,057
1	1908	Buildings & Fixtures	\$	246,355,014	\$ 3,834,718	(\$ 11,442,228	\$ 238,747,504	(\$	29,323,031) (\$ 11,331,950)	\$ 3,084,685	\$ 37,570,297) \$	201,177,207
13	1910	Leasehold Improvements	\$ 753.		\$ -	\$ -	\$ 753,840	(\$	734,624) (\$ 10,481)	\$ -	\$ 745,106) \$	8,734
8	1915	Office Furniture & Equipment	\$	19,308,596	\$ 567,003	\$ -	\$ 19,875,598	(\$	7,295,578) (\$ 2,112,380)	\$ -	\$ 9,407,958) \$	10,467,640
50	1920	Computer Equipment - Hardware	\$	58,683,341	\$ 11,534,282	\$ -	\$ 70,217,623	(\$	28,967,065) (\$ 11,352,594)	11,352,594) \$ -	\$ 40,319,660) \$	29,897,964
10	1930	Transportation Equipment	\$	33,718,724	\$ 4,652,877	\$ -	\$ 38,371,602	(\$	21,592,028) (\$ 3,733,970)	\$ -	\$ 25,325,997) \$	13,045,604
8	1935	Stores Equipment	\$	7,066	\$ -	\$ -	\$ 7,066	(\$	7,066)		\$ -	\$ 7,066) \$	-
8	1940	Tools, Shop & Garage Equipment	\$	21,151,564	\$ 3,306,026	\$ -	\$ 24,457,590	(\$	9,064,186) (\$ 2,282,386)	\$ -	\$ 11,346,572) \$	13,111,018
8	1945	Measurement & Testing Equipment	\$	480,243	\$ 182	\$ -	\$ 480,425	(\$	274,545) (\$ 59,829)	\$ -	\$ 334,375) \$	146,050
8	1950	Service Equipment	\$	845,773	\$ 192,667	\$ -	\$ 1,038,440	(\$	481,618) (\$ 113,681)	\$ -	\$ 595,298) \$	443,141
8	1955	Communications Equipment	\$	45,358,046	\$ 616,253	\$ -	\$ 45,974,299	(\$	10,349,452) (\$ 4,287,086)	\$ -	\$ 14,636,538) \$	31,337,761
8	1960	Miscellaneous Equipment	\$	270,978	\$ 4,792	\$ -	\$ 275,770	(\$	148,393) (\$ 37,343)	\$ -	\$ 185,736) \$	90,034
47	1970	Load Management Controls Customer Premises	\$	3,022,834	\$ -	\$ -	\$ 3,022,834	(\$	3,022,834)	\$ -	\$ -	\$ 3,022,834) \$	-
47	1975	Load Management Controls Utility Premises	\$	-	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ - \$	-
47	1980	System Supervisor Equipment	\$	35,587,033	\$ 15,440,125	(\$ 443,248	\$ 50,583,910	(\$	8,735,164) (\$ 2,887,747)	\$ 47,915	\$ 11,574,995) \$	39,008,915
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$	117,959,106)	(\$ 64,488,417)	\$ 390,793	(\$ 182,056,729)	\$	11,205,218	\$ 5,203,131	(\$ 19,921)	\$ 16,388,428 (\$	165,668,301)
N/A	1609	Capital Contributions Paid	\$	75,574,497	\$ 110,620,512	\$ -	\$ 186,195,009	(\$	7,221,863) (\$ 5,592,493)	\$ -	\$ 12,814,355) \$	173,380,654
N/A	2005	Property Under Capital Leases	\$	18,170,834	\$ -	\$ -	\$ 18,170,834	(\$	10,349,973) (\$ 1,076,886)	\$ -	\$ 11,426,859) \$	6,743,976
		. ,		, ,	·	•		,,	, , ,	, , ,			
		Sub-Total	\$	4,442,099,105	\$ 616,209,155	(\$ 36,608,966	\$ 5,021,699,294	(\$	684,360,885) (\$ 212,665,331)	\$ 7,072,510	\$ 889,953,706) \$	4,131,745,588
		Less Socialized Renewable Energy Generation Investments			14 000 000		(4 000 000)				<u>, , , , , , , , , , , , , , , , , , , </u>		202.252
		(input as negative)	\$	2 002 022	(\$ 806,300)	\$ -	(\$ 806,300)	\$	- 22.267	\$ 5,944	\$ -	\$ 5,944 (\$, ,
		Less Other Non Rate-Regulated Utility Assets (input as	(\$	2,002,023)	(, -,,- ,	\$ -	(\$ 8,482,535)		33,367	. ,	5 -	\$ 220,753 (\$	
		Total PP&E Depreciation Expense adj. from gain or loss on the retirement	\$	4,440,097,082	\$ 608,922,343	(\$ 36,608,966	\$ 5,012,410,459	(\$	684,327,518) (\$ 212,472,001)	\$ 7,072,510	\$ 889,727,009) \$	4,122,683,451

ı	10	Transportation
	8	Stores Equipment

Less: Fully Allocated Depreciation

 Transportation
 (\$ 1,759,521)

 Stores Equipment
 \$

 Net Depreciation
 (\$ 210,712,480)

212,472,001)

Notes:

Fixed Asset Continuity Schedule includes monthly billing
Socialized Renewable Energy Generation Investments include Energy Storage program
Other Non Rate-Regulated Utility Assets includes Generation Protection, Monitoring, and Control

Year 2019

				Cost (Brid	ige)			Accumulated Depi	reciation (Bridge)		
CCA Class	OEB Account	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$ 232,703,106	\$ 34,899,862	\$ -	\$ 267,602,967	(\$ 101,957,703)	(\$ 31,832,793)	\$ -	(\$ 133,790,497)	\$ 133,812,471
N/A	1612	Land Rights	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - :	\$ -
N/A	1805	Land	\$ 7,001,832	\$ -	\$ -	\$ 7,001,832	\$ -	\$ -	\$ -	\$ - :	\$ 7,001,832
1	1808	Buildings	\$ 141,027,076	\$ 1,390,768	\$ -	\$ 142,417,844	(\$ 12,782,215)	(\$ 3,671,135)	\$ -	(\$ 16,453,350)	\$ 125,964,494
47	1815	Transformer Station Equipment >50 kV	\$ 38,872,920	\$ 98,421	\$ -	\$ 38,971,341	(\$ 3,154,311)	(\$ 1,321,906)	\$ -	(\$ 4,476,217)	\$ 34,495,124
47	1820	Distribution Station Equipment <50 kV	\$ 228,761,288	\$ 22,534,698	(\$ 265,137)	\$ 251,030,850	(\$ 37,655,722)	(\$ 10,158,330)	\$ 77,844	(\$ 47,736,208)	\$ 203,294,642
47	1830	Poles, Towers & Fixtures	\$ 386,542,689	\$ 27,186,494	(\$ 5,493,426)	\$ 408,235,757	(\$ 46,639,807)	(\$ 11,274,091)	\$ 985,969	(\$ 56,927,928)	\$ 351,307,828
47	1835	Overhead Conductors & Devices	\$ 432,235,028	\$ 40,428,298	(\$ 2,032,722)	\$ 470,630,605	(\$ 43,883,906)	(\$ 11,559,544)	\$ 266,244	(\$ 55,177,206)	\$ 415,453,399
47	1840	Underground Conduit	\$ 1,225,723,213	\$ 96,757,977	(\$ 551,512)	\$ 1,321,929,677	(\$ 199,284,469)	(\$ 47,539,941)	\$ 102,826	(\$ 246,721,584)	\$ 1,075,208,093
47	1845	Underground Conductors & Devices	\$ 858,303,920	\$ 96,185,169	(\$ 4,333,143)	\$ 950,155,945	(\$ 102,121,717)	(\$ 26,397,900)	\$ 415,566	(\$ 128,104,051)	\$ 822,051,894
47	1850	Line Transformers	\$ 574,437,151	\$ 79,882,272	(\$ 8,716,292)	\$ 645,603,131	(\$ 100,303,459)	(\$ 25,933,134)	\$ 1,224,605	(\$ 125,011,987)	\$ 520,591,144
47	1855	Services (Overhead & Underground)	\$ 139,599,522	\$ 16,527,952	(\$ 284,579)	\$ 155,842,896	(\$ 11,709,970)	(\$ 3,429,537)	\$ 16,419	(\$ 15,123,088)	\$ 140,719,807
47	1860	Meters	\$ 97,073,135	\$ 18,432,082	(\$ 587,628)	\$ 114,917,588	(\$ 17,512,613)	(\$ 5,447,752)	\$ 80,851	(\$ 22,879,514)	\$ 92,038,075
47	1860	Meters (Smart Meters)	\$ 125,946,743	\$ 8,482,042	(\$ 1,323,187)	\$ 133,105,598	(\$ 50,022,597)	(\$ 11,738,159)	\$ 303,721	(\$ 61,457,036)	\$ 71,648,563
N/A	1905	Land	\$ 17,356,057	\$ -	\$ -	\$ 17,356,057	\$ -	\$ -	\$ -	\$ -	\$ 17,356,057
1	1908	Buildings & Fixtures	\$ 238,747,504	\$ 992,208	\$ -	\$ 239,739,712	(\$ 37,570,297)	(\$ 11,349,805)	\$ -	(\$ 48,920,103)	\$ 190,819,609
13	1910	Leasehold Improvements	\$ 753,840	\$ -	\$ -	\$ 753,840	(\$ 745,106)	(\$ 8,734)	\$ -	(\$ 753,840)	\$ -
8	1915	Office Furniture & Equipment	\$ 19,875,598	\$ 355,697	\$ -	\$ 20,231,295	(\$ 9,407,958)	(\$ 2,097,661)	\$ -	(\$ 11,505,619)	\$ 8,725,676
50	1920	Computer Equipment - Hardware	\$ 70,217,623	\$ 7,685,101	\$ -	\$ 77,902,724	(\$ 40,319,660)	(\$ 11,744,632)	\$ -	(\$ 52,064,292)	\$ 25,838,433
10	1930	Transportation Equipment	\$ 38,371,602	\$ 3,123,485	\$ -	\$ 41,495,087	(\$ 25,325,997)	(\$ 3,254,411)	\$ -	(\$ 28,580,408)	\$ 12,914,679
8	1935	Stores Equipment	\$ 7,066	\$ -	\$ -	\$ 7,066	(\$ 7,066)	\$ -	\$ -	(\$ 7,066)	\$ -
8	1940	Tools, Shop & Garage Equipment	\$ 24,457,590	\$ 9,125,806	\$ -	\$ 33,583,396	(\$ 11,346,572)	(\$ 2,480,670)	\$ -	(\$ 13,827,242)	\$ 19,756,154
8	1945	Measurement & Testing Equipment	\$ 480,425	\$ 610	\$ -	\$ 481,035	(\$ 334,375)	(\$ 59,861)	\$ -	(\$ 394,236)	\$ 86,799
8	1950	Service Equipment	\$ 1,038,440	\$ 76,515	\$ -	\$ 1,114,955	(\$ 595,298)	(\$ 95,793)	\$ -	(\$ 691,091)	\$ 423,864
8	1955	Communications Equipment	\$ 45,974,299	\$ 659,651	\$ -	\$ 46,633,950	(\$ 14,636,538)	(\$ 4,122,018)	\$ -	(\$ 18,758,557)	\$ 27,875,394
8	1960	Miscellaneous Equipment	\$ 275,770	\$ -	\$ -	\$ 275,770	(\$ 185,736)	(\$ 37,712)	\$ -	(\$ 223,448)	\$ 52,322
47	1970	Load Management Controls Customer Premises	\$ 3,022,834	\$ -	\$ -	\$ 3,022,834	(\$ 3,022,834)	\$ -	\$ -	(\$ 3,022,834)	\$ -
47	1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - :	\$ -
47	1980	System Supervisor Equipment	\$ 50,583,910	\$ 11,782,424	(\$ 459,202)	\$ 61,907,132	(\$ 11,574,995)	(\$ 3,581,825)	\$ 49,636	(\$ 15,107,184)	\$ 46,799,948
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$ 182,056,729)	(\$ 72,738,047) \$ 422,038	(\$ 254,372,738)	\$ 16,388,428	\$ 6,334,692	(\$ 21,514)	\$ 22,701,606 (\$ 231,671,133)
N/A	1609	Capital Contributions Paid	\$ 186,195,009	\$ 5,579,006	\$ -	\$ 191,774,015	(\$ 12,814,355)	(\$ 7,676,972)	\$ -	(\$ 20,491,327)	\$ 171,282,688
N/A	2005	Property Under Capital Leases	\$ 18,170,834	\$ -	\$ -	\$ 18,170,834	(\$ 11,426,859)	(\$ 89,423)	\$ -	(\$ 11,516,281)	\$ 6,654,553
		•									
		Sub-Total	\$ 5,021,699,294	\$ 409,448,493	(\$ 23,624,791)	\$ 5,407,522,996	(\$ 889,953,706)	(\$ 230,569,049)	\$ 3,502,166	(\$ 1,117,020,588)	\$ 4,290,502,407
		Less Socialized Renewable Energy Generation Investments (input as negative)	(\$ 806,300)	(\$ 7,332,469) \$ -	(\$ 8,138,769)	\$ 5,944	\$ 113,812	\$ -	\$ 119,756 (\$ 8,019,013)
		Less Other Non Rate-Regulated Utility Assets (input as	(\$ 8,482,535)	(\$ 4,280,125) \$ -	(\$ 12,762,660)	\$ 220,753	\$ 453,429	\$ -	\$ 674,182 (\$ 12,088,478)
		Total PP&E	\$ 5,012,410,459	\$ 397,835,898	(\$ 23,624,791)	\$ 5,386,621,566	(\$ 889,727,009)	(\$ 230,001,808)	\$ 3,502,166	(\$ 1,116,226,651)	\$ 4,270,394,915
		Depreciation Expense adj. from gain or loss on the retirement of	of assets (pool of like assets)	·				\$ -			

	10	Transportation
I	8	Stores Equipment

Less: Fully Allocated Depreciation
Transportation (\$
Stores Equipment \$

Net Depreciation

230,001,808)

1,759,521)

228,242,288)

Notes:

Fixed Asset Continuity Schedule includes monthly billing
Socialized Renewable Energy Generation Investments include Energy Storage program
Other Non Rate-Regulated Utility Assets includes Generation Protection, Monitoring, and Control program

Year 2020

					Cost (Foreca	ast)					Accumulated Depre	eciation (Foreca	st)		
CCA Class	OEB Account	Description		Opening Balance	Additions	Disposals		Closing Balance	Opening Ba	alance	Additions	Dispos	als	Closing Balance	Net Book Value
12	1611	Computer Software (Formally known as Account 1925)	\$	267,602,967	\$ 30,655,579	\$ -	\$	298,258,546	(\$ 13	3,790,497) (\$	36,099,942)	\$	- (\$	169,890,439)	\$ 128,368
N/A	1612	Land Rights	\$	-	\$ -	\$ -	\$	-	\$	- \$	-	\$	- \$	-	\$
N/A	1805	Land	\$	7,001,832	\$ -	\$ -	\$	7,001,832	\$	- \$	-	\$	- \$	-	\$ 7,001
1	1808	Buildings	\$	142,417,844	\$ 2,986,710	\$ -	\$	145,404,554	(\$ 1	6,453,350) (\$	3,720,102)	\$	- (\$	20,173,452)	\$ 125,231
47	1815	Transformer Station Equipment >50 kV	\$	38,971,341	\$ 112,337	\$ -	\$	39,083,678	(\$	4,476,217) (\$	1,325,172)	\$	- (\$	5,801,389)	\$ 33,282
47	1820	Distribution Station Equipment <50 kV	\$	251,030,850	\$ 27,166,846	(\$ 326,79	96) \$	277,870,899	(\$ 4	7,736,208) (\$	11,273,000)	\$	95,923 (\$	58,913,285)	\$ 218,957
47	1830	Poles, Towers & Fixtures	\$	408,235,757	\$ 34,478,688	(\$ 6,898,19	94) \$	435,816,251	(\$ 5	6,927,928) (\$	11,739,346)	\$	927,888 (\$	67,739,387)	\$ 368,076
47	1835	Overhead Conductors & Devices	\$	470,630,605	\$ 47,031,817	(\$ 2,629,67	78) \$	515,032,744	(\$ 5	5,177,206) (\$	12,364,683)	\$	283,889 (\$	67,258,000)	\$ 447,774
47	1840	Underground Conduit	\$	1,321,929,677	\$ 111,087,570	(\$ 668,55	(9)	1,432,348,688	(\$ 24	(\$ (\$	50,257,599)	\$	98,099 (\$	296,881,084)	\$ 1,135,467
47	1845	Underground Conductors & Devices	\$	950,155,945	\$ 99,413,968	(\$ 5,903,04	13) \$	1,043,666,871	(\$ 12	28,104,051) (\$	29,225,810)	\$	560,001 (\$	156,769,861)	\$ 886,897
47	1850	Line Transformers	\$	645,603,131	\$ 79,659,607	(\$ 11,048,45	(6)	714,214,282	(\$ 12	(\$ (\$	28,236,015)	\$	1,545,228 (\$	151,702,773)	\$ 562,511
47	1855	Services (Overhead & Underground)	\$	155,842,896	\$ 19,867,315	(\$ 398,08	38) \$	175,312,122	(\$ 1	5,123,088) (\$	3,818,256)	\$	22,965 (\$	18,918,379)	\$ 156,393
47	1860	Meters	\$	114,917,588	\$ 20,046,264	(\$ 1,022,85	51) \$	133,941,001	(\$ 2	2,879,514) (\$	6,389,230)	\$	140,733 (\$	29,128,011)	\$ 104,812
47	1860	Meters (Smart Meters)	\$	133,105,598	\$ 9,339,433	(\$ 713,14	1) \$	141,731,890	(\$ 6	51,457,036) (\$	12,222,117)	\$	163,557 (\$	73,515,596)	\$ 68,216
N/A	1905	Land	\$	17,356,057	\$ -	\$ -	\$	17,356,057	\$	- \$	-	\$ -		-	\$ 17,356
1	1908	Buildings & Fixtures	\$	239,739,712	\$ 2,499,408	\$ -	\$	242,239,120	(\$ 4	8,920,103) (\$	11,382,932)	\$	- (\$	60,303,035)	\$ 181,936
13	1910	Leasehold Improvements	\$	753,840	\$ -	\$ -	\$	753,840	(\$	753,840) \$	-	\$	- (\$	753,840)	\$
8	1915	Office Furniture & Equipment	\$	20,231,295	\$ 896,014	\$ -	\$	21,127,310	(\$ 1	1,505,619) (\$	1,905,523)	\$	- (\$	13,411,142)	\$ 7,716
50	1920	Computer Equipment - Hardware	\$	77,902,724	\$ 11,081,696	\$ -	\$	88,984,420	(\$ 5	(\$ (\$	11,692,222)	\$	- (\$	63,756,513)	\$ 25,227
10	1930	Transportation Equipment	\$	41,495,087	\$ 4,654,924	\$ -	\$	46,150,010	(\$ 2	28,580,408) (\$	3,045,967)	\$	- (\$	31,626,375)	\$ 14,523
8	1935	Stores Equipment	\$	7,066	\$ -	\$ -	\$	7,066	(\$	7,066) \$	-	\$	- (\$	7,066)	\$
8	1940	Tools, Shop & Garage Equipment	\$	33,583,396	\$ 9,772,286	\$ -	\$	43,355,682	(\$ 1	3,827,242) (\$	3,095,774)	\$	- (\$	16,923,016)	\$ 26,432
8	1945	Measurement & Testing Equipment	\$	481,035	\$ 2,661	\$ -	\$	483,695	(\$	394,236) (\$	44,522)	\$	- (\$	438,758)	\$ 44
8	1950	Service Equipment	\$	1,114,955	\$ 59,523	\$ -	\$	1,174,478	(\$	691,091) (\$	84,739)	\$	- (\$	775,830)	\$ 398
8	1955	Communications Equipment	\$	46,633,950	\$ 1,711,630	\$ -	\$	48,345,580	(\$ 1	8,758,557) (\$	3,827,071)	\$	- (\$	22,585,628)	\$ 25,759
8	1960	Miscellaneous Equipment	\$	275,770	\$ -	\$ -	\$	275,770	(\$	223,448) (\$	34,673)	\$	- (\$	258,121)	\$ 17
47	1970	Load Management Controls Customer Premises	\$	3,022,834	\$ -	\$ -	\$	3,022,834	(\$	3,022,834) \$	-	\$	- (\$	3,022,834)	\$
47	1975	Load Management Controls Utility Premises	\$	-	\$ -	\$ -	\$	-	\$	- \$	-	\$	- \$	-	\$
47	1980	System Supervisor Equipment	\$	61,907,132	\$ 9,907,190	(\$ 627,89	98) \$	71,186,424	(\$ 1	5,107,184) (\$	4,128,590)	\$	67,859 (\$	19,167,914)	\$ 52,018
47	2440	Contributions & Grants (Formally known as Account 1995)	(\$	254,372,738)	(\$ 68,786,707)	\$ 565,89	6 (\$	322,593,549)	\$ 2	2,701,606 \$	8,776,418	(\$	28,847) \$	31,449,176	(\$ 291,144
N/A	1609	Capital Contributions Paid	\$	191,774,015	\$ 46,229,405	\$ -	\$	238,003,420	(\$ 2	(\$ 0,491,327)	8,780,891)	\$	- (\$	29,272,218)	\$ 208,731
N/A	2005	Property Under Capital Leases	\$	18,170,834	\$ -	\$ -	\$	18,170,834	(\$ 1	1,516,281) (\$	89,423)	\$	- (\$	11,605,704)	\$ 6,565
		Sub-Total	e	5.407.522.996	\$ 499.874.163	(\$ 29,670,80	9 (9)	5.877.726.351	(\$ 1.11°	7.020.588) (\$	246.007.180)	e ·	3.877.295 (\$	1,359,150,473)	\$ 4.518.575
		Less Socialized Renewable Energy Generation Investments	Ψ	3,407,322,990	Ψ -35,074,103	(ψ 25,070,00	, o, p	3,077,720,331	(Ψ 1,11	7,020,000) (\$	2-0,007,100)	Ψ ,	5,011,295 (\$	1,555,150,475)	Ψ 4,310,373,
		(input as negative)	(\$	8,138,769)	(\$ 6,831,351)	\$ -	(\$	14,970,121)	\$	119,756 \$	789,272	\$	- \$	909,028	(\$ 14,061
		Less Other Non Rate-Regulated Utility Assets (input as	(\$	12,762,660)	. , , ,	•	(\$	15,958,451)	\$	674,182 \$	587,711	\$	- \$	1,261,893	
		Total PP&E	\$	5,386,621,566	\$ 489,847,020	(\$ 29,670,80	8) \$	5,846,797,779	(\$ 1,11	6,226,651) (\$	244,630,196)	\$ 3	3,877,295 (\$	1,356,979,552)	\$ 4,489,818
		Depreciation Expense adj. from gain or loss on the retirement	of assets	(pool of like assets)	. ,	· · · · ·				\$	-	1			
		Total								(\$	244,630,196)	1			

10	Transportation
8	Stores Equipment

Notes:
Fixed Asset Continuity Schedule includes monthly billing
Socialized Renewable Energy Generation Investments include Energy Storage program
Other Non Rate-Regulated Utility Assets includes Generation Protection, Monitoring, and Control

Less: Fully Allocated Depreciation

1,759,521) Transportation Stores Equipment **Net Depreciation** 242,870,675)

GROSS ASSETS

2

3

1

1. BREAKDOWN BY FUNCTION

- In accordance with Section 2.2.1.2 of the OEB's Filing Requirements for Electricity
- 5 Distribution Rate Applications (July 12, 2018) (the "Filing Requirements"), Table 1 below
- 6 provides a breakdown of Toronto Hydro's gross assets by function for the historical
- 7 (2015-2017), bridge (2017-2018), and forecast (2020) years. The amounts for
- 8 construction work-in-progress ("CWIP"), which is not included in rate base, have also
- 9 been provided.

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Table 1: Breakdown of Ending Balance of Gross Assets by Function (\$ Millions)

	2015	2016	2017	2018	2019	2020
Gross Assets	Actual	Actual	Actual	Bridge	Bridge	Forecast
High Voltage Plant	5.8	6.0	36.9	38.9	39.0	39.1
Distribution Plant	3,047.0	3,471.1	3,803.4	4,265.9	4,590.4	4,996.0
General Plant	354.0	482.3	599.8	707.6	757.2	811.7
Gross Fixed Assets Before CWIP	3,406.8	3,959.4	4,440.1	5,012.4	5,386.6	5,846.8
CWIP	577.7	502.9	485.8	311.5	343.5	367.7
Total Including CWIP	3,984.5	4,462.3	4,925.9	5,323.9	5,730.2	6,214.5

Note: Variances due to rounding may exist

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2. BREAKDOWN BY MAJOR PLANT ACCOUNT

- Also, in accordance with the Filing Requirements, Appendix A to this schedule provides a
- detailed breakdown of gross assets by major plant account and Uniform System of
- 16 Accounts.

Appendix A - Gross Assets Breakdown by Major Plant Account – Detailed by Uniform System of Account

	Description	2015 Actuals MIFRS	2016 Actuals MIFRS	2017 Actuals MIFRS	2018 Bridge MIFRS	2019 Bridge MIFRS	2020 Forecast MIFRS
1815	Transformer Station Equipment	5.8	6.0	36.9	38.9	39.0	39.1
	Subtotal High Voltage Plant	5.8	6.0	36.9	38.9	39.0	39.1
1805	Land	7.1	7.1	7.0	7.0	7.0	7.0
1808	Buildings and Fixtures	51.4	105.1	116.6	141.0	142.4	145.4
1820	Distribution Station Equipment	149.9	156.8	184.5	228.8	251.0	277.9
1830	Poles, Towers and Fixtures	311.0	339.5	362.5	386.5	408.2	435.8
1835	O/H Conductors and Devices	299.4	349.5	390.5	432.2	470.6	515.0
1840	U/G Conduit	952.0	1,051.0	1,127.9	1,225.7	1,321.9	1,432.3
1845	U/G Conductors and Devices	609.9	690.6	782.8	858.3	950.2	1,043.7
1850	Line Transformers	412.4	465.3	515.4	574.4	645.6	714.2
1855	Services	93.3	109.1	122.1	139.6	155.8	175.3
1860	Meters (includes Smart Meters)	168.7	180.9	199.7	223.0	248.0	275.7
1970	Load Management-Customer	3.0	3.0	3.0	3.0	3.0	3.0
1980	System Supervisory Equipment	25.4	28.2	33.6	42.1	49.1	55.2
1609	Capital Contributions Paid	21.7	75.6	75.6	186.2	191.8	238.0
2440	Contributed Capital	(58.2)	(90.5)	(118.0)	(182.1)	(254.4)	(322.6)
	Subtotal Distribution Plant	3,047.0	3,471.1	3,803.4	4,265.9	4,590.4	4,996.0
1611	Computer Software	101.6	113.6	137.0	232.7	267.6	298.3
1905	Land	17.7	17.7	17.7	17.4	17.4	17.4
1908	Buildings and Fixtures	126.9	184.5	246.7	238.7	239.7	242.2
1910	Leasehold Improvements	0.8	0.8	0.8	0.8	0.8	0.8
1915	Office Furniture and Equipment	10.8	15.4	19.0	19.9	20.2	21.1
1920	Computer Equipment	27.3	47.2	58.7	70.2	77.9	89.0
1930	Transportation Equipment	26.6	29.9	33.7	38.4	41.5	46.2
1935	Stores Equipment	0.0	0.0	0.0	0.0	0.0	0.0
1940	Tools, Shop and Garage Equipment	14.7	17.8	21.2	23.7	25.4	28.4
1945	Measurement & Test Equipment	0.5	0.5	0.5	0.5	0.5	0.5
1950	Power Operated Equipment	0.6	0.7	0.8	1.0	1.1	1.2
1955	Communication Equipment	8.0	35.9	45.4	46.0	46.6	48.3
1960	Miscellaneous Equipment	0.3	0.3	0.3	0.3	0.3	0.3
2005	Property Under Capital Leases	18.2	18.2	18.2	18.2	18.2	18.2
	Subtotal General Plant	354.0	482.3	599.8	707.6	757.2	811.7
	GROSS FIXED ASSETS BEFORE CWIP	3,406.8	3,959.4	4,440.1	5,012.4	5,386.6	5,846.8
2055	Construction Work-in-Process	577.7	502.9	485.8	311.5	343.5	367.7
	TOTAL INCLUDING CWIP	3,984.5	4,462.3	4,925.9	5,323.9	5,730.2	6,214.5

WORKING CAPITAL ALLOWANCE ("WCA")

2

1

3 Toronto Hydro has determined the Working Capital Allowance ("WCA") included in its

4 2020 rate base based on an updated Lead-Lag Study performed by Navigant Consulting

Inc. ("Navigant"), which is filed as Exhibit 2A, Tab 3, Schedule 2.

6

8

5

7 Navigant used a full year of Toronto Hydro's financial information to determine the

revenue lead and expense lag for various detailed revenue and cost components. The

9 time periods chosen were intended to provide the most recent actual data available at

the time of analysis. Navigant's methodology is generally the same as that employed in

the last two Lead-Lag studies performed for Toronto Hydro. Toronto Hydro confirms

that for the purposes of the Lead-Lag Study, leads and lags were measured in days, and

were dollar weighted.

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The current Lead-Lag Study demonstrates a decrease in the WCA rate approved in the

utility's last rebasing application from 8.0 percent of controllable expenses plus cost of

power to 6.21 percent. Applying the lead/lag days to Toronto Hydro's forecast revenues

and expenses produces a WCA percentage of 6.42 percent for the 2020 test year. The

reduction was achieved primarily as a result of:

1) The OEB's requirement for utilities to transition to monthly billing in late 2016;²

21 plus

2) The expiration of the Debt Retirement Charge as of April 1, 2018; minus

3) The impact of the OEB's Winter Disconnection Moratorium.

2324

¹ EB-2007-0680 and EB-2014-0116

² Please refer to Exhibit 9, Tab 1 for Toronto Hydro's Deferral and Variance Account evidence which includes the discussion of the transition to monthly billing.

- 1 Table 1 below presents a detailed calculation of the WCA for 2020. To calculate the
- 2 WCA, the Cost of Power is determined by using the split between RPP and non-RPP
- 3 customers, the 2020 forecast RPP, HOEP, and the most recent OEB approved UTRs.
- 4 Details of the Cost of Power calculation are provided in Appendix A. Toronto Hydro has
- used the same methodology as used in its EB-2014-0116 application, and reflects the
- 6 implementation of the Fair Hydro Plan.

7

Table 1: Working Capital Allowance Calculation

	2020 Expenses (\$ Millions)	Working Capital Factor		Expenses times Working Capital Factor (\$ Millions)
Cost of Power	3,384.0	5.0%		169.2
OM&A	277.5	4.29%		11.9
Interest on Long Term Debt	89.2	6.99%		6.2
Income and Capital Taxes	34.7	16.69%		5.8
Sub-Total Working Capital Requirement				193.1
HST at 13%		Net Lag Days	Expenses * Net Lag Days/365 * 13% HST	
Revenue	4,182.0	-10.07	-15.0	
Cost of Power	3,384.0	46.03	55.5	
Eligible OM&A Expenses	106.3	41.58	1.6	
HST Working Capital Requirement				42.1
Total Working Capital				235.2
Working Capital as % of and Controllable Expenses			6.42%	

- 1 Table 2 below provides a comparison of the WCA requirements for the 2020 test year
- included in the utility's rate base calculations (Exhibit 2A, Tab 1, Schedule 1), and the
- 3 last OEB-approved WCA in 2015.

4

5

Table 2: Working Capital Allowance (\$ Millions)

	2015 OEB Approved	2020 Test Year
Working Capital Allowance	240.2	235.2

Toronto Hydro-Electric System Limited
EB-2018-0165
Exhibit 2A
Tab 3
Schedule 1
Appendix A
ORIGINAL
Page 1 of 1

Cost of Power 2018-2020

			2018	2019	2020	Notes & Assumptions
Quant	ities					
	Total Purchased Energy (kWh)		24,378,163,944	24,123,762,642	24,036,018,049	From Final CIR Load Forecast
	RPP		10,450,785,029	10,156,104,072	10,119,163,599	
	Non-RPP		13,927,378,915	13,967,658,570	13,916,854,451	
	System Network (kW)	•	44,537,292	44,120,546	43,836,438	From Final CIR Load Forecast
	Line Connection (kW)		45,679,633	44,073,209	43,788,978	From Final CIR Load Forecast
	Transformer Connection (kW)		20,698,744	45,203,542	44,912,009	From Final CIR Load Forecast
	Own Use kWh		20,698,744	20,698,744	20,698,744	Equal to April 2017-March 2018 Annual Amount
Prices						
	HOEP (\$/kWh)	\$	0.01954	\$ 0.01974	\$ 0.01895	Based on Navigant Apr 2018 Report for 2018/2019, weighted average. 2020 escalated at factor of 0.96
	GA (\$/kWh)	\$	0.09847	\$ 0.10597	\$ 0.10989	Based on Navigant Apr 2017 Report, 3.7% increase annually in 2019-20
	Network Rate (\$/kW)	\$	3.52	\$ 3.63	\$ 3.74	Based on most recent 2018 actuals, assumes 3% annual increase 2019-20
	Line Connection Rate (\$/kW)	\$	0.88	\$ 0.91	\$ 0.94	Based on most recent 2018 actuals, assumes 3% annual increase 2019-20
	Transformer Connection Rate (\$/kW)	\$	2.13	\$ 2.19	\$ 2.26	Based on most recent 2018 actuals, assumes 3% annual increase 2019-20
	Wholesale Market Services Rate (\$/kWh)	\$	0.0036	\$ 0.0036	\$ 0.0036	Assumed constant at most recent actual amount
	Ontario Electricity Support Program Charge	\$	-	\$ -	\$ -	Assumed constant at most recent actual amount
	Rural Rate Protection Charge (\$/kWh)	\$	0.0003	\$ 0.0003	\$ 0.0003	Assumed constant at most recent actual amount
Other						
	Switch Gear Credit (\$)	\$	(10,913,609.04)	\$ (10,913,609.04)	\$ (10,913,609.04)	Assumed constant at 2018 forecast amount, based on most recent actuals
	Hydro One Low Voltage (\$)	\$	328,146.44	\$ 328,146.44	\$ 328,146.44	Assumed constant at 2018 forecast amount, based on most recent actuals
	Agincourt Shortfall Load Transfer (\$)	\$	1,165,983.97	\$ 1,165,983.97	\$ 1,165,983.97	Assumed constant at 2018 forecast amount, based on most recent actuals
	Hydro One MSP costs (\$)	\$	434,250.00	\$ 434,250.00	\$ 434,250.00	Assumed constant at 2018 forecast amount, based on most recent actuals
	RPP % of Total Purchased Energy kWh		42.87%	42.10%	42.10%	2018 uses 3 months actuals. Remainder of forecast is average of 12 months actuals April 17 - March 18.
	Class A % of total GA amount		12.35%	15.50%	15.50%	2018 uses 3 months actuals. Remainder of forecast is average of months actuals Jul 17 - March 18.
Cost o	f Power					
	Energy (HOEP)		2,876,844,040	3,032,598,202	3,096,810,180	
	RPP		1,229,907,408	1,276,723,843	1,303,757,086	
	(a) HOEP - EE 2001		205,736,637	200,481,494	191,762,198	
	(b) GA - EE 2003		1,024,170,771	1,076,242,349	1,111,994,888	
	Non-RPP:		1,646,936,632	1,755,874,359	1,793,053,094	
	(a) HOEP - EE 2005		270,689,339	275,721,580	263,729,959	
	(b) GA - EE 2095		1,376,247,293	1,480,152,779	1,529,323,136	
	GA - Class A		169,949,437	229,423,681	237,045,086	
	GA - Class B		1,206,297,856	1,250,729,098	1,292,278,050	
	GA Modifier		-108,190,292	-107,061,259	-106,671,848	
	Transmission		284,446,121	290,274,731	297,625,829	

5,286,155

86,529,665

7,210,805

-2,747,560

3,384,043,227

Smart Metering Entity Charge

Wholesale Market Services

THESL Own Use Deduction

Rural Rate Protection Charge

Total Cost of Power Expense

5,195,067

87,761,390

7,313,449

-2,530,174

3,150,839,602

5,236,050

86,845,546

7,237,129

-2,682,764

3,312,447,633



Working Capital Requirements of Toronto Hydro Electric System Limited's Distribution Business

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December 22, 2017

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Working Capital Requirements of Toronto Hydro Electric System Limited's Distribution Business

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Working Capital Requirements of Toronto Hydro Electric System Limited's Distribution Business

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Working Capital Requirements of Toronto Hydro Electric System Limited's Distribution Business

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SECTION I: EXECUTIVE SUMMARY

Summary

In preparation for an upcoming rate filing before the OEB, THESL retained Navigant to prepare an update to its prior working capital study. This report provides the results of the update and the working capital requirements of THESL's distribution business.

Listed below are key findings and conclusions from this study:

- 1. In terms of lead-lag days, the results from this study are generally comparable with THESL's previous working capital study (EB-2014-0116);
- 2. The approach and methods used in this study are generally consistent with THESL's prior lead-lag study as well as studies performed by other local distribution companies in Ontario; and,
- 3. Results from the lead-lag study identify the following working capital amounts.

Table 1: Summary of Working Capital Requirements

Year	
Percentage of OMA	6.21%
Working Capital Requirement \$(M)	\$211.54

Organization of the Report

Section II of this report discusses the methodology used within this working capital lead-lag study.

Section III of this report discusses the lag times associated with THESL's collections of revenues. This includes a description of the sources of revenues and how an overall revenue lag is derived.

Section IV presents the lead times associated with THESL's expenses. This includes a description of the types of expenses incurred by THESL's distribution operations and how expenses are treated for the purposes of deriving an overall expenses lead. This includes the working capital requirement associated with the Harmonized Sales Tax ("HST").

Section V presents the working capital requirements of THESL's distribution business.

Section VI presents a supporting appendix for this study that includes detailed data tables.



SECTION II: WORKING CAPITAL METHODOLOGY

Working capital is the amount of funds that are required to finance the day-to-day operations of a regulated utility and which are included as part of a rate base for ratemaking purposes. A lead-lag study is the most accurate basis for the determination of working capital and was used by Navigant for this purpose.

A lead-lag study analyzes the time between the date customers receive service and the date that customers' payments are available to THESL (or "lag") together with the time between which THESL receives goods and services from its vendors and pays for them at a later date (or "lead")¹. "Leads" and "Lags" are both measured in days and are dollar-weighted where appropriate. The dollar-weighted net lag (lag minus lead) days is then divided by 365 (or 366 for leap years) and then multiplied by the annual test year expenses to determine the amount of working capital required. The resulting amount of working capital is then included in THESL's rate base for the purpose of deriving revenue requirement.

Key Concepts

Mid-Point Method

When a service is provided to (or by) THESL over a period of time, the service is deemed to have been provided (or received) evenly over the midpoint of the period, unless specific information regarding the provision (or receipt) of that service indicates otherwise. If both the service end date ("Y") and the service start date ("X") are known, the mid-point of a service period can be calculated using the formula:

$$\mathsf{Mid\text{-}Point} = \frac{([Y - X] + 1)}{2}$$

When specific start and end dates are unknown, but it is known that a service is evenly distributed over the mid-point of a period, an alternative formula that is generally used is shown below. The formula uses the number of days in a year ("A") and the number of periods in a year ("B"):

$$Mid-Point = \frac{A/B}{2}$$

Statutory Approach

In conjunction with the mid-point method, it is important to note that not all areas of this study may utilize dates on which actual payments were made to (or by) THESL. In some instances, the due dates for payments are established by statute or by regulation. In these instances, the due date established by statute has been used in lieu of when payments were made.

¹ A positive lag (or lead) indicates that payments are received (or paid for) after the provision of a good or service.



Expense Lead Components

As used in this study, expense leads are defined to consist of two components:

- 1. Service Lead component (services are assumed to be provided to THESL evenly around the mid-point of the service period); and,
- 2. Payment Lead component (the time period from the end of the service period to the time payment was made and when funds have left THESL's possession).

Dollar Weighting

Both leads and lags should be dollar-weighted where appropriate and where data is available to accurately reflect the flow of dollars. For example, suppose that a particular transaction has a lead time of 100 days and has a dollar value of \$100. Further, suppose that another transaction has a lead time of 30 days with a dollar value of \$1 Million. A simple un-weighted average of the two transactions would give us a lead time of 65 days ([100+30]/2). However, when these two transactions are dollar weighted, the resulting lead time would be closer to 30 days which is more representative of how the dollars flow.

Methodology

Performing a lead-lag study requires two key undertakings:

- 1. Developing an understanding of how the regulated distribution business operates in terms of products and services sold to customers/purchased from vendors, and the policies and procedures that govern such transactions; and,
- Modeling such operations using data from a relevant period of time and a representative data set. It is important to ascertain and factor into the study whether (or not) there are known changes to existing business policies and procedures going forward. Where such changes are known and material, they should be factored into the study.

To develop an understanding of THESL's operations, interviews with personnel within THESL's Accounts Payable, Customer Service, Wholesale Market Operations, Human Resources, Payroll, Treasury, and Tax Departments were conducted. Key questions that were addressed during the course of the interviews included:

- 1. What is being sold (or purchased)? If a service is being provided to (or by) THESL, over what time period was this service provided;
- 2. Who are the buyers (or sellers);
- 3. What are the terms for payment? Are the terms for payment driven by industry norms or by company policy? Is there flexibility in the terms for payment;
- 4. Are any changes to the terms for payment expected? Are these terms driven by industry or internally? What is the basis for any such changes;
- 5. Are there any new rules or regulations governing transactions relating to distribution operations that are expected to materialize over the time frame considered in this report; and,
- 6. How are payments made (or received)? Payment types have different payment lead times (i.e., internet payments have shorter deposit times than cheque deposit times)



SECTION III: REVENUE LAGS

A distribution utility providing service to its customers generally derives its revenue from bills paid for service by its customers. A revenue lag represents the number of days from the date service is rendered by THESL until the date payments are received from customers and funds are available to THESL.

Interviews with THESL personnel indicate that its distribution business receives funds from the following funding streams:

- 1. Retail Customers:
- 2. IESO Credits (i.e., Ontario Electricity Support Program, Ontario Rebate for Electricity Consumers); and,
- 3. Other External Revenues (i.e., Hydro One Substation Monitoring, Demand Billables, Distributed Generation claims).

The lag times associated with the funding streams above were weighted and combined to calculate an overall revenue lag time as shown below. Additional details regarding IESO Credits and Other External Revenues can be found in the Appendix.

Description	Lag Days	Revenues (\$M)	Weighting (%)	Weighted Lag
Retail Customer Revenues	50.90	\$4,077.72	93.81%	47.75
IESO Credits	62.82	\$157.74	3.63%	2.28
Other External Revenues	32.54	\$111.10	2.56%	0.83
Total		\$4,346.55	100.00%	50.87

Table 2: Summary of Revenue Lag

Retail Customer Revenue Lag

Retail customer revenue lag consists of the following components:

- 1. Service Lag;
- 2. Billing Lag;
- 3. Collections Lag; and,
- 4. Payment Processing Lag.

The lag times for each of the above components, when added together, results in the retail customer revenue lag for the purpose of calculating the working capital requirements for THESL's distribution business. The components are intended to represent a continuous process from the end date of the customer's previous billing cycle to the date in which the payment is available to THESL. Table 3 below provides a summary of THESL's retail customer revenue lag along with a description for each component. Based upon discussions with THESL, it has also been noted that the Ontario Fair Hydro plan, which came into effect in July 1, 2017, is expected to have an impact on the retail customer revenue lag and consequently the working capital calculation, however at the time of this study there is insufficient data to make an estimate of the impact and hence the impacts have not been quantified. The intent is to update the study when THESL data reflecting the Ontario Fair Hydro Plan is available.



Table 3: Retail Customer Revenue Lag

Revenue Lag Component	Description	Lag Days
Service Lag	The average time from the provision of electricity to a customer until the meter is read	15.21
Billing Lag	The average time from the meter read until the bill is generated and provided to the customer	12.49
Collections Lag	The average time from when a bill is provided to the customer until the customer initiate payment to the utility	21.86
Payment Lag	The average time from when the customer provides payment to the utility until when the payment is made liquid and available to the utility	1.34
Total		50.90

The estimation of each component of the retail customer revenue lag is described below.

Service Lag

The service lag is the time from THESL's provision of electricity to a customer, to the time the customer's service period ends, which is typically defined as when the meter is read. Customer service staff at THESL provided data which documented that all customer have been moved to monthly billing. As such the service lag was estimated to be 15.21, which is a departure from what was calculated in the prior study which had a combination of monthly and bi-monthly customers.

Billing Lag

The billing lag is the time period from when the customer's service period ends, which is typically defined as when the meter is read, and the time that the customer's bill is generated in the customer information system. Interviews with billing staff at THESL and analysis of meter billing data indicated that THESL customers have an average billing lag of 12.49 days, which is similar to what was calculated in the prior study indicating no significant changes to billing operations and practices.

Collections Lag

The collections lag is the time period from when the bill is generated in the customer information system, until the time when the customer provides a payment to THESL. The collections lag is measured by analyzing the receivables aging data provided by THESL. THESL's collection lag was calculated to be 21.86 days, which is shorter than what was calculated in the prior study.



Payment Processing Lag

The payment processing lag is the time period from when the customer provides a payment to THESL until such time as the funds associated with that payment are liquid and available to the utility. The payment processing lag is measured by analyzing the payment methods used by THESL customers. Some examples of the payment methods used include credit card, pre-authorized payment and branch payment. THESL provided the processing time associated with each method of payment and the number of customers using each method of payment. Using such data provided by THESL, a customer-weighted average payment processing lag of 1.34 days was determined for THESL's distribution operations. This number is very similar to that from the prior study indicating that there are no significant changes to the way that customers opt to pay for their electricity bills.



SECTION IV: EXPENSE LEADS

The determination of working capital requires both a measurement of the lag in the collection of revenues for services provided by THESL's distribution business, and the lead times associated with payments for services provided to THESL. Therefore, in conjunction with the calculation of the revenue lag, expense lead times were calculated for the following items:

- 1. Cost of Power;
- 2. Operating, Maintenance and Administration ("OM&A") Expenses;
- 3. Payments in Lieu of Taxes;
- 4. Interest on Long Term Debt; and,
- 5. Harmonized Sales Tax.

The expense lead calculation in this study does not take into account the Debt Retirement Charge, which was incorporated into the prior study. The Debt Retirement Charge was not included as it is expected to completely expire by April 1, 2018².

Cost of Power

For the purpose of the distribution lead-lag study, cost of power expenses were considered to consist of payments made by THESL to its vendors in the following categories:

- 1. Independent Electricity System Operator ("IESO") Cost of Power Expenses;
- 2. Hydro One Low Voltage Charges;
- 3. Payments to Non-Utility Generators; and,
- 4. Payments to Distributed Generators ("DG") such as Residential Standard Offer Program ("RESOP"), Feed-in Tariff ("FIT"), and micro Feed-in Tariff ("mFIT") generators.

Expense lead times were calculated individually for each of the items listed above and then dollarweighted to derive a composite cost of power expense lead time of 32.63 days.

Table 4: Summary of Cost of Power Expenses

Description	Lag Days	Expenses (\$M)	Weighting (%)	Weighted Lag
IESO Cost of Power	32.73	\$3,000.26	98.06%	32.10
Hydro One Low Voltage Expense	32.79	\$0.35	0.01%	0.00
Payments to Non-Utility Generators	32.89	\$0.03	0.00%	0.00
Payments to DG	27.51	\$58.88	1.92%	0.53
Total		\$3,059.51	100.00%	32.63

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² https://www.fin.gov.on.ca/en/guides/drc/101.html



IESO Cost of Power

THESL purchases its power supply requirements on a monthly basis from the IESO and pays for such supplies on a schedule defined by the IESO's billing and settlement procedures. Taking the information on actual payments made by THESL, a dollar-weighted cost of power expense lead time of 32.73 days was calculated. Table 5 below summarizes the components of the IESO cost of power expense lead calculation.

Table 5: Summary of IESO Cost of Power Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$254.69	8.49%	2/17/2016	15.50	17.00	32.50	2.76
Feb-16	\$240.10	8.00%	3/16/2016	14.50	16.00	30.50	2.44
Mar-16	\$250.83	8.36%	4/18/2016	15.50	18.00	33.50	2.80
Apr-16	\$239.57	7.99%	5/17/2016	15.00	17.00	32.00	2.56
May-16	\$238.44	7.95%	6/16/2016	15.50	16.00	31.50	2.50
Jun-16	\$253.99	8.47%	7/19/2016	15.00	19.00	34.00	2.88
Jul-16	\$217.24	7.24%	8/17/2016	15.50	17.00	32.50	2.35
Aug-16	\$298.28	9.94%	9/19/2016	15.50	19.00	34.50	3.43
Sept-16	\$260.03	8.67%	10/19/2016	15.00	19.00	34.00	2.95
Oct-16	\$240.53	8.02%	11/17/2016	15.50	17.00	32.50	2.61
Nov-16	\$236.64	7.89%	12/16/2016	15.00	16.00	31.00	2.45
Dec-16	\$269.91	9.00%	1/18/2017	15.50	18.00	33.50	3.01
Total	\$3,000.26	100.00%					32.73



Hydro One Low Voltage Expense

THESL provides payment to Hydro One for low voltage expenses on a monthly basis. Based upon information on payments made by THESL, a dollar-weighted Hydro One low voltage expense lead time of 32.79 days was calculated. Table 6 below summarizes the components of the Hydro One low voltage expense lead calculation.

Table 6: Summary of Hydro One Low Voltage Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.03	8.64%	2/17/2016	15.50	17.00	32.50	2.81
Feb-16	\$0.02	6.79%	3/16/2016	14.50	16.00	30.50	2.07
Mar-16	\$0.02	6.66%	4/18/2016	15.50	18.00	33.50	2.23
Apr-16	\$0.02	6.77%	5/17/2016	15.00	17.00	32.00	2.17
May-16	\$0.02	6.33%	6/16/2016	15.50	16.00	31.50	1.99
Jun-16	\$0.03	8.35%	7/19/2016	15.00	19.00	34.00	2.84
Jul-16	\$0.03	8.78%	8/17/2016	15.50	17.00	32.50	2.85
Aug-16	\$0.03	9.74%	9/19/2016	15.50	19.00	34.50	3.36
Sept-16	\$0.04	10.96%	10/19/2016	15.00	19.00	34.00	3.72
Oct-16	\$0.03	8.60%	11/17/2016	15.50	17.00	32.50	2.79
Nov-16	\$0.03	8.53%	12/16/2016	15.00	16.00	31.00	2.65
Dec-16	\$0.03	9.84%	1/18/2017	15.50	18.00	33.50	3.30
Total	\$0.35	100.00%					32.79



Payments to Non-Utility Generators

THESL purchases power supply from non-utility generators on a monthly basis and pays for such supplies on a monthly basis. A dollar-weighted expense lead time of 32.89 days was calculated. Table 7 below summarizes the components of the non-utility generator expense lead calculation.

Table 7: Summary of Non-Utility Generator Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.001	3.98%	2/17/2016	15.50	17.00	32.50	1.29
Feb-16	\$0.001	5.29%	3/16/2016	14.50	16.00	30.50	1.61
Mar-16	\$0.000	1.84%	4/18/2016	15.50	18.00	33.50	0.62
Apr-16	\$0.000	1.86%	5/17/2016	15.00	17.00	32.00	0.60
May-16	\$0.001	5.43%	6/16/2016	15.50	16.00	31.50	1.71
Jun-16	\$0.002	7.01%	7/19/2016	15.00	19.00	34.00	2.38
Jul-16	\$0.003	10.26%	8/17/2016	15.50	17.00	32.50	3.34
Aug-16	\$0.005	19.51%	9/19/2016	15.50	19.00	34.50	6.73
Sept-16	\$0.002	8.03%	10/19/2016	15.00	19.00	34.00	2.73
Oct-16	\$0.001	4.83%	11/17/2016	15.50	17.00	32.50	1.57
Nov-16	\$0.004	15.91%	12/16/2016	15.00	16.00	31.00	4.93
Dec-16	\$0.004	16.04%	1/18/2017	15.50	18.00	33.50	5.37
Total	\$0.026	100.00%					32.89

Payments to DG

THESL purchases power supply from RESOP, FIT and mFIT customers. A dollar-weighted expense lead time of 27.51 days was calculated. Table 8 below summarizes the components of the DG expense lead calculation.

Table 8: Summary of DG Cost of Power Expenses

Description	Lag Days	Revenues (\$M)	Weighting (%)	Weighted Lag
RESOP	35.97	\$0.18	0.31%	0.11
FIT	27.86	\$54.87	93.20%	25.97
mFIT	22.03	\$3.83	6.50%	1.43
Total		\$58.88	100.00%	27.51



OM&A Expenses

For the purpose of this distribution lead-lag study, OM&A expenses were considered to consist of payments made by THESL to its vendors in the following categories:

- 1. Payroll & Benefits;
- 2. Property Taxes;
- 3. Payments-in-lieu of Property Taxes;
- 4. Non-Resident Withholding Tax;
- 5. Corporate Procurement Card;6. Lease Payments;
- 7. Consulting and Contract Staff; and,
- 8. Miscellaneous OM&A.

Expense lead times were calculated individually for each of the items listed above and then dollarweighted to derive a composite expense lead time of 35.19 days for OM&A expenses.

Table 9: Summary of OM&A Expenses

Description	Amounts (\$M)	Weighting (%)	Expense Lead Time	Weighted Lead Time
Payroll & Benefits	\$205.09	59.46%	32.73	19.46
Property Tax	\$5.85	1.70%	-30.39	-0.52
Non-Resident Withholding Tax	\$0.08	0.02%	29.60	0.01
Corporate Procurement Card	\$0.15	0.04%	32.76	0.01
Lease Payments	\$2.83	0.82%	34.74	0.28
Consulting and Contract Staff	\$83.27	24.14%	48.06	11.60
Miscellaneous OM&A	\$47.63	13.81%	31.41	4.34
Total	\$344.90	100.00%		35.19



Payroll and Benefits

The following items were considered to be expenses related to the payroll and benefits of THESL's distribution business:

- 1. Two types of Payroll including Basic and Management payroll;
- 2. Three types of Payroll Withholdings including the Canada Pension Plan, Employment Insurance, and Income Tax withholdings;
- 3. Pension related expenses which include contributions made by THESL to the THESL Pension Plan:
- 4. Group Health, Dental, and Life Insurance related administrative fees and claims, payments made by THESL to the Workplace Safety and Insurance Board ("WSIB") and payments made by THESL on account of the Employer Health Tax ("EHT"); and,
- 5. Other Benefits such as Long-term Disability ("LTD"), Accidental Death and Dismemberment ("AD&D"), and the Employee Assistance Program ("EAP").

When all the above expenses were dollar-weighted using actual payment data, the weighted average expense lead time associated with payroll and benefits was determined to be 32.73 days as shown in Table 10, below. Additional detail can be found in the Appendix.

Weighting Amounts **Expense Lead** Weighted Description (\$M) (%) Time Lead Time 49.20% 21.39 10.52 Payroll \$100.90 Payroll Withholdings \$50.07 24.42% 38.24 9.34 Pensions \$33.34 16.26% 71.89 11.69 **Benefits** 1.06 \$18.99 9.26% 11.44 Other Benefits \$1.78 0.87% 13.89 0.12 Total \$205.09 100.00% 32.73

Table 10: Summary of Payroll and Benefits Expenses

Property Taxes

THESL makes property tax payments to the City of Toronto and taxing authorities in the Province of Ontario. These payments are made in the current year for the current year and are typically made in installments. Using the payment dates and amounts associated with THESL's distribution business, a dollar-weighted expense lead (-lag) time of negative 30.39 days was determined. Table 11, below summarizes the components of the property tax expense lead calculation. Additional detail can be found in the Appendix.

Table 11: Summary of Property Tax Expenses

Amounts Weighting Expenses

Description	Amounts (\$M)	Weighting (%)	Expense Lead Time	Weighted Lead Time
Property Taxes	\$5.81	99.30%	-30.67	-30.46
Payments in Lieu of Property Taxes	\$0.04	0.70%	9.23	0.06
Total	\$5.85	100.00%		-30.39



Non-Resident Withholding Taxes

THESL makes non-resident withholding tax payments to the relevant taxing authority. These payments are made on a monthly basis. Using actual payment dates and amounts provided by THESL, a dollar-weighted expense lead time of 29.60 days was determined. Table 12 below summarizes the components of the non-resident withholding tax expense lead calculation.

Table 12: Summary of Non-Resident Withholding Tax Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.005	6.68%	1/15/2016	15.50	15.00	30.50	2.04
Feb-16	\$0.012	14.41%	2/12/2016	15.50	12.00	27.50	3.96
Mar-16	\$0.006	7.00%	3/15/2016	14.50	15.00	29.50	2.06
Apr-16	\$0.001	1.58%	4/15/2016	15.50	15.00	30.50	0.48
May-16	\$0.001	1.50%	5/13/2016	15.00	13.00	28.00	0.42
Jun-16	\$0.019	23.14%	6/14/2016	15.50	14.00	29.50	6.83
Jul-16	\$0.008	9.63%	7/15/2016	15.00	15.00	30.00	2.89
Aug-16	\$0.022	26.45%	8/15/2016	15.50	15.00	30.50	8.07
Sept-16	\$0.001	1.51%	9/15/2016	15.50	15.00	30.50	0.46
Oct-16	\$0.002	1.96%	10/14/2016	15.00	14.00	29.00	0.57
Nov-16	\$0.003	3.46%	11/14/2016	15.50	14.00	29.50	1.02
Dec-16	\$0.002	2.69%	12/15/2016	15.00	15.00	30.00	0.81
Total	\$0.082	100.00%					29.60



Corporate Procurement Card

Procurement (or charge) cards are used by the THESL's employees for a variety of company related reasons including, and not limited to, purchases of materials in the field, incidental expenses, and to settle charges for travel and accommodation. Based on invoice and payment information provided by THESL, a dollar-weighted expense lead time of 32.76 days was determined. Table 13 below summarizes the components of the corporate procurement card expense lead calculation.

Table 13: Summary of Corporate Procurement Card Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.010	6.63%	2/7/2016	15.50	18.00	33.50	2.22
Feb-16	\$0.009	6.32%	3/7/2016	15.50	16.00	31.50	1.99
Mar-16	\$0.016	10.88%	4/7/2016	14.50	18.00	32.50	3.54
Apr-16	\$0.007	4.66%	5/7/2016	15.50	17.00	32.50	1.51
May-16	\$0.009	5.98%	6/7/2016	15.00	18.00	33.00	1.97
Jun-16	\$0.012	8.52%	7/7/2016	15.50	17.00	32.50	2.77
Jul-16	\$0.009	6.30%	8/7/2016	15.00	18.00	33.00	2.08
Aug-16	\$0.011	7.71%	9/7/2016	15.50	18.00	33.50	2.58
Sept-16	\$0.009	5.93%	10/7/2016	15.50	17.00	32.50	1.93
Oct-16	\$0.017	11.68%	11/7/2016	15.00	18.00	33.00	3.86
Nov-16	\$0.019	12.97%	12/7/2016	15.50	17.00	32.50	4.22
Dec-16	\$0.018	12.41%	1/7/2017	15.00	18.00	33.00	4.10
Total	\$0.146	100.00%					32.76



Lease Payments

THESL makes lease payments to various entities for use of land related to its distribution business. Based upon discussions with THESL subject matter experts, THESL will no longer be using operating leases and primarily hold capital leases in the future and as such only operating and maintenance costs associated with these capital leases should be included in this working capital study. Since the operating and maintenance costs related to these future capital leases cannot be determined presently, THESL's current operating and maintenance costs for leases were used as a proxy for future operating and maintenance costs. Using the payment dates and amounts associated with THESL's distribution business, a dollar-weighted expense lead time of 34.74 days was determined. Table 14, below summarizes the components of the lease payment lead calculation. Additional detail can be found in the Appendix.

Table 14: Summary of Lease Payment Expenses

Description	Amounts (\$M)	Weighting (%)	Expense Lead Time	Weighted Lead Time
Islington Monogram Holdings	\$1.33	47.11%	-16.68	-7.86
Davpart Inc	\$1.12	39.43%	-16.75	-6.60
Other Annual Leases	\$0.38	13.46%	365.50	49.20
Total	\$2.83	100.00%		34.74



Consulting and Contract Staff

THESL engages consulting and contract staff to provide assistance in the areas such as engineering, receivables management, accounting, and general consulting.

A dollar-weighted expense lead time of 48.06 days was determined based on a review of invoices rendered and payments made by THESL, as shown in Table 15 below.

Table 15: Summary of Consulting and Contract Staff Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$6.42	7.71%	16.00	32.80	48.80	3.76
Feb-16	\$5.27	6.32%	15.00	33.23	48.23	3.05
Mar-16	\$8.28	9.95%	15.75	30.63	46.37	4.61
Apr-16	\$6.54	7.85%	15.50	29.26	44.76	3.51
May-16	\$7.23	8.69%	15.99	31.21	47.21	4.10
Jun-16	\$6.03	7.24%	15.50	30.93	46.43	3.36
Jul-16	\$7.21	8.66%	15.98	34.37	50.35	4.36
Aug-16	\$6.84	8.22%	16.00	34.17	50.17	4.12
Sept-16	\$7.04	8.46%	15.50	33.69	49.19	4.16
Oct-16	\$11.98	14.39%	15.98	31.62	47.60	6.85
Nov-16	\$10.18	12.22%	15.50	33.60	49.10	6.00
Dec-16	\$0.24	0.29%	15.50	41.12	56.62	0.16
Total	\$83.27	100.00%				48.06



Miscellaneous OM&A

The Miscellaneous OM&A category includes items such as product purchases, equipment rentals, and provision of general services to THESL. Based on transactions in THESL's accounts payable system under the Miscellaneous OM&A category, a dollar-weighted expense lead time of 31.41 days was derived. Table 16, below summarizes the components of the Miscellaneous OM&A expense lead calculation.

Table 16: Summary of Miscellaneous OM&A Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$2.85	5.98%	57.28	-102.76	-45.48	-2.72
Feb-16	\$6.08	12.76%	107.69	-16.01	91.68	11.70
Mar-16	\$3.07	6.45%	14.58	15.31	29.88	1.93
Apr-16	\$4.39	9.21%	56.46	-70.31	-13.84	-1.27
May-16	\$4.13	8.68%	42.35	34.55	76.90	6.67
Jun-16	\$3.94	8.28%	25.79	2.23	28.02	2.32
Jul-16	\$4.77	10.01%	36.39	-16.87	19.52	1.95
Aug-16	\$3.34	7.01%	19.73	2.70	22.43	1.57
Sept-16	\$2.85	5.97%	24.37	11.11	35.49	2.12
Oct-16	\$3.06	6.43%	34.67	47.84	82.51	5.31
Nov-16	\$4.38	9.19%	20.92	8.21	29.13	2.68
Dec-16	\$4.78	10.04%	43.48	-51.93	-8.45	-0.85
Total	\$47.63	100.00%				31.41



Interest Expenses

THESL makes interest payments on long-term and short-term debt. Payments on long-term debt are generally made twice a year whereas payments on short-term debt are generally made monthly. Table 17 below summarizes the components of the interest expense lead calculation. Taking into account the various long-term and short-term debt instruments, a dollar-weighted expense lead time of 25.34 days was determined.

Table 17: Summary of Interest Expenses

Description	Amounts (\$M)	Weighting (%)	Expense Lead Time	Weighted Lead Time
Long-term Debt	\$75.58	96.05%	25.18	24.19
Short-term Debt	\$3.11	3.95%	29.30	1.16
Total	\$78.68	100.00%		25.34

Payments in Lieu of Taxes ("PILs")

THESL makes payments in lieu of taxes in installments to the relevant taxing authorities. As payment data for the calendar year 2016 was not reflective of historical or forward-looking payment frequencies for PILs, payment amounts that were made in calendar year 2017 were used. Taking this into account, a dollar-weighted expense lead (-lag) time of negative 10.05 days was determined for PILs. Table 18, below summarizes the components of the PILS expense lead calculation.

Table 18: Summary of Payments in Lieu of Taxes Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-17	\$0.27	2.56%	182.50	-334.00	-151.50	-3.87
Feb-17	\$0.27	2.56%	182.50	-306.00	-123.50	-3.16
Mar-17	\$2.00	19.15%	182.50	-275.00	-92.50	-17.71
Apr-17	\$2.00	19.15%	182.50	-244.00	-61.50	-11.78
May-17	\$1.14	10.94%	182.50	-214.00	-31.50	-3.45
Jun-17	\$0.00	0.00%	182.50	-184.00	-1.50	0.00
Jul-17	\$1.11	10.65%	182.50	-153.00	29.50	3.14
Aug-17	\$1.83	17.50%	182.50	-122.00	60.50	10.59
Sept-17	\$1.83	17.50%	182.50	-90.00	92.50	16.19
Total	\$10.45	100.00%				-10.05



Harmonized Sales Tax

The expense lead times associated with the following items that attract HST were considered in THESL's distribution lead-lag study:

- 1. Revenues;
- 2. Cost of Power; and,
- 3. OM&A³.

A summary of the expense lead times and working capital amounts associated with each of the above items is provided in Table 19. Note that the statutory approach described at the outset was used to determine the expense lead times associated with THESL's remittances and disbursements of HST (i.e., both remittances and collections are generally on the last day of the month following the date of the applicable invoice). Expense lead times for HST is shown below.

Table 19: Summary of HST Working Capital Amounts

Description	HST Lead Time	HST Working Capital Amount (\$M)
Revenues	-10.07	-\$15.59
Cost of Power	46.03	\$50.16
OM&A	41.58	\$2.07
Total		\$36.64

³ Costs within OM&A that attract HST include Corporate Procurement Card, Lease Payments, Consulting and Contract Staff, and Miscellaneous OM&A.



SECTION V: TORONTO HYDRO – WORKING CAPITAL REQUIREMENTS

Using the results described under the discussion of revenue lags and expense leads, and applying them to THESL's distribution expenses, THESL's working capital requirements were determined and are shown in the tables below.

Table 20: THESL Distribution Working Capital Requirements

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Expenses (\$M)	Working Capital Requirements (\$M)
Cost of Power	50.87	32.63	18.24	5.00%	\$3,059.51	\$152.85
OM&A Expenses	50.87	35.19	15.68	4.29%	\$344.90	\$14.81
PILS	50.87	-10.05	60.91	16.69%	\$10.45	\$1.74
Interest Expense	50.87	25.34	25.52	6.99%	\$78.68	\$5.50
Total					\$3,493.53	\$174.91
HST						\$36.64
Total - Including HST						\$211.54
Working Capital as a Percent of OM&A incl. Cost of Power						6.21%

The results of the study indicate a lower working capital requirement as compared to THESL's EB-2014-0116 distribution lead-lag study. The primary reasons for the difference is driven by:

- 1. The decrease in retail revenue lag days due to the move of all customers to a monthly billing frequency the retail revenue lag days have decreased by approximately 7%; and,
- 2. The removal of the Debt Retirement Charge component has decreased working capital for THESL had the debt retirement charge still been an expense, the working capital amount would be approximately 0.15% higher for each year of the filing period.



SECTION VI: APPENDIX - DETAILED DATA TABLES

IESO Credits

Table 21: Summary of IESO Credits

Description	Lag Days	Revenues (\$M)	Weighting (%)	Weighted Lag
Ontario Electricity Support Program	62.84	\$14.04	8.90%	5.59
Ontario Rebate for Electricity Consumers ("OREC")	62.91	\$123.37	78.21%	49.20
OREC Global Adjustment Modifier	62.24	\$20.33	12.89%	8.02
Total		\$157.74	100.00%	62.82

Other External Revenues

Table 22: Summary of Other External Revenues

Description	Lag Days	Revenues (\$M)	Weighting (%)	Weighted Lag
Hydro One Sub-Station	273.00	\$0.63	0.57%	1.55
Demand Billables	29.52	\$53.95	48.56%	14.33
RESOP	32.03	\$0.13	0.12%	0.04
FIT	32.73	\$52.95	47.66%	15.60
mFIT	32.77	\$3.44	3.09%	1.01
Total		\$111.10	100.00%	32.54



Payroll

Table 23: Summary of Payroll Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
12/27/2015	\$3.33	3.30%	1/13/2016	7.00	4.00	11.00	0.36
1/10/2016	\$3.41	3.38%	1/27/2016	7.00	4.00	11.00	0.37
1/24/2016	\$3.59	3.56%	2/10/2016	7.00	4.00	11.00	0.39
2/7/2016	\$3.51	3.47%	2/24/2016	7.00	4.00	11.00	0.38
2/21/2016	\$3.67	3.63%	3/9/2016	7.00	4.00	11.00	0.40
3/6/2016	\$3.16	3.13%	3/23/2016	7.00	4.00	11.00	0.34
3/20/2016	\$3.78	3.75%	4/6/2016	7.00	4.00	11.00	0.41
4/3/2016	\$3.51	3.48%	4/20/2016	7.00	4.00	11.00	0.38
4/17/2016	\$3.71	3.68%	5/4/2016	7.00	4.00	11.00	0.40
5/1/2016	\$3.59	3.56%	5/18/2016	7.00	4.00	11.00	0.39
5/15/2016	\$3.65	3.61%	6/1/2016	7.00	4.00	11.00	0.40
5/29/2016	\$3.81	3.77%	6/15/2016	7.00	4.00	11.00	0.42
6/12/2016	\$3.79	3.76%	6/29/2016	7.00	4.00	11.00	0.41
6/26/2016	\$3.77	3.74%	7/13/2016	7.00	4.00	11.00	0.41
7/10/2016	\$3.73	3.70%	7/27/2016	7.00	4.00	11.00	0.41
7/24/2016	\$3.82	3.78%	8/10/2016	7.00	4.00	11.00	0.42
8/7/2016	\$3.79	3.76%	8/24/2016	7.00	4.00	11.00	0.41
8/21/2016	\$3.80	3.77%	9/7/2016	7.00	4.00	11.00	0.41
9/4/2016	\$3.83	3.79%	9/21/2016	7.00	4.00	11.00	0.42
9/18/2016	\$3.81	3.77%	10/5/2016	7.00	4.00	11.00	0.42
10/2/2016	\$3.77	3.74%	10/19/2016	7.00	4.00	11.00	0.41
10/16/2016	\$3.87	3.84%	11/2/2016	7.00	4.00	11.00	0.42
10/30/2016	\$3.90	3.86%	11/16/2016	7.00	4.00	11.00	0.43
11/13/2016	\$4.04	4.00%	11/30/2016	7.00	4.00	11.00	0.44
11/27/2016	\$4.05	4.01%	12/14/2016	7.00	4.00	11.00	0.44
12/11/2016	\$4.10	4.07%	12/28/2016	7.00	4.00	11.00	0.45
1/1/2015	\$4.12	4.08%	3/23/2016	182.50	83.00	265.50	10.84
Total	\$100.90	100.00%					21.39



Withholdings

Table 24: Summary of Withholdings Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
12/27/2015	\$2.02	4.04%	1/19/2016	7.00	10.00	17.00	0.69
1/10/2016	\$2.07	4.14%	2/3/2016	7.00	11.00	18.00	0.74
1/24/2016	\$2.20	4.39%	2/18/2016	7.00	12.00	19.00	0.83
2/7/2016	\$2.19	4.38%	3/3/2016	7.00	12.00	19.00	0.83
2/21/2016	\$2.22	4.44%	3/17/2016	7.00	12.00	19.00	0.84
3/6/2016	\$2.77	5.52%	4/5/2016	7.00	17.00	24.00	1.33
3/20/2016	\$2.21	4.41%	4/12/2016	7.00	10.00	17.00	0.75
4/3/2016	\$2.04	4.08%	4/26/2016	7.00	10.00	17.00	0.69
4/17/2016	\$2.07	4.13%	5/11/2016	7.00	11.00	18.00	0.74
5/1/2016	\$1.91	3.82%	5/26/2016	7.00	12.00	19.00	0.73
5/15/2016	\$1.86	3.71%	6/10/2016	7.00	13.00	20.00	0.74
5/29/2016	\$1.87	3.74%	6/24/2016	7.00	13.00	20.00	0.75
6/12/2016	\$1.77	3.53%	7/6/2016	7.00	11.00	18.00	0.64
6/26/2016	\$1.65	3.30%	7/19/2016	7.00	10.00	17.00	0.56
7/10/2016	\$1.55	3.10%	8/3/2016	7.00	11.00	18.00	0.56
7/24/2016	\$1.51	3.01%	8/17/2016	7.00	11.00	18.00	0.54
8/7/2016	\$1.48	2.96%	9/6/2016	7.00	17.00	24.00	0.71
8/21/2016	\$1.42	2.84%	9/19/2016	7.00	16.00	23.00	0.65
9/4/2016	\$1.45	2.89%	10/5/2016	7.00	18.00	25.00	0.72
9/18/2016	\$1.41	2.82%	10/13/2016	7.00	12.00	19.00	0.54
10/2/2016	\$1.38	2.76%	10/26/2016	7.00	11.00	18.00	0.50
10/16/2016	\$1.43	2.86%	11/10/2016	7.00	12.00	19.00	0.54
10/30/2016	\$1.44	2.87%	11/24/2016	7.00	12.00	19.00	0.55
11/13/2016	\$1.52	3.03%	12/12/2016	7.00	16.00	23.00	0.70
11/27/2016	\$1.51	3.01%	12/28/2016	7.00	18.00	25.00	0.75
12/11/2016	\$1.51	3.02%	1/5/2017	7.00	12.00	19.00	0.57
1/1/2015	\$3.60	7.20%	4/5/2016	182.50	96.00	278.50	20.04
Total	\$50.07	100.00%					38.24



Pensions

Table 25: Summary of Pension Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Dec-15	\$1.19	3.56%	2/29/2016	7.00	51.00	58.00	2.06
Jan-16	\$1.19	3.58%	2/29/2016	7.00	37.00	44.00	1.58
Jan-16	\$1.19	3.56%	3/31/2016	7.00	54.00	61.00	2.17
Feb-16	\$1.21	3.63%	3/31/2016	7.00	40.00	47.00	1.71
Feb-16	\$1.19	3.58%	4/29/2016	7.00	55.00	62.00	2.22
Mar-16	\$1.58	4.74%	4/29/2016	7.00	41.00	48.00	2.27
Mar-16	\$1.20	3.61%	5/31/2016	7.00	59.00	66.00	2.38
Apr-16	\$1.19	3.58%	5/31/2016	7.00	45.00	52.00	1.86
Apr-16	\$1.19	3.57%	6/30/2016	7.00	61.00	68.00	2.43
May-16	\$1.19	3.57%	6/30/2016	7.00	47.00	54.00	1.93
May-16	\$1.19	3.58%	7/29/2016	7.00	62.00	69.00	2.47
May-16	\$1.19	3.56%	7/29/2016	7.00	48.00	55.00	1.96
Jun-16	\$1.18	3.55%	7/29/2016	7.00	34.00	41.00	1.46
Jun-16	\$1.19	3.56%	8/31/2016	7.00	53.00	60.00	2.14
Jul-16	\$1.20	3.58%	8/31/2016	7.00	39.00	46.00	1.65
Jul-16	\$1.18	3.55%	9/30/2016	7.00	55.00	62.00	2.20
Aug-16	\$1.19	3.56%	9/30/2016	7.00	41.00	48.00	1.71
Aug-16	\$1.17	3.50%	10/31/2016	7.00	58.00	65.00	2.27
Sep-16	\$1.18	3.54%	10/31/2016	7.00	44.00	51.00	1.80
Sep-16	\$1.18	3.55%	11/30/2016	7.00	60.00	67.00	2.38
Oct-16	\$1.19	3.57%	11/30/2016	7.00	46.00	53.00	1.89
Oct-16	\$1.18	3.55%	12/30/2016	7.00	62.00	69.00	2.45
Oct-16	\$1.19	3.56%	12/30/2016	7.00	48.00	55.00	1.96
Nov-16	\$1.19	3.56%	1/31/2017	7.00	66.00	73.00	2.60
Nov-16	\$1.17	3.50%	1/31/2017	7.00	52.00	59.00	2.07
Dec-16	\$1.19	3.57%	1/31/2017	7.00	38.00	45.00	1.61
Jan-15	\$2.06	6.17%	4/29/2016	182.50	120.00	302.50	18.67
Total	\$33.34	100.00%					71.89



Benefits – Health and Dental

Table 26: Summary of Benefits, Health and Dental Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Dec-15	\$0.51	3.94%	1/1/2016	7.00	-8.00	-1.00	-0.04
Jan-16	\$0.51	3.94%	1/1/2016	7.00	-22.00	-15.00	-0.59
Jan-16	\$0.55	4.26%	2/1/2016	7.00	-5.00	2.00	0.09
Feb-16	\$0.55	4.26%	2/1/2016	7.00	-19.00	-12.00	-0.51
Feb-16	\$0.54	4.21%	3/1/2016	7.00	-4.00	3.00	0.13
Mar-16	\$0.54	4.21%	3/1/2016	7.00	-18.00	-11.00	-0.46
Mar-16	\$0.58	4.54%	4/1/2016	7.00	-1.00	6.00	0.27
Apr-16	\$0.58	4.54%	4/1/2016	7.00	-15.00	-8.00	-0.36
Apr-16	\$0.56	4.35%	5/1/2016	7.00	1.00	8.00	0.35
May-16	\$0.56	4.35%	5/1/2016	7.00	-13.00	-6.00	-0.26
May-16	\$0.39	3.06%	6/1/2016	7.00	4.00	11.00	0.34
May-16	\$0.39	3.06%	6/1/2016	7.00	-10.00	-3.00	-0.09
Jun-16	\$0.39	3.06%	6/1/2016	7.00	-24.00	-17.00	-0.52
Jun-16	\$0.50	3.91%	7/1/2016	7.00	-8.00	-1.00	-0.04
Jul-16	\$0.50	3.91%	7/1/2016	7.00	-22.00	-15.00	-0.59
Jul-16	\$0.52	4.02%	8/1/2016	7.00	-5.00	2.00	0.08
Aug-16	\$0.52	4.02%	8/1/2016	7.00	-19.00	-12.00	-0.48
Aug-16	\$0.51	3.97%	9/1/2016	7.00	-2.00	5.00	0.20
Sep-16	\$0.51	3.97%	9/1/2016	7.00	-16.00	-9.00	-0.36
Sep-16	\$0.49	3.82%	10/1/2016	7.00	0.00	7.00	0.27
Oct-16	\$0.49	3.82%	10/1/2016	7.00	-14.00	-7.00	-0.27
Oct-16	\$0.52	4.07%	11/1/2016	7.00	3.00	10.00	0.41
Oct-16	\$0.52	4.07%	11/1/2016	7.00	-11.00	-4.00	-0.16
Nov-16	\$0.37	2.89%	12/1/2016	7.00	5.00	12.00	0.35
Nov-16	\$0.37	2.89%	12/1/2016	7.00	-9.00	-2.00	-0.06
Dec-16	\$0.37	2.89%	12/1/2016	7.00	-23.00	-16.00	-0.46
Total	\$12.85	100.00%					-2.79



Benefits – Group Life Insurance

Table 27: Summary of Benefits, Group Life Insurance Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Dec-15	\$0.06	3.92%	1/1/2016	7.00	-8.00	-1.00	-0.04
Jan-16	\$0.06	3.92%	1/1/2016	7.00	-22.00	-15.00	-0.59
Jan-16	\$0.06	3.91%	2/1/2016	7.00	-5.00	2.00	0.08
Feb-16	\$0.06	3.91%	2/1/2016	7.00	-19.00	-12.00	-0.47
Feb-16	\$0.06	3.96%	3/1/2016	7.00	-4.00	3.00	0.12
Mar-16	\$0.06	3.96%	3/1/2016	7.00	-18.00	-11.00	-0.44
Mar-16	\$0.06	4.31%	4/1/2016	7.00	-1.00	6.00	0.26
Apr-16	\$0.06	4.31%	4/1/2016	7.00	-15.00	-8.00	-0.35
Apr-16	\$0.06	4.21%	5/1/2016	7.00	1.00	8.00	0.34
May-16	\$0.06	4.21%	5/1/2016	7.00	-13.00	-6.00	-0.25
May-16	\$0.04	2.77%	6/1/2016	7.00	4.00	11.00	0.31
May-16	\$0.04	2.77%	6/1/2016	7.00	-10.00	-3.00	-0.08
Jun-16	\$0.04	2.77%	6/1/2016	7.00	-24.00	-17.00	-0.47
Jun-16	\$0.06	4.23%	7/1/2016	7.00	-8.00	-1.00	-0.04
Jul-16	\$0.06	4.23%	7/1/2016	7.00	-22.00	-15.00	-0.63
Jul-16	\$0.06	4.21%	8/1/2016	7.00	-5.00	2.00	0.08
Aug-16	\$0.06	4.21%	8/1/2016	7.00	-19.00	-12.00	-0.51
Aug-16	\$0.06	4.30%	9/1/2016	7.00	-2.00	5.00	0.21
Sep-16	\$0.06	4.30%	9/1/2016	7.00	-16.00	-9.00	-0.39
Sep-16	\$0.06	4.28%	10/1/2016	7.00	0.00	7.00	0.30
Oct-16	\$0.06	4.28%	10/1/2016	7.00	-14.00	-7.00	-0.30
Oct-16	\$0.06	4.23%	11/1/2016	7.00	3.00	10.00	0.42
Oct-16	\$0.06	4.23%	11/1/2016	7.00	-11.00	-4.00	-0.17
Nov-16	\$0.04	2.85%	12/1/2016	7.00	5.00	12.00	0.34
Nov-16	\$0.04	2.85%	12/1/2016	7.00	-9.00	-2.00	-0.06
Dec-16	\$0.04	2.85%	12/1/2016	7.00	-23.00	-16.00	-0.46
Total	\$1.47	100.00%					-2.77



Benefits - WSIB

Table 28: Summary of Benefits, WSIB Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Dec-15	\$0.06	4.42%	2/29/2016	7.00	51.00	58.00	2.57
Jan-16	\$0.06	4.42%	2/29/2016	7.00	37.00	44.00	1.95
Jan-16	\$0.06	4.61%	3/31/2016	7.00	54.00	61.00	2.81
Feb-16	\$0.06	4.61%	3/31/2016	7.00	40.00	47.00	2.17
Feb-16	\$0.10	7.51%	4/30/2016	7.00	56.00	63.00	4.73
Mar-16	\$0.10	7.51%	4/30/2016	7.00	42.00	49.00	3.68
Mar-16	\$0.06	4.45%	5/31/2016	7.00	59.00	66.00	2.94
Apr-16	\$0.06	4.45%	5/31/2016	7.00	45.00	52.00	2.32
Apr-16	\$0.06	4.38%	6/30/2016	7.00	61.00	68.00	2.98
May-16	\$0.06	4.38%	6/30/2016	7.00	47.00	54.00	2.37
May-16	\$0.06	4.32%	7/31/2016	7.00	64.00	71.00	3.07
May-16	\$0.06	4.32%	7/31/2016	7.00	50.00	57.00	2.46
Jun-16	\$0.06	4.32%	7/31/2016	7.00	36.00	43.00	1.86
Jun-16	\$0.06	4.07%	8/31/2016	7.00	53.00	60.00	2.44
Jul-16	\$0.06	4.07%	8/31/2016	7.00	39.00	46.00	1.87
Jul-16	\$0.05	3.71%	9/30/2016	7.00	55.00	62.00	2.30
Aug-16	\$0.05	3.71%	9/30/2016	7.00	41.00	48.00	1.78
Aug-16	\$0.04	3.21%	10/31/2016	7.00	58.00	65.00	2.09
Sep-16	\$0.04	3.21%	10/31/2016	7.00	44.00	51.00	1.64
Sep-16	\$0.04	2.63%	11/30/2016	7.00	60.00	67.00	1.76
Oct-16	\$0.04	2.63%	11/30/2016	7.00	46.00	53.00	1.40
Oct-16	\$0.03	2.18%	12/31/2016	7.00	63.00	70.00	1.52
Oct-16	\$0.03	2.18%	12/31/2016	7.00	49.00	56.00	1.22
Nov-16	\$0.02	1.57%	1/31/2017	7.00	66.00	73.00	1.14
Nov-16	\$0.02	1.57%	1/31/2017	7.00	52.00	59.00	0.92
Dec-16	\$0.02	1.57%	1/31/2017	7.00	38.00	45.00	0.70
Total	\$1.38	100.00%					56.67



Benefits – Employee Health Tax

Table 29: Summary of Benefits, Employee Health Tax Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Payment Date	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Dec-15	\$0.11	3.48%	2/15/2016	7.00	37.00	44.00	1.53
Jan-16	\$0.12	3.55%	2/15/2016	7.00	23.00	30.00	1.07
Jan-16	\$0.12	3.65%	3/15/2016	7.00	38.00	45.00	1.64
Feb-16	\$0.12	3.69%	3/15/2016	7.00	24.00	31.00	1.14
Feb-16	\$0.12	3.65%	4/15/2016	7.00	41.00	48.00	1.75
Mar-16	\$0.13	3.85%	4/15/2016	7.00	27.00	34.00	1.31
Mar-16	\$0.12	3.69%	5/16/2016	7.00	44.00	51.00	1.88
Apr-16	\$0.12	3.62%	5/16/2016	7.00	30.00	37.00	1.34
Apr-16	\$0.12	3.67%	6/15/2016	7.00	46.00	53.00	1.94
May-16	\$0.12	3.61%	6/15/2016	7.00	32.00	39.00	1.41
May-16	\$0.12	3.63%	7/15/2016	7.00	48.00	55.00	1.99
May-16	\$0.12	3.70%	7/15/2016	7.00	34.00	41.00	1.52
Jun-16	\$0.12	3.68%	7/15/2016	7.00	20.00	27.00	0.99
Jun-16	\$0.12	3.64%	8/15/2016	7.00	37.00	44.00	1.60
Jul-16	\$0.12	3.61%	8/15/2016	7.00	23.00	30.00	1.08
Jul-16	\$0.12	3.60%	9/15/2016	7.00	40.00	47.00	1.69
Aug-16	\$0.12	3.61%	9/15/2016	7.00	26.00	33.00	1.19
Aug-16	\$0.12	3.57%	10/17/2016	7.00	44.00	51.00	1.82
Sep-16	\$0.12	3.66%	10/17/2016	7.00	30.00	37.00	1.35
Sep-16	\$0.12	3.60%	11/15/2016	7.00	45.00	52.00	1.87
Oct-16	\$0.12	3.58%	11/15/2016	7.00	31.00	38.00	1.36
Oct-16	\$0.12	3.65%	12/15/2016	7.00	47.00	54.00	1.97
Oct-16	\$0.12	3.67%	12/15/2016	7.00	33.00	40.00	1.47
Nov-16	\$0.12	3.78%	1/16/2017	7.00	51.00	58.00	2.19
Nov-16	\$0.12	3.78%	1/16/2017	7.00	37.00	44.00	1.66
Dec-16	\$0.12	3.79%	1/16/2017	7.00	23.00	30.00	1.14
Jan-15	\$0.16	5.01%	4/15/2016	182.50	106.00	288.50	14.46
Total	\$3.29	100.00%					54.38



Other Benefits - Long-term Disability

Table 30: Summary of Other Benefits, Long-term Disability Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.140	8.36%	15.50	-2.00	13.50	1.13
Feb-16	\$0.141	8.42%	14.00	-2.00	12.00	1.01
Mar-16	\$0.140	8.38%	15.50	-1.00	14.50	1.21
Apr-16	\$0.140	8.34%	15.00	-1.00	14.00	1.17
May-16	\$0.138	8.27%	15.50	-4.00	11.50	0.95
Jun-16	\$0.139	8.32%	15.00	-1.00	14.00	1.17
Jul-16	\$0.139	8.31%	15.50	-2.00	13.50	1.12
Aug-16	\$0.139	8.30%	15.50	-5.00	10.50	0.87
Sept-16	\$0.139	8.30%	15.00	0.00	15.00	1.25
Oct-16	\$0.139	8.28%	15.50	-3.00	12.50	1.04
Nov-16	\$0.139	8.32%	15.00	0.00	15.00	1.25
Dec-16	\$0.140	8.39%	15.50	-1.00	14.50	1.22
Total	\$1.674	100.00%				13.38

Other Benefits - Accidental Death and Dismemberment

Table 31: Summary of Other Benefits, Accidental Death and Dismemberment Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.003	8.01%	15.50	-2.00	13.50	1.08
Feb-16	\$0.003	8.18%	14.00	-2.00	12.00	0.98
Mar-16	\$0.003	8.22%	15.50	-1.00	14.50	1.19
Apr-16	\$0.003	8.28%	15.00	-1.00	14.00	1.16
May-16	\$0.003	8.25%	15.50	-4.00	11.50	0.95
Jun-16	\$0.003	8.39%	15.00	-1.00	14.00	1.17
Jul-16	\$0.003	8.41%	15.50	-2.00	13.50	1.14
Aug-16	\$0.003	8.43%	15.50	-5.00	10.50	0.88
Sept-16	\$0.003	8.47%	15.00	0.00	15.00	1.27
Oct-16	\$0.003	8.43%	15.50	-3.00	12.50	1.05
Nov-16	\$0.003	8.44%	15.00	0.00	15.00	1.27
Dec-16	\$0.003	8.49%	15.50	-1.00	14.50	1.23
Total	\$0.036	100.00%				13.38



Other Benefits – Employee Assistance Program

Table 32: Summary of Other Benefits, Employee Assistance Program Expenses

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.006	8.33%	15.50	12.00	27.50	2.29
Feb-16	\$0.006	8.34%	14.00	12.00	26.00	2.17
Mar-16	\$0.006	8.34%	15.50	28.00	43.50	3.63
Apr-16	\$0.006	8.34%	15.00	12.00	27.00	2.25
May-16	\$0.006	8.33%	15.50	9.00	24.50	2.04
Jun-16	\$0.006	8.32%	15.00	14.00	29.00	2.41
Jul-16	\$0.006	8.32%	15.50	11.00	26.50	2.20
Aug-16	\$0.006	8.33%	15.50	8.00	23.50	1.96
Sept-16	\$0.006	8.33%	15.00	13.00	28.00	2.33
Oct-16	\$0.006	8.33%	15.50	10.00	25.50	2.13
Nov-16	\$0.006	8.34%	15.00	15.00	30.00	2.50
Dec-16	\$0.006	8.34%	15.50	12.00	27.50	2.29
Total	\$0.073	100.00%				25.91

Lease Payments – Islington Monogram Holdings

Table 33: Summary of Lease Payments, Islington Monogram Holdings

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Jan-16	\$0.12	9.09%	15.50	-25.00	-9.50	-0.86
Feb-16	\$0.12	9.09%	14.50	-31.00	-16.50	-1.50
Mar-16	\$0.12	9.09%	15.50	-34.00	-18.50	-1.68
Apr-16	\$0.12	9.09%	15.00	-31.00	-16.00	-1.45
May-16	\$0.12	9.09%	15.50	-32.00	-16.50	-1.50
Jun-16	\$0.12	9.09%	15.00	-34.00	-19.00	-1.73
Jul-16	\$0.12	9.09%	15.50	-32.00	-16.50	-1.50
Aug-16	\$0.12	9.09%	15.50	-33.00	-17.50	-1.59
Sept-16	\$0.12	9.09%	15.00	-35.00	-20.00	-1.82
Oct-16	\$0.12	9.09%	15.50	-31.00	-15.50	-1.41
Nov-16	\$0.12	9.09%	15.00	-33.00	-18.00	-1.64
Total	\$1.33	100.00%				-16.68



Lease Payments – Davpart Inc

Table 34: Summary of Lease Payments, Davpart Inc

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
Feb-16	\$0.09	8.35%	14.50	-31.00	-16.50	-1.38
Mar-16	\$0.09	8.35%	15.50	-34.00	-18.50	-1.55
Apr-16	\$0.09	8.35%	15.00	-31.00	-16.00	-1.34
May-16	\$0.09	8.35%	15.50	-32.00	-16.50	-1.38
Jun-16	\$0.09	8.35%	15.00	-34.00	-19.00	-1.59
Jul-16	\$0.09	8.35%	15.50	-32.00	-16.50	-1.38
Aug-16	\$0.09	8.35%	15.50	-33.00	-17.50	-1.46
Sep-16	\$0.09	8.35%	15.00	-30.00	-15.00	-1.25
Oct-16	\$0.09	8.35%	15.50	-31.00	-15.50	-1.29
Nov-16	\$0.09	8.35%	15.00	-33.00	-18.00	-1.50
Dec-16	\$0.09	8.35%	15.50	-31.00	-15.50	-1.29
Jan-17	\$0.09	8.13%	15.50	-32.00	-16.50	-1.34
Total	\$1.12	100.00%				-16.75

Lease Payments – Other Annual Leases

Table 35: Summary of Lease Payments, Other Annual Leases

Delivery Period	Costs (\$M)	Weighting (%)	Service Lead Time	Payment Lead Time	Total Lead Time	Weighted Lead
2015	\$0.38	100%	182.50	183.00	365.50	365.50
Total	\$0.38	100%				365.50

CAPITAL EXPENDITURES

2			

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- 3 In accordance with the Chapter 5 of the OEB's Filing Requirements for Electricity
- 4 Distribution Rate Applications (July 12, 2018) ("Filing Requirements"), Toronto Hydro
- has filed a consolidated Distribution System Plan ("DSP") in Exhibit 2B. In this schedule,
- 6 Toronto Hydro files OEB's Appendix 2-AA (Capital Projects Table) and Appendix 2-AB
- 7 (Capital Expenditures Summary), as required by Chapter 2, s. 2.2.2.2 of the Filing
- 8 Requirements. In accordance with the Filing Requirements, this schedule also provides:
 - A description of the proposed accounting treatment for projects that have a life cycle greater than one year, including the treatment of the cost of funds for construction work-in-progress ("CWIP");
 - The components of other capital expenditures, including a reconciliation of all capital components to the total capital budget; and
 - The components of CWIP.

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- Toronto Hydro makes capital contributions to Hydro One Networks Inc. ("HONI"), as
- required, to complete certain capital work such as Stations Renewal and Stations
- Expansion (see Exhibit 2B, Sections E6.6 and E7.4, respectively). These contributions are
- recognized as intangible assets and amortized on a straight line basis over 25 years.

20

21

1. OEB-REQUIRED APPENDICES (2-AA AND 2-AB)

- Appendices 2-AA and 2-AB, which are filed at Exhibit 2A, Tab 4, Schedules 2 and 3,
- provide an overview of Toronto Hydro's capital expenditures from 2015 to 2024 by
- 24 program and investment category, respectively.

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- 1 To maximize the usefulness of these appendices, Toronto Hydro mapped its historical
- and future capital expenditures to the investment categories and programs presented in
- the DSP, at Exhibit 2B. Variance explanations related to Toronto Hydro's capital
- 4 expenditures are provided in Exhibit 2B, Section E4.

6 Toronto Hydro confirms that no non-distribution activities are included in the plan

7 presented in this application.

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9 2. ACCOUNTING TREATMENT FOR CWIP

- Some of Toronto Hydro's capital projects may be in progress at the reporting cut-off
- date. In such cases, capital costs are recorded in a CWIP account until the project work
- is completed. Under Modified International Financial Reporting Standards ("MIFRS"), a
- financing charge, referred to as Allowance for Funds Used During Construction
- ("AFUDC"), is added to capital projects that necessarily take a substantial period of time
- (exceeding six months) to get ready for their intended use. Further information follows.

3. COMPONENTS OF CAPITAL EXPENDITURES

- 18 Toronto Hydro's capital expenditures under the Other Capital Expenditures category (in
- 19 Appendix 2-AB) includes AFUDC and miscellaneous capital, which are described below.

21 3.1 Allowance for Funds Used During Construction (AFUDC)

- 22 The OEB's Accounting Procedures Handbook, Article 410, directs utilities to capitalize
- 23 AFUDC. The AFUDC rate applied by Toronto Hydro under MIFRS for 2015 to 2017
- actuals, 2018 to 2019 bridge, and 2020 forecast years is based on Toronto Hydro
- 25 Corporation's weighted average cost of borrowing.

3.2 Miscellaneous Capital

- 2 Miscellaneous capital primarily consists of pre-capitalized inventory and major tools.
- The value of pre-capitalized inventory results from the change in capitalized inventory
- 4 levels between years. The utility purchases major tools in the normal course of
- operations and on an ongoing basis to replace worn or broken tools, as required, and to
- 6 install, commission and otherwise complete capital activities.

7

1

- 8 The 2015 to 2019 capital plan presented in EB-2014-0116 ("CIR Filing Plan") included the
- annual inflationary increases within the 'Other' category. To improve comparability to
- actuals, Toronto Hydro has included the inflationary component for the CIR Filing Plan in
- the System Access, System Renewal, System Service, and General Plant categories in
- 12 Appendix 2-AB.

13

14

4. CONSTRUCTION WORK IN PROGRESS

- 15 At any point in time, Toronto Hydro will have a balance in the CWIP account. Initial
- capital expenditures are recorded into CWIP until the project is complete, and
- 17 capitalized in accordance with MIFRS.

18

19 Table 1: Historical, Bridge and Forecasted Construction Work In Progress (\$ Millions)

	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Bridge	Bridge	Forecast
Opening CWIP	522.1	577.7	502.9	485.8	311.5	343.5
Additions (CAPEX)	490.6	508.4	496.6	434.7	425.7	514.0
Deductions (In Service Additions)	(435.3)	(584.3)	(520.3)	(608.9)	(397.8)	(489.8)
Other	0.3	1.1	6.5	-	4.2	-
Closing CWIP	577.7	502.9	485.8	311.5	343.5	367.7

Note

Variances due to rounding may exist

¹ See Article 410 of the Accounting Procedures Handbook for Electricity Distributors.

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- 1 Other includes amounts related to monthly billing and externally driven capital deferral
- 2 accounts (see Exhibit 9) and accounting presentation changes.

OEB Appendix 2-AA Capital Programs Table

Programs (\$M)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
· regrame (4)	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Customer Connections	31.7	40.1	21.9	44.8	37.6	42.9	43.9	44.8	45.6	46.3
Externally Initiated Plant Relocations &	31.7	40.1	21.9	44.0	37.0	42.9	45.9	44.0	45.0	40.5
Expansion	2.2	2.6	2.6	7.5	8.3	11.4	20.8	4.6	4.7	4.5
Generation Protection, Monitoring, and										
Control	-	2.1	0.0	8.0	3.4	3.7	2.3	2.4	2.5	2.7
Load Demand	9.9	16.8	16.2	17.3	21.6	11.3	11.4	18.5	22.6	23.6
Metering	14.5	17.4	24.8	23.0	26.1	22.6	14.8	23.6	30.6	39.2
System Access Total	58.3	79.0	65.5	100.8	97.1	91.8	93.3	93.9	106.0	116.4
Area Conversions	46.3	28.2	26.9	40.0	44.4	41.4	47.2	46.3	50.4	35.6
Network System Renewal	10.2	16.8	14.7	18.9	29.8	18.6	19.3	18.5	17.7	18.3
Reactive and Corrective Capital	42.0	54.3	55.5	58.4	57.1	61.2	62.4	63.5	64.4	65.8
Stations Renewal	11.3	11.6	19.0	19.7	23.7	27.5	35.3	29.4	27.0	22.4
Underground System Renewal - Downtown	-	-	-	-	-	15.1	22.5	23.9	30.0	30.6
Underground System Renewal - Horseshoe	115.5	80.7	83.1	70.0	71.4	93.0	88.7	90.3	93.1	95.2
Overhead Infrastructure Relocation	0.9	3.1	2.6	0.2	-	-	-	-	-	-
SCADAMATE R1 Renewal	3.5	4.9	2.1	1.4	2.7	-	-	-	-	-
PILC Piece Outs & Leakers	6.0	5.7	1.8	0.1	1.5	-	-	-	-	-
Underground Legacy Infrastructure	7.4	9.9	9.0	2.3	5.0	-	-	-	-	-
Overhead System Renewal	61.0	51.0	35.7	18.4	17.8	49.8	50.4	51.3	56.5	57.7
System Renewal Total	304.1	266.1	250.3	229.4	253.4	306.6	325.7	323.1	339.0	325.5
Energy Storage Systems	-	-	-	5.9	2.0	1.0	3.7	3.8	1.0	1.0
Network Condition Monitoring and Control	-	-	-	-	-	7.6	10.2	12.6	15.3	17.4
Overhead Momentary Reduction	0.0	-	-	0.3	0.3	-	-	-	-	-
Stations Expansion	23.0	34.5	59.4	30.6	32.8	19.5	40.0	49.3	12.5	15.2
System Enhancements	7.1	17.2	12.2	4.0	6.7	6.2	6.2	5.6	4.8	4.9
Handwell Upgrades	4.7	0.8	0.8	-	-	-	-	-	-	-
Polymer SMD-20 Renewal	3.0	0.3	0.0	0.6	-	-	-	-	-	-
Design Enhancement	0.0	0.6	(0.0)	-	-	-	-	-	-	-
System Service Total	37.9	53.3	72.4	41.4	41.8	34.2	60.1	71.3	33.6	38.5
Facilities Management and Security	15.4	9.0	6.3	2.1	2.5	11.6	11.8	12.1	12.3	12.6
Fleet and Equipment	4.1	3.7	4.7	3.3	3.3	8.6	8.9	8.5	8.7	7.8
IT/OT Systems	28.4	48.6	55.4	64.6	34.4	54.8	55.7	49.5	56.6	64.8
Control Operations Reinforcement	-	-	-	-	-	3.9	17.4	18.9	-	-
Operating Centers Consolidation Plan	31.6	48.3	32.2	-	-	-	-	-	-	-
Program Support	-	0.0	0.4	-	-	-	-	-	-	-
General Plant Total	79.4	109.5	98.9	70.0	40.2	78.8	93.7	89.0	77.7	85.2
AFUDC	10.8	12.5	9.8	6.0	4.0	6.0	8.2	8.7	8.9	7.7
Miscellaneous	0.8	(8.8)	0.9	0.3	(1.6)	1.0	0.8	1.2	0.6	1.0
Other Total	11.6	3.7	10.7	6.3	2.4	7.0	9.0	9.8	9.5	8.7
Subtotal	491.4	511.6	497.8	447.8	434.9	518.4	581.8	587.1	565.7	574.4
Less Renewable Generation Facility										
Assets and Other Non Rate-Regulated										
Utility Assets (input as negative)	(8.0)	(3.2)	(1.2)	(13.1)	(9.3)	(4.4)	(3.1)	(3.2)	(3.3)	(3.5)
Total	490.6	508.4	496.6	434.7	425.7	514.0	578.8	583.9	562.4	570.9

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OEB Appendix 2-AB Table 2 - Capital Expenditure Summary from Chapter 5 Consolidated

First year of Forecast Period:

2021

2020																				
																	Fore	cast Period (plan	ned)	
		2015			2016			2017			2018			2019						
CATEGORY	CIR Filing Plan	Actual	Var	CIR Filing Plan	Actual	Var	CIR Filing Plan	Actual	Var	CIR Filing Plan	Bridge	Var	CIR Filing Plan	Bridge ²	Var	2020	2021	2022	2023	2024
	In million:	s of dollars	%	In millions	of dollars	%		In	millions of dollar	S										
System Access	86.1	58.3	-32.3%	95.3	79.0	-17.2%	104.9	65.5	-37.6%	95.8	100.8	5.2%	92.3	97.1	5.2%	91.8	93.3	93.9	106.0	116.4
System Renewal	251.7	304.1	20.8%	239.6	266.1	11.0%	256.2	250.3	-2.3%	275.9	229.4	-16.9%	287.3	253.4	-11.8%	306.6	325.7	323.1	339.0	325.5
System Service	76.5	37.9	-50.4%	70.7	53.3	-24.6%	65.1	72.4	11.3%	52.6	41.4	-21.4%	80.2	41.8	-47.9%	34.2	60.1	71.3	33.6	38.5
General Plant	104.6	79.4	-24.1%	101.5	109.5	7.9%	30.3	98.9	226.4%	34.2	70.0	104.6%	30.3	40.2	32.7%	78.8	93.7	89.0	77.7	85.2
Other	12.2	11.6	-4.8%	11.6	3.7	-67.9%	10.8	10.7	-1.4%	11.5	6.3	-45.6%	12.1	2.4	-80.2%	7.0	9.0	9.8	9.5	8.7
TOTAL EXPENDITURE	531.1	491.4	-7.5%	518.8	511.6	-1.4%	467.4	497.8	6.5%	470.0	447.8	-4.7%	502.2	434.9	-13.4%	518.4	581.8	587.1	565.7	574.4
Capital Contributions	- 6.6	- 4.0	-40.0%	- 29.1	- 16.6	-42.9%	- 48.2	- 37.4	-22.5%	- 32.1	- 22.9	-28.6%	- 30.5	- 28.1	-8.0%	- 12.8	- 16.1	- 15.2	- 16.8	- 14.6
Net Capital Expenditures	524.5	487.5	-7.1%	489.7	495.0	1.1%	419.2	460.5	9.9%	438.0	424.9	-3.0%	471.6	406.8	-13.7%	505.6	565.7	571.9	548.9	559.8
System O&M	128.8	116.1	-9.9%		126.5			126.3			126.9			131.0		130.4				

Note: Variances due to rounding may exist

Notes to the Table:

- 1. Historical "previous plan" data is not required unless a plan has previously been filed. However, use the last cost of service rebasing year, and the applicant should include their planned budget in each subsequent historical year up to and including the Bridge Year.
- 2. Indicate the number of months of 'actual' data included in the last year of the Historical Period (normally a 'bridge' year): 12

Explanatory Notes on Variances (complete only if applicable)

Notes on shifts in forecast vs. historical budgets by category

Refer to Section E4 for analysis of shifts in forecast vs. historical expenditures by category

Notes on year over year Plan vs. Actual variances for Total Expenditures

Refer to Section E4 on Variance analysis for between Plan vs Actuals.

Notes on Plan vs. Actual variance trends for individual expenditure categories

Refer to Section E4 on Variance analysis for between Plan vs Actuals.

CAPITALIZATION POLICY

2

1

- This schedule addresses s. 2.2.2.5 of the Ontario Energy Board's ("OEB") Filing
- 4 Requirements for Electricity Distribution Rate Applications (July 12, 2018) ("Filing
- 5 Requirements"), which requires each applicant to file a copy of its capitalization policy
- and identify changes to that capitalization policy since filing its last rebasing application.

7

8

1. BACKGROUND

- 9 Consistent with the OEB's expectations, Toronto Hydro converted to International
- 10 Financial Reporting Standards ("IFRS") effective January 1, 2015. This application
- represents Toronto Hydro's second rebasing application under Modified IFRS ("MIFRS").

12

- 13 Although Toronto Hydro updated and implemented its IFRS-compliant capitalization
- policy in time for IFRS reporting for the year ended December 2015, Toronto Hydro filed
- its USGAAP capitalization policy in the 2015-2019 CIR application (refer to EB-2014-
- 0116, Exhibit 2A, Tab 7, Appendix A) as the utility's IFRS policy was not approved at that
- 17 time.

18 19

2. CAPITALIZATION POLICY

- 20 A copy of Toronto Hydro's current and IFRS-compliant capitalization policy is filed in
- 21 Appendix A to this schedule.

22

- Toronto Hydro confirms that, for purposes of calculating the 2020-2024 rates (Exhibit
- 24 2A, Tab 1, Schedule 1), its capitalization practices conform to MIFRS.

¹ Filing Requirements, s. 2.0.9 - "Accounting Matters".

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1 3. CHANGES TO CAPITALIZATION POLICY

- 2 There have been no changes to Toronto Hydro's IFRS-compliant capitalization policy
- 3 applied to rates resulting from the last application. As part of a continuous review
- 4 process, Toronto Hydro evaluates its policies and practices to incorporate new IFRS
- 5 pronouncements.



POLICY

CAPITALIZATION

Policy Owner:

Executive Vice-President and Chief Financial Officer

Policy Approver:

Policy Administration Steering Committee

Version Approval Date:

V6.0 2017-10-16

Last Review by PASC:

V6.0 2017-10-16

The most recent version of this policy can be obtained from http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx

The distribution of this policy is not restricted.

Anthony Haines

President and CEO, Toronto Hydro Corporation

Dec 6,2017

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1 DOCUMENT REVIEW & REVISION HISTORY

This policy is reviewed annually.

Version Number	Date of Review	Reviewed By	Brief Description of Change
V1.0	2008-06-27	PASC	V1.0 approved by PASC
V2.0	2010-07-29	PASC	V2.0 approved by PASC
V3.0	2011-06-30	PASC	V3.0 approved by PASC
V4.0	2013-09-24	PASC	V4.0 approved by PASC
V5.0	2015-12-14	PASC	Reflect accounting policies in accordance with IFRS, revisions to policy administration and responsibilities, addition of compliance monitoring
V6.0	2017-10-16	PASC	Added clarifying guidance including additional intangible asset treatment, updated roles and responsibilities, added OEB AP Handbook related excerpts and other minor wording changes

2 DISTRIBUTION HISTORY

Version Number	Date of Issue	Recipients
V1.0	2008-06-27	Toronto Hydro @ Home Employee Extranet
V2.0	2010-08-30	Toronto Hydro @ Home Employee Extranet
V3.0	2011-09-16	http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx
V4.0	2013-09-30	http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx
V5.0	2015-12-14	http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx
V6.0	2017-10-16	http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx

3 POLICY OVERVIEW

This document describes the accounting policy and specific criteria used to determine the appropriate classification of expenditures, in particular, whether expenditures should be capitalized on the balance sheet (capital assets) or expensed to operations in the period incurred (expense), and the conditions for derecognition.

The purpose of recording expenditures as capital assets is to provide for an equitable allocation of costs among current and future periods. As capital assets are expected to provide future economic benefits for more than a year, expenditures incurred for the acquisition, construction or development of capital assets should be capitalized and allocated over the estimated useful lives of the associated capital assets in the form of amortization/depreciation expense. All other expenditures should be expensed in the accounting period incurred.

4 DEFINITIONS AND ABBREVIATIONS

TERM or ACRONYM	DESCRIPTION
AP Handbook	Accounting Procedures Handbook for Electricity Distributors issued by the OEB
Borrowing Costs	Interest and other costs incurred in connection with the borrowing of funds
CWIP	Construction Work In Progress
Corporation	Toronto Hydro Corporation and its subsidiaries
IFRS	International Financial Reporting Standards
ISA	In-Service Additions
Qualifying asset	An asset that necessarily takes a substantial period of time to get ready for its intended use
OEB	Ontario Energy Board
On-cost	Materials handling costs
PASC	Policy Administration Steering Committee
PP&E	Property, Plant and Equipment
SLR	Standard Labour Rate
VHR	Vehicle Hire Rate

¹ Estimates of useful life are reviewed annually and whenever events or changes in circumstances indicate that the current estimates or depreciation method are no longer appropriate. Changes in estimates are accounted for on a prospective basis.

5 SCOPE

- 5.1 This policy applies to the capitalization of assets for the Corporation.
- 5.2 This policy is designed to augment other corporate policies and is not intended to replace or preclude them. Should an overlap arise between the application of this policy and any other policy, the policy most specific to the situation will apply.

6 OBJECTIVE

6.1 To ensure proper classification of the Corporation's expenditures in accordance with IFRS and the regulatory reporting standards included in the AP Handbook.

7 CRITERIA FOR CAPITALIZATION

7.1 Initial Recognition – Capitalization versus Expensing

Subject to the threshold levels outlined in **Appendix A**, expenditures will be capitalized only if:

- i) It is probable that future economic benefits will flow to the entity; and
- ii) The cost can be measured reliably.

Capital assets comprise of PP&E and intangible assets, and are expected to be used during more than one year. PP&E consists typically of long-lived tangible assets used in the production or supply of goods or services, for rental to others, or for administrative purposes, such as distribution assets, equipment, land and buildings. Intangible assets are assets that lack physical substance, such as computer software and capital contributions paid.

For additional guidance, **Appendix B – Decision Tree** illustrates the criteria that must be met in order for expenditures to be capitalized. Expenditures not meeting the criteria will be expensed in the period incurred. Additionally, **Appendix C** includes excerpts from the OEB AP Handbook outlining capital asset and expense account definitions. A review of these definitions provides practical references and examples to assist in the classification of various expenditures.

For complex transactions, when capital/operating decisions may be ambiguous and/or estimates of useful lives are not known, the Business Units should consult with the Finance group.

7.2 Subsequent recognition - Capitalization versus Expensing

When expenditures are incurred relating to existing capital assets, they should be evaluated against the recognition criteria (i.e., it is probable that future economic benefits will flow to the entity and the cost can be measured reliably). Subsequent costs should be capitalized only if they meet the recognition criteria. Otherwise, costs should be expensed.

Costs to be capitalized are costs incurred to enhance the service potential of an existing capital asset. The service potential of an existing capital asset may be enhanced when:

- there is an increase in the previously assessed physical output or service capacity;
- ii) associated operating costs are lowered;
- iii) the life or useful life is extended; or
- iv) the quality of output is improved.

Costs to be expensed are costs incurred in the maintenance of the service potential of a capital asset. Frequently referred to as repair and maintenance expenses, they are costs incurred more or less on a continuous basis to keep the capital asset in normal operating condition, but do not improve the value of the asset, nor prolong its life appreciably. They are the result of an activity that encompasses actions of a detective, preventive, and/or monitoring nature. They are normally planned or scheduled. They can also be reactionary, in response to an unscheduled breakdown in service function.

For those instances when professional judgement has to be exercised to determine the proper classification of the Corporation's expenditures, the Business Units should confirm the classification with the Finance group.

8 ASSET COST

Capital asset cost is the amount of consideration given to acquire, construct, or develop a capital asset and includes all costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

The "directly attributable" criteria should not be interpreted as "directly attributable to an asset". It means "directly attributable to getting the asset ready to operate as intended". Further, the directly attributable costs for a self-constructed asset is determined using the same principles as an acquired asset.

8.1 Cost

For purchased capital assets, cost should include the purchase price and other acquisition costs, such as brokers' commissions, and all the costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, such as: costs of employee benefits arising directly from the acquisition of the asset; installation costs, including architectural, design and engineering fees; legal fees; survey costs; site preparation costs; freight charges; transportation insurance costs; duties; the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located; and testing and preparation charges.

For an electrical plant that is constructed, construction costs should include where applicable: the cost of directly attributable labour; materials and supplies; transportation; work done by others for the utility; damages incurred in the construction work; privileges and permits; special machinery services; borrowing costs applied to construction work in progress; the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located; and such portion of directly attributable general engineering, salaries and expenses, insurance, taxes and other similar items as may be properly included in construction. The cost of abnormal amounts of wasted material, labour, or other resources incurred in self-constructing an asset is not included in the cost of the asset.

For information technology ("IT") projects related to computer software, costs should include only the expenditures incurred in the development phase of a project.

Software development involves two stages:

- the research phase. Examples of activities which might be incurred in this stage are conceptual formulation of alternatives, evaluation of alternatives, determination of existence of needed technologies, and final selection of alternatives. All costs incurred during this phase should be expensed as they are incurred.
- ii) the development phase. Examples of activities which might be incurred in this stage are design of chosen alternative, including software configuration and interfaces, coding, installation on computer hardware, and testing. Costs incurred during this phase should start being capitalized only after the IT group demonstrates all of the following:
 - a. the technical feasibility of completing the software so that it will be available for use:
 - the intention to complete the software and use it (i.e., commit resources for the project in the budget);
 - the ability to use the software;
 - d. how the software will generate probable future economic benefits (i.e., demonstrate the usefulness of the software);
 - the availability of adequate technical, financial and other resources to complete the development and to use the software (i.e., a business plan showing the technical, financial and other resources needed and how they will be secured);
 - f. the ability to measure reliably the expenditure attributable to the software during its development (i.e., use of time sheets).

If the research phase of an internal project to create/modify a software cannot be distinguished from the development phase, the expenditure for that project should be treated as if it were incurred in the research phase only.

Capitalization should cease no later than when substantial testing is complete and the software is capable of operating in the manner intended by management, or when it is no longer probable that the computer software project will be completed and placed in service.

For cloud computing arrangements with third party service providers to use their software applications over the internet, the costs should be assessed against the general capitalization criteria set out in **Appendix B – Decision Tree**. The service provider hosts the hardware, software, servers, storage and other components. The Corporation incurs costs to build a customized user interface which is housed on its premises in order to access the software application. If the definition of an asset is met, the Corporation should consider the nature of asset that has been acquired in order to determine the appropriate accounting treatment (e.g., prepaid, other asset, or intangible asset). Otherwise, the costs should be expensed as a service fee. Each arrangement should be analysed on a case-by-case basis.

As there is often no asset that the Corporation controls on its own premises in these types of arrangements, the capitalization criteria would need to be applied to the rights provided through the individual contractual arrangement with the third party service provider. As each arrangement may be unique, each individual contract should be assessed separately. Any development costs related to the cloud solution should be assessed using the same criteria as the IT projects related to computer software above.

Other costs that are not costs of an item of PP&E or intangible asset:

i) costs incurred while an item capable of operating in the manner intended by

- management has yet to be brought into use or is operated at less than full capacity;
- ii) initial operating losses, such as those incurred while demand for the item's output builds up:
- iii) costs of relocating or redeploying the item to a new location;
- iv) administration and other general overhead costs; and
- v) training costs.

8.2 Borrowing costs

Borrowing costs eligible for capitalization are determined by applying the weighted average cost of borrowing to the carrying amount of eligible CWIP during a period, including borrowing costs previously capitalized. Capitalization of borrowing costs will commence as soon as the expenditure on a qualifying asset is incurred and will cease when substantially all the activities necessary to prepare the qualifying asset for its intended use are complete.

8.3 Burdens

Four burden rates are specifically analyzed below with respect to the asset cost:

1. Time-sheeting of Indirect Labour

One of the methods of capitalizing labour costs is to allocate employee labour costs through the process of time-sheeting of indirect labour. Field crews are supported, supervised and guided by those employees whose personnel costs are included in indirect labour.

The process of capitalizing costs of indirect labour includes labour costing (i.e. time-sheeting) which differentiates the time spent between capital, operating, and "blended" activities (i.e. a mix of capital and operating), in order to appropriately allocate costs across projects based on identified cost drivers.

Once time-sheeted hours are applied to specific activities, the calculated cost will be allocated to capital expenditures, operating expenses, or a blend of both based on the nature of the activity. Costs identified as capital or costs that are designated as capital in nature within a blend activity will be mapped to CWIP, while costs identified as operating or costs that are designated as operating in nature within a blend activity will be mapped to operating expense.

2. Standard labour rate

Another method of capitalizing labour costs is to track direct labour costs for various employees and apply a SLR to time recorded to various jobs. There are three broad direct labour categories within the group of employees who currently submit timesheets for direct labour and for whom SLR's are calculated: inside workers, outside shift workers and outside hourly workers.

The SLRs are calculated by dividing the total employee burden (i.e. employee's total remuneration, including various types of benefits) by the total available hours (i.e. hours available for work during the course of the year on capital projects) for each SLR category. The total available hours consist of: a) the total working days in a year less b) leaves (such as vacation and statutory holidays) as well as c) various unproductive time (such as safety training, inclement weather, etc.).

3. On-cost

An on-cost charge is applied to material issuances from the warehouse. Examples include transformers, poles, cables, etc. If the items issued from the warehouse are associated with capital projects, the on-cost charge is capitalized, whereas if the items issued are associated with operating projects, the on-cost charge is expensed in the period in which it is incurred.

The on-cost charge associates the cost of warehousing and handling to the items themselves. The on-cost rate is calculated as the sum of budgeted expenses in the specific material handling responsibility centers divided by the budgeted dollar value of materials moving through the warehouse in a given year. This rate is then applied to the dollar value of all materials when issued to capital and operating projects. Some of the budgeted expenses within the material handling responsibility centers are not capitalizable, thus should not be included in the on-cost calculation. The disallowed costs include:

- Payroll related to administrative staff supporting the procurement and warehousing functions;
- Inventory and direct purchases of materials used in the warehouse for internal purposes – i.e. not used for capital projects;
- Utilities and communications related expenses;
- Office supplies used in procurement and warehousing;
- Employee expenses (i.e. reimbursed expenses for employee purchases); and
- Allocated IT charges related to telephone and computing equipment used by the procurement and warehousing departments.

4. Vehicle Hire Rate

Vehicles used in the construction of capital assets can be capitalized into the item of PP&E. This capitalization is applied to projects based on time-sheets for the use of each vehicle. A VHR is calculated for each vehicle class and applied to the hours time-sheeted to determine the amount capitalized to each project.

The VHRs are calculated by taking the sum of the total operating charges, fuel costs and depreciation, and dividing by the total available vehicle hours for each vehicle class. The total available vehicle hours are based on the number of working days in a year less a factor for vehicle repairs and maintenance. Some of the budgeted expenses are not capitalizable, thus should not be included in the VHR calculation.

8.4 Decommissioning cost

The Corporation recognizes a liability, known as a decommissioning provision, for future removal and handling costs for contamination in distribution equipment and for the future environmental remediation of certain properties, as assessed on a case-by-case basis. A decommissioning provision shall be recognized when there is a present legal or constructive obligation as a result of a past event and it is probable that there will be a future economic outflow that can be reliably measured. The liability is measured at present value and an offsetting amount is added to the carrying amount of the related asset. This cost is depreciated over the useful life of the related asset. Changes to an existing decommissioning provision are added to or deducted from the cost of the related asset and depreciated prospectively over the remaining useful life of the asset.

9 IN-SERVICE ADDITIONS

9.1 Once it has been established that an expenditure is part of the cost of a capital asset, it is recorded as CWIP until the asset is capable of operating in the manner intended by management (i.e., the capital asset is energized or connected to the distribution system), at which point it is recorded as an item of PP&E or intangible asset and depreciation begins.

10 DERECOGNITION

- 10.1 Derecognition occurs when an item of PP&E or intangible asset no longer generate future economic benefits or when the item is disposed of.
- 10.2 When an item of PP&E or intangible asset no longer generates future economic benefits, the loss arising from derecognition equals its carrying amount and is recorded in the period in which the item is derecognized as depreciation or amortization expense.
- 10.3 When an item of PP&E or intangible asset is disposed of, the gain or loss arising from derecognition equals the difference between the net disposal proceeds (if any) and its carrying amount and is recorded in the period in which the item is derecognized as a gain or loss on disposal.

11 POLICY ADMINISTRATION OWNERSHIP, APPROVAL AND RESPONSIBILITIES

Policy Owner

- **11.1** This policy is owned by the Executive Vice-President and Chief Financial Officer, who is responsible for:
 - Ensuring that this policy is comprehensive, clear and current.
 - Approving any exceptions to this policy, as required.
 - · Reviewing this policy annually.

Policy Approver

- **11.2** This policy is approved by the *Policy Administration Steering Committee*, which is responsible for:
 - Considering the impact of this policy to the associated risk.
 - Approving this policy annually.

Designated Responsible Person

- **11.3** This policy is managed by the *Manager, External Financial Reporting*, who is responsible for:
 - Ensuring that this policy is in accordance with IFRS and OEB Accounting Procedures Handbook guidance.
 - Ensuring consistency between referenced appendices and this document.
 - Reviewing and updating this policy annually, as necessary.
- **11.4** This policy is implemented by the *Manager, Capital Planning and Reporting*, who is responsible for:
 - Ensuring that this policy is communicated to all staff impacted.

- Ensuring on-going compliance with this policy.
- Immediately communicating any exceptions or violations of this policy to the Controller and the Executive Vice-President and Chief Financial Officer.

12 POLICY COMMUNICATION

COMMUNICATION TRIGGER	TYPE OF COMMUNICATION	PARTY RESPONSIBLE FOR POLICY COMMUNICATION	AUDIENCE	ACKNOWLEDGEMENT
Policy Update	E-Mail, Posted on Intranet	Controller	All affected employees	No
New Hire in Finance	Discussion, E-mail	Immediate Supervisor/Manager	New hire	No

13 POLICY COMPLIANCE AND VIOLATIONS

- 13.1 All of the Corporation's employees, officers and directors are required to comply with this policy.
- 13.2 Any employee who fails to comply with this policy could be subject to disciplinary action, up to and including dismissal.
- 13.3 Failure to comply with this policy could lead to a material misstatement of the Corporation's expenditures on the financial statements and inaccurate submissions to regulatory agencies. This can have legal, regulatory and reputational ramifications.
- 13.4 Compliance Monitoring

At the direction of the Corporation's General Counsel, the Controller is responsible for tracking and collecting applicable data measuring compliance and reporting upon the same to the General Counsel in such format as he/she may require.

14 RELATED LAWS, REGULATIONS AND DOCUMENTATION

- **14.1** Refer to IAS 16 *Property, Plant and Equipment* and IAS 38 *Intangible Assets* for additional definitions and accounting principles. These standards are available from the Finance group.
- 14.2 The following appendices were referenced in this policy:
 - · Appendix A Minimum threshold dollar amounts for capitalization
 - Appendix B Decision Tree Classification of an expenditure
 - Appendix C Capital asset and repair and maintenance expense definitions Excerpts from the OEB AP Handbook

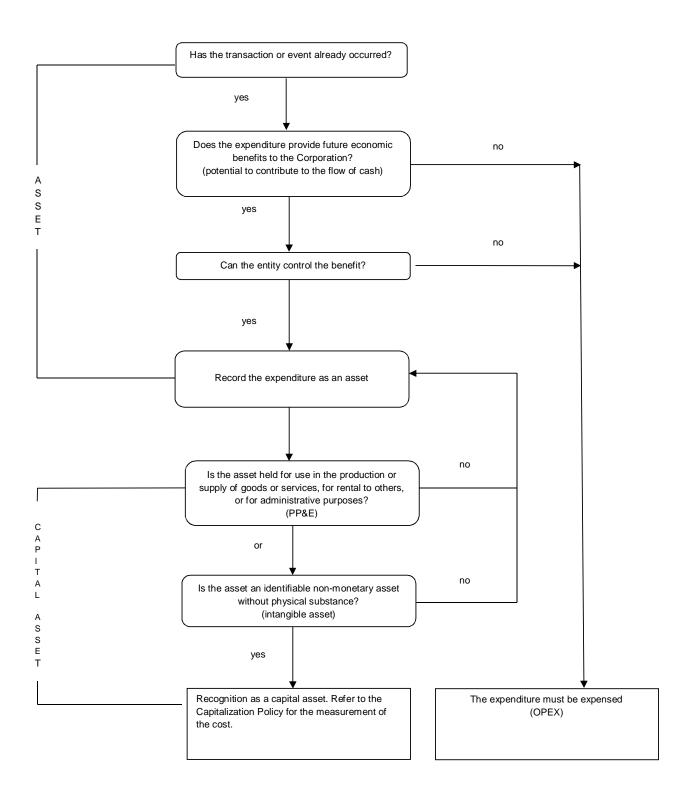
These appendices can be found on the Toronto Hydro Plugged In intranet site at http://pluggedin.torontohydro.com/policy/Pages/FinancePolicies.aspx.

CAPITALIZATION POLICY APPENDIX A – MINIMUM THRESHOLD DOLLAR AMOUNT FOR CAPITALIZATION

This appendix is governed by the Capitalization Policy.

Once it has been established that an expenditure has the characteristics of a capital asset, for practical purposes, only those expenditures exceeding the prescribed threshold \$ amount outlined below will be recorded as a capital asset. Expenditures below the threshold \$ amount will be recorded as an expense. Note that for expenditures related to "major" projects, such as overhauls, major renovations, etc., it may not be appropriate to look at threshold \$ amounts on an itemized basis (i.e. per project, per expenditure/item). For those instances, the expenditure will be reviewed on a case by case basis in order to assess capitalization.

Asset Category	Comment	Threshold Amount (\$)
Land	All purchases treated as a capital asset	n/a
Buildings	Per project	5,000
Leasehold Improvements	Per project	2,000
Fixtures	Per project	5,000
Stations – Major Equipment	Per project	5,000
Distribution Systems	Per project	5,000
OH Conductors	Per project	5,000
UG Conduit and Conductors	Per project	5,000
Poles, towers, fixtures	Per project	5,000
Transformers	Per project	5,000
Meters	Per project	2,000
Office furniture and equipment	Per expenditure/item	2,000
Computer Equipment-Hardware (Mainframe and software)	Per expenditure/item	2,000
Computer software	Per expenditure/item	2,000
Tools, shop, garage and store equipment	Per expenditure/item	1,000
Measuring and testing equipment	Per expenditure/item	1,000
Communication equipment	Per expenditure/item	1,000
Rolling stock/transportation equipment	Per expenditure/item	1,000
Work and service equipment	Per expenditure/item	2,000
Capital contributions (intangible assets)	Per project	n/a
CWIP	Includes assets not currently available for use	n/a



CAPITALIZATION POLICY

APPENDIX C – CAPITAL ASSET AND REPAIR AND MAINTENANCE EXPENSE DEFINITIONS – EXCERPT FROM OEB AP HANDBOOK (Issued: December 2011; Effective: January 1, 2012; Updates issued in March 2015 for new accounts) (APPLICABLE TO THESL)

This appendix is governed by the Capitalization Policy.

Article 220 – Uniform System of Accounts Electric Plant in Service - Detailed Accounts D. Distribution Plant

1805 Land

This account shall include the cost of land used in connection with power distribution. (See Article 230, Definitions and Instructions No. 8 for detail guidance).

Note: Do not include in this account the cost of permits to erect poles, towers, etc., or to trim trees. See Account 1830, Poles, Towers and Fixtures, and Account 1835, Overhead Conductors and Devices.

1808 Buildings and Fixtures

This account shall include the cost in place of buildings and fixtures used in connection with distribution operations. (See Article 230 *Definitions and Instructions* No. 9.)

1810 Leasehold Improvements

This account shall include the cost of additions, improvements or alterations made to premises the utility leases from others. The cost of the leasehold improvements shall be amortized over the term of the lease or the service life of the improvement, whichever is shorter. Renewal provisions in the lease agreement shall be disregarded in amortizing leasehold improvements. This account shall be subdivided into as many classifications as are required.

1815 Transformer Station Equipment - Normally Primary Above 50 kV

This account shall include the installed cost of transforming and switching equipment used for the purpose of stepping down from transmission voltages to subtransmission voltages and/or distribution voltages.

The account shall include all equipment used in the above operation from the high voltage feeder through to the delivery point outside the station or the connections within the confines of the station area. Included in the cost shall be all transformer equipment, control equipment, switching equipment, station metering equipment and the compartments or cubicles used to house such equipment, as well as general equipment such as cranes, hoists, test equipment, motors and the like. Moveable mountings or settings specially constructed for the particular equipment mounted therein shall also be included.

The detail of separate stations shall be entered in such a manner that an accurate record of their age, cost, location, and voltage characteristics will be evident.

1820 Distribution Station Equipment - Normally Primary Below 50 kV

This account shall include the installed cost of transforming and switching equipment used for the purpose of stepping down to distribution voltages.

The account shall include all equipment used in the above operation from the high voltage feeder through to the low voltage connection outside the station within the confines of the station area. Included in the cost shall be all transformer equipment, control equipment, switching equipment, station metering equipment and the compartments or cubicles used to house such equipment, as well as general equipment such as cranes, hoists, test equipment, motors and the like. Moveable

mountings or settings specially constructed for the particular equipment mounted therein shall also be included.

The detail of separate stations shall be entered in such a manner that an accurate record of their age, cost, location, and voltage characteristics will be evident.

1825 Storage Battery Equipment

This account shall include the cost installed of storage battery equipment used for the purpose of supplying electricity to meet emergency or peak demands.

Example items:

- · Batteries, including elements, tanks, tank insulators, etc
- · Battery room connections, including cable or bus runs and connections
- · Battery room flooring, when specially laid for supporting batteries
- Charging equipment, including motor generator sets and other charging equipment and connections, and cable runs from generator or station bus to battery room connections
- · Miscellaneous equipment, including instruments, water stills, etc
- Switching equipment, including endcell switches and connections, boards and panels, used exclusively for battery control, not part of general station switchboard
- Ventilating equipment, including fans and motors, louvers, and ducts not part of building

Note: Storage batteries used for control and general station purposes shall not be included in this account but in the account appropriate for their use.

1830 Poles, Towers, and Fixtures

This account shall include the cost installed of poles, towers, and appurtenant fixtures used for supporting overhead distribution conductors and service wires.

Example items:

- Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc
- Brackets
- · Crossarms and braces
- · Excavation and backfill, including disposal of excess excavated material
- Extension arms
- Foundations
- Guards
- · Insulator pins and suspension bolts
- Paving
- Permits for construction
- · Pole steps and ladders
- · Poles, wood, steel, concrete, or other material
- Racks complete with insulators
- Railings
- · Reinforcing and stubbing
- Settings
- · Shaving, painting, gaining, roofing, stenciling, and tagging
- Towers
- Transformer racks and platforms

Note: Sub-accounts should be used for sub-transmission Poles, Towers and Fixtures.

1835 Overhead Conductors and Devices

This account shall include the cost installed of overhead conductors and devices used for distribution purposes.

Example items:

- Circuit breakers
- · Conductors, including insulated and bare wires and cables
- · Ground wires, clamps, etc
- · Insulators, including pin, suspension, and other types, and tie wire or clamps
- Lightning arresters
- Railroad and highway crossing guards
- Splices
- Switches
- Initial cost of tree trimming, including the cost of permits
- Other line devices

Note: The cost of conductors used solely for street lighting or signal systems shall not be included in this account but in account 1875, Street Lighting and Signal Systems.

1840 Underground Conduit

This account shall include the cost installed of underground conduit and tunnels used for housing distribution cables or wires.

Example items:

- Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower
- Excavation, including shoring, bracing, bridging, backfill, and disposal of excess excavated material
- Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed
- · Lighting systems
- Manholes, concrete or brick, including iron or steel frames and covers, hatchways, gratings, ladders, cable racks and hangers, etc., permanently attached to manholes
- Municipal inspection
- Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks
- Permits
- · Protection of street openings
- · Removal and relocation of subsurface obstructions
- \cdot $\;$ Sewer connections, including drains, traps, tide valves, check valves, etc.
- · Sumps, including pumps
- · Ventilating equipment

Note: The cost of underground conduit used solely for street lighting or signal systems shall be included in Account 1875, Street Lighting and Signal Systems.

1845 Underground Conductors and Devices

This account shall include the cost installed of underground conductors and devices used for distribution purposes.

Example items:

- Armored conductors, buried, including insulators, insulating materials, splices, potheads, trenching, etc
- Armored conductors, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc
- Cables in standpipe, including pothead and connection from terminal chamber or manhole to insulators on pole
- · Circuit breakers
- · Fireproofing, in connection with any items listed herein

- Hollow core oil filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc
- Lead and fabric covered conductors, including insulators, compound filled, oil filled or vacuum splices, potheads, etc
- · Lightning arresters
- · Municipal inspection and Permits
- · Protection of street openings
- Racking of cables
- Switches
- Other line devices

Note: The cost of underground conductors and devices used solely for street lighting or signal systems shall be included in Account 1875, Street Lighting and Signal Systems.

1850 Line Transformers

A. This account shall include the cost installed of overhead and underground distribution line transformers and poletype and underground voltage regulators owned by the utility, for use in transforming electricity to the voltage at which it is to be used by the customer, whether actually in service or held in reserve.

B. The records covering line transformers shall be so kept that the utility can furnish the number of transformers of various capacities in service and those in reserve by:

- a) type (underground or overhead);
- b) capacity;
- c) function.

Example items:

- Transformers
- · Transformer cutouts
- Grounding equipment
- · Other material and labour necessary for installation (first installation only)
- Transformer lightning arresters
- · Transformers, line and network
- Capacitors
- Network protectors

Note: The cost of removing and resetting line transformers shall not be charged to this account but to Account 5035, Overhead Distribution Transformers - Operations or Accounts 5055, Underground Distribution Transformers - Operations. The cost of line transformers used solely for street lighting or signal systems shall be included in Account 1875, Street Lighting and Signal Systems.

1855 Services

This account shall include the cost installed of overhead and underground conductors leading from a point where wires leave the last pole of the overhead system or the transformers or manhole, or the top of the pole of the distribution line, to the point of connection with the customer's electrical panel. Conduit used for underground service conductors shall be included herein.

Example items:

- Brackets
- · Cables and wires
- Conduit
- Insulators
- Municipal inspection
- Overhead to underground, including conduit or standpipe and conductor from last splice on pole to connection with customer's wiring

- Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks
- Permits
- · Protection of street openings
- · Service switch
- Suspension wire

Records shall be maintained providing information on underground and overhead services separately and by capacity and function.

1860 Meters

- A. This account shall include the cost installed of meters or devices and appurtenances thereto, for use in measuring the electricity delivered to its users, whether actually in service or held in reserve.
- B. The records covering meters shall be so kept that the utility can furnish information as to the number of meters of various capacities in service and in reserve by:
- a) type (underground or overhead);
- b) capacity;
- c) function.

Example items:

- · Labour and expense of first installation
- Inspection fees
- · Alternating current, watt hour meters
- Current limiting devices
- Demand indicators
- Demand meters
- Direct current watt hour meters
- Graphic demand meters
- · Instrument transformers
- Maximum demand meters
- Meter badges and their attachments
- Meter boards and boxes
- · Meter fittings, connections, and shelves (first set)
- Meter switches and cutouts
- Prepayment meters
- Protective devices
- · Testing new meters
- Interval Meters
- Smart Meters

Note A: This account shall not include meters for recording output of a generating station, substation meters, etc. Generation station high voltage meters shall be recorded in Account 1815, Transformer Station Equipment - Normally Primary Above 50 kV and substation meters shall be recorded in Account 1820, Distribution Station Equipment - Normally Primary Below 50 kV.

Note B: Generation related meter costs for renewable energy standard offer program, Feed-in Tariff (—FITII) and microFIT generation activities shall be recorded in a separate sub-account by meter type under this account. The revenues collected for the recovery of the generator connection costs including the meter costs shall be treated as capital contributions and recorded in Account 2440, Deferred Revenues. The meter cost is offset by the capital contribution (recorded in Account 2440, Deferred Revenues) and the depreciation expense is offset by the amortized deferred revenue (recorded in Account 4245, Government and Other Assistance Directly Credited to Income) in profit or loss. (See Article 430 *Contributions in Aid of Construction.*)

Note C: The cost of removing and resetting meters shall be charged to Account 5065, Meter Expenses.

1865 Other Installations on Customer Premises

This account shall include the cost installed of equipment on the customer's side of a meter when the utility incurs such cost and when the utility retains title to and assumes full responsibility for maintenance and replacement of such property. This account shall not include expenses related to leased equipment (see Account 1870, Leased Property on Customer Premises).

Example items:

- · Cable vaults
- Commercial lamp equipment
- · Foundations and settings specially provided for equipment included herein
- Frequency changer sets
- Motor generator sets
- Motors
- · Switchboard panels, high or low tension
- Wire and cable connections to incoming cables

Note A: Do not include in this account any costs incurred in connection with merchandising or contract work activities. (See Account 4330).

Note B: It is intended that only equipment used in furnishing special service or service of a character different from that normally supplied shall be included in this account.

Note C: Maintenance costs relating the items in this account are to be charged to Account 5195, Maintenance of Other Installations on Customer Premises.

1870 Leased Property on Customer Premises

This account shall include the cost of electric motors, transformers, and other equipment on customers' premises (including municipal corporations), leased or loaned to customers, but not including property held for sale.

Note A: The cost of setting and connecting such appliances or equipment on the premises of customers and the cost of resetting or removal shall not be charged to this account but to operating expenses, Account 5178, Customer Installations Expenses - Leased Property.

Note B: Do not include in this account any costs incurred in connection with merchandising. (See Account 4330).

1875 Street Lighting and Signal Systems

If street lighting and signal systems are authorized by the Board for ratemaking, this account shall include the cost installed of equipment used wholly for public street and highway lighting or traffic, fire alarm, police, and other signal systems.

Example items:

- Armored conductors, buried or submarine, including insulators, insulating materials, splices, trenching, etc
- · Automatic control equipment
- · Conductors, overhead or underground
- Lamps, incandescent, or other types, including glassware, suspension fixtures, brackets, etc
- Municipal inspection
- Ornamental lamp posts
- Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks
- Permits
- Posts and standards
- Protection of street openings
- · Relays or time clocks
- Series contactors
- Switches
- Transformers, pole or underground

Article 220 - Uniform System of Accounts
Balance Sheet Accounts
Electric Plant in Service - Detailed Accounts
E. General Plant

1905 Land

This account shall include the cost of land used for utility purposes, the cost of which is not properly included in other land account. (See Article 230 *Definitions and Instructions* No. 8 for detail guidance.)

1908 Buildings and Fixtures

This account shall include the cost in place of buildings and fixtures used for utility purposes, the cost of which is not properly included in other Buildings and Fixtures accounts. (See Article 230 *Definitions and Instructions* No. 9.)

1910 Leasehold Improvements

This account shall include the cost of additions, improvements or alterations made to premises the utility leases from others. The cost of the leasehold improvements shall be amortized over the term of the lease or the service life of the improvement, whichever is shorter. Renewal provisions in the lease agreement shall be disregarded in amortizing leasehold improvements.

This account shall be subdivided into as many classifications as are required.

1915 Office Furniture and Equipment

This account shall include the cost of the general office furniture and equipment.

Articles of low value and/or relatively short life should be charged to the appropriate operating account when purchased.

The account shall be maintained in such a manner as to provide the cost of each piece of equipment, and be subdivided into as many classifications as are required.

1920 Computer Equipment - Hardware

This account shall include the costs of acquiring computer hardware. Hardware includes all physical equipment associated with input, processing, storage and output functions, also word processing equipment.

This account shall be subdivided as considered necessary.

1930 Transportation Equipment

These accounts shall include the cost of automobiles, small trucks, truck chassis, special truck bodies, aerial ladders, trailers and other mobile equipment.

These accounts shall be subdivided into the following:

- Automobiles
- · Trucks Under 3 tons
- · Trucks 3 tons and over.

The accounts shall be maintained in such a manner as to provide the cost of each piece of equipment.

Note: Work and service equipment is to be included in Account 1950, Power Operated Equipment.

1935 Stores Equipment

This account shall include the cost of equipment used for the receiving, shipping, handling, and storage of materials and supplies.

Example items:

· Chain falls

- Counters
- · Cranes (portable)
- · Elevating and stacking equipment (portable)
- Hoists
- Lockers
- Scales
- Shelving
- Storage bins
- · Trucks, hand and power driven
- Wheelbarrows

1940 Tools, Shop and Garage Equipment

This account shall include the cost of tools, implements, and equipment used in construction, repair work, general shops and garages and not specifically provided for or included in other accounts.

Example items:

- · Air compressors
- Anvils
- · Automobile repair shop equipment
- · Battery charging equipment
- · Belts, shafts and countershafts
- Boilers
- · Cable pulling equipment
- Concrete mixers
- Drill presses
- Derricks
- · Electric equipment
- Engines
- Forges
- Furnaces
- · Foundations and settings specially constructed
- Gas producers
- · Greasing tools and equipment
- Hoists
- Ladders
- Lathes
- · Machine tools
- Motor-driven tools
- Pneumatic tools
- Pumps
- Riveters
- · Smithing equipment
- Tool racks
- Vises
- Welding apparatus
- Work benches
- · Line belt and harness for line crews
- · Chain saws

1945 Measurement and Testing Equipment

This account shall include the cost installed of laboratory equipment used for general laboratory purposes and not specifically provided for or included in other departmental or functional plant accounts.

Example items:

- Ammeters
- · Current batteries
- · Frequency changers
- Galvanometers
- Inductometers
- Laboratory standard millivolt meters and volt meters
- Meter testing equipment
- Millivolt meters
- Motor generator sets
- Panels
- Phantom loads
- Portable graphic ammeters, voltmeters, and wattmeters
- Portable loading devices
- Potential batteries
- Potentiometers
- · Rotating standards
- Standard cell, reactance, resistor, and shunt
- Switchboards
- Synchronous timers
- Testing panels
- · Testing resistors
- Transformers
- Voltmeters
- · Other testing, laboratory, or research equipment not provided for elsewhere
- · Telescopic guns

1950 Power Operated Equipment

This account shall include the cost of power operated equipment used in construction, repair and service work exclusive of equipment included in other accounts. Include, also, the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted.

Example items:

- · Air compressors, including driving unit and vehicle
- · Backhoe machines
- · Boring machines
- Bulldozers
- Cranes and hoists
- · Pipe cleaning machines
- Pipe coating or wrapping machines
- Tractors Crawler type
- · Trenchers
- Other power operated equipment

Note: It is intended that this account include only such large units as are generally self-propelled or mounted on movable equipment.

1955 Communication Equipment

This account shall include the cost installed of telephone and wireless equipment for general use in connection with utility operations.

1960 Miscellaneous Equipment

This account shall include the cost of equipment, apparatus, etc., used in the utility operations, which is not included in any other account of this Uniform System of Accounts.

Example items:

- · Kitchen equipment
- Employees' recreation equipment
- Operators' cottage furnishings
- Other miscellaneous equipment

Note: Miscellaneous equipment of the nature indicated above wherever practicable shall be included in the utility plant accounts on a functional basis.

1970 Load Management Controls - Customer Premises

This account shall include the cost of control equipment on customer premises in connection with the remote control of water heaters, and other customer equipment.

1975 Load-Management Controls - Utility Premises

This account shall include the cost of all control devices situated on utility premises, used for the purpose of controlling equipment in Account 1970 above.

1980 System Supervisory Equipment

This account shall include the costs of all control equipment used for the purposes of remote operation and control of utility transformer stations and distribution equipment.

1985 Sentinel Lighting Rental Units

These accounts shall include the installed cost of all Sentinel Lighting Rental Units. The accounts shall be subdivided into as many classifications as are required.

1990 Other Tangible Property

This account shall include the cost of tangible utility plant not provided for elsewhere.

1995 Contributions and Grants - Credit

Effective until December 31, 2011, (or date of IFRS adoption, if early adoption was elected) this account shall include amounts relating to contributions or grants in cash, services or property from governments or government agencies, corporations, individuals and others received in aid of construction or for acquisition of fixed assets.

This account shall be maintained so that the company can supply information as to the purpose of each contribution or grant, the conditions, if any, on which it was made, the amount of contributions or grants from governments or government agencies, corporations, individuals and others and the amount applicable to each Electric Plant in Service detail Account (i.e. Accounts 1606 to 1990).

Note A: Effective on January 1, 2012, (or date of IFRS adoption, if early adoption was elected) customer contributors will be recorded in Account 2440, Deferred Revenues.

Note B: Effective on the date of IFRS adoption on January 1, 2012, (or date of IFRS adoption, if

early adoption was elected by the utility), the balance in this account should be adjusted to zero in accordance with the guidance in Article 510 *Transitional Issues Relating to the Adoption of IFRS*. Note C: After the adoption of IFRS, the utility shall continue to maintain detail records as evidence in support of the amounts recorded in this account as at December 31, 2011 (or date of IFRS adoption, if early adoption was elected) relating to contributions or grants in cash, services or property from governments or government agencies, corporations, individuals and others received in aid of construction or for acquisition of fixed assets.

Article 220 - Uniform System of Accounts Balance Sheet Accounts Electric Plant in Service - Detailed Accounts Other Capital Assets

2005 Property Under Capital Leases

A. This account shall include the amount recorded under capital leases for plant leased from others and used by the utility in its utility operations.

- B. The electric property included in this account shall be classified separately according to the detailed Accounts (1606 to 1990) prescribed for Electric Plant in Service.
- C. Records shall be maintained with respect to each capital lease reflecting: (1) name of leaser, (2) basic details of lease, (3) termination date, (4) original cost or fair market value of property leased, (5) future minimum lease payments, (6) executor costs, (7) present value of minimum lease payments, (8) the amount representing interest and the interest rate used, and (9) expenses paid.

Note: The related obligations shall be recorded in Account 2285, Obligations Under Capital Leases - Current and Account 2325, Obligations Under Capital Leases - Non-current.

2010 Electric Plant Purchased or Sold

- A. This account shall be charged with the cost of electric plant acquired as an operating unit or system by purchase, merger, consolidation liquidation, or otherwise, and shall be credited with the selling price of like property transferred to others pending the distribution to appropriate accounts in accordance with Article 230 *Definitions and Instructions* No. 7.
- B. Within six months from the date of acquisition or sale of property recorded herein, the utility shall file with the Board the proposed journal entries to clear from this account the amounts recorded herein.

2020 Experimental Electric Plant Unclassified

- A. This account shall include the cost of electric plant which was constructed as a development plant under the provisions of paragraph C, Account 2055, Construction Work in Progress Electric, and due to the nature of the plant it is desirable to operate it for a period of time in an experimental status.
- B. Amounts in this account shall be transferred to Electric Plant in Service Accounts 1606 to 1990, or Account 2075, Non Rate-Regulated Property Owned or Under Capital Leases as appropriate when the project is no longer considered as experimental.
- C. The amortization of property in this account shall be charged to Account 5705, Amortization Expense, and credited to Account 2105, Accumulated Amortization of Electric Utility Plant. The amounts herein shall be amortized over a period which would correspond to the estimated useful life of the relevant project considering the characteristics involved. However, when projects are transferred to relevant Electric Plant in Service accounts, the projects shall be reviewed and a new amortization rate based on the revised service life and unamortized amounts will be established as required.
- D. Records shall be maintained with respect to each unit of experiment so that full details may be obtained as to the cost, amortization and the experimental status.
- E. Should it be determined that experimental plant recorded in this account will fail to satisfactorily perform its function, the costs thereof shall be accounted for as directed or authorized by the Board.

2030 Electric Plant and Equipment Leased to Others

- A. This account shall include the original cost of electric plant and equipment owned by the utility, but leased to others as operating units or systems, where the lessee has exclusive possession.
- B. The property included in this account shall be classified according to the detailed Accounts (1606 to 1990) prescribed for Electric Plant in Service and this account shall be maintained in such detail as though the property were used by the owner in its utility operations.

2040 Electric Plant Held For Future Use

- A. This account shall include the original cost of electric plant (for land and land rights see B below) owned and held for future use in electric service under a definite plan for such use, to include: (1) Property acquired (for land and land rights see B below) but never used by the utility in electric service, but held for such service in the future under a definite plan, and (2) property (for land and land rights see B below) previously used by the utility in service, but retired from such service and held pending its reuse in the future, under a definite plan, in electric service.
- B. This account shall also include the original cost of land and land rights owned and held for future use in electric service under a plan for such use, to include land and land rights: (1) Acquired but never used by the utility in electric service, but held for such service in the future under a plan, and (2) previously held by the utility in service, but retired from such service and held pending its reuse in the future under a plan, in electric service. See Article 230 *Definitions and Instructions* No. 8 for detailed guidance.)
- C. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall request Board approval of journal entries to remove such property from this account when the gain realized from the sale or other disposition of the property is material, prior to their being recorded. Such filings shall include the description and original cost of individual properties removed from this account, the accounts charged upon removal, and any associated gains realized upon disposition of such property.
- D. Gains or losses from the sale of land and land rights or other disposition of such property previously recorded in this account and not placed in utility service shall be recorded directly in Accounts 4345 or 4350, as appropriate, except when determined to be significant by the Board. Upon such a determination, the amounts shall be transferred to Account 2410, Deferred Gains from Disposition of Utility Plant, or Account 1530, Deferred Losses from Disposition of Utility Plant, and amortized to Accounts 4345, Gains from Disposition of Utility Plant, or 4350, Losses from Disposition of Utility Plant, as appropriate.
- E. The property included in this account shall be classified according to the detail Accounts (1606 to 1990) prescribed for Electric Plant in Service and the account shall be maintained in such detail as though the property were in service.

2050 Completed Construction Not Classified-Electric

At the end of the year or such other date as a balance sheet may be required by the Board, this account shall include the total of the balances of work orders for electric plant which has been completed and placed in service but which work orders have not been classified for transfer to the detailed electric plant accounts.

Note: For the purpose of reporting to the Board the classification of Electric Plant in Service by Accounts (1606 to 1990), the utility shall also report the balance in this account tentatively classified as accurately as practicable according to prescribed account classifications. The purpose of this provision is to avoid any significant omissions in reported amounts of Electric Plant in Service.

2055 Construction Work in Progress-Electric

- A. This account shall include the total of the balances of work orders for electric plant in process of construction.
- B. Work orders shall be cleared from this account as soon as practicable after completion of the job. Further, if a project, such as a hydroelectric project, a steam station or a transmission line, is designed to consist of two or more units or circuits which may be placed in service at different dates, any expenditures which are common to and which will be used in the operation of the project as a whole shall be included in Electric Plant in Service upon the completion and the readiness for service of the first unit. All expenditures which are identified exclusively with units of property not yet in service shall be included in this account.
- C. Expenditures on development projects for construction of utility facilities are to be included in a separate subdivision in this account. Records must be maintained to show separately each project along with complete detail of the nature and purpose of the development project together with the related costs.

2060 Electric Plant Acquisition Adjustments

- A. This account shall include the difference between (1) the cost to the accounting utility of electric plant acquired as an operating unit or system by purchase, merger, consolidation, liquidation, or otherwise, and (2) the original cost, estimated, if not known, of such property, less the amount or amounts credited by the accounting utility at the time of acquisition to accumulated provisions for amortization and contributions in aid of construction with respect to such property. The goodwill shall be recorded as a debit in this account and the credit is to Account 3030, Miscellaneous Paid-in Capital in the case of goodwill resulting from pushdown accounting by the parent to its subsidiary.
- B. This account shall be subdivided so as to show the amounts included for each property acquisition and to Electric Plant in Service, Electric Plant Held for Future Use and Electric Plant Leased to Others. (See Article 230 *Definitions and Instructions* No. 7.)
- C. Amounts recorded in this account related to an operating unit or system acquisition may be amortized to Account 5720, Amortization of Electric Plant Acquisition Adjustments, pursuant to an approval or order of the Board, over a period not longer than the estimated remaining life of the properties to which such amounts relate.
- D. Amounts included in this account shall be disposed subject to Board approval.

Note: The provisions of this account shall not be construed as approving or authorizing the recording of appreciation of electric plant.

2065 Other Electric Plant Adjustments

A. This account shall include the difference between the original cost, estimated if not known, and the book cost of electric plant to the extent that such difference is not included in Account 2060, Electric Plant Acquisition Adjustments (See Article 230 *Definitions and Instructions* No. 7 under —General classification of electric plant.)

B. Amounts included in this account shall be classified in such manner as to show the origin of each amount and shall be disposed of as the Board may approve or direct. Note: The provisions of this account shall not be construed as approving or authorizing the recording of appreciation of electric plant.

2070 Other Utility Plant

This account shall include the cost of land, structures, equipment and other tangible and intangible plant assets owned by the utility, but not used in its utility operations and not included in Accounts 2030, Electric Plant and Equipment Leased to Others, 2040, Electric Plant Held for Future Use, and 2055, Construction Work in Progress - Electric.

Non rate-regulated utility assets shall not be included in this account but in Account 2075.

2075 Non Rate-Regulated Utility Property Owned or Under Finance Leases

- A. This account shall include the book cost of land, structures, equipment, or other tangible or intangible property owned by the utility or under a finance lease, but not used in utility service and not included in Account 2040, Electric Plant Held for Future Use.
- B. This account shall also include the amount recorded under finance leases for property leased from others and used by the utility in its non rate-regulated utility operations. Records shall be maintained with respect to each lease reflecting: (1) name of lessor, (2) basic details of lease, (3) terminal date, (4) original cost or fair market value of property leased, (5) future minimum lease payments, (6) executory costs, (7) present value of minimum lessee payments, (8) the amount representing interest and the interest rate used, and (9) expenses paid.
- C. This account shall be subdivided so as to show the amount of property used in operations which are non-utility in character but nevertheless constitute a distinct operating activity of the company and the amount of miscellaneous property not used in operations. The records in support of each sub-account shall be maintained so as to show an appropriate classification of the property.

Note A: The gain from the sale or other disposition of property included in this account which had been previously recorded in Account 2040, Electric Plant Held for Future Use, shall be accounted for in accordance with paragraph C of Account 2040.

Note B: The related obligations shall be recorded in Account 2285, Obligations Under Capital Leases - Current and Account 2325, Obligations Under Capital Leases - Non-current.

2075 Non Rate-Regulated Utility Property Owned or Under Finance Leases, Sub-account Generation Facility Assets

- A. This account shall include the book cost of qualifying generation facilities or assets owned by the utility or under a finance lease, but not used in utility service and not included in Account 2040, Electric Plant Held for Future Use.
- B. This account shall also include the amount recorded under finance leases for generation property leased from others and used by the utility in its non rate-regulated utility operations. Records shall be maintained with respect to each lease reflecting: (1) name of lessor, (2) basic details of lease, (3) terminal date, (4) original cost or fair market value of property leased, (5) future minimum lease payments, (6) executory costs, (7) present value of minimum lessee payments, (8) the amount representing interest and the interest rate used, and (9) expenses paid.
- C. This account shall be subdivided so as to show the amount of property used in operations which are non-utility in character but nevertheless constitute a distinct operating activity of the company and the amount of miscellaneous property not used in operations. The records in support of each sub-account shall be maintained so as to show an appropriate classification of the generation property.

2105 Accumulated Depreciation of Electric Utility Plant – Property Plant and Equipment, Sub-account Accumulated Depreciation for Specifically Identified Asset Accounts

This sub-account will record the total amount of accumulated depreciation or accumulated amortization related to the below detailed asset accounts.

Electric Plant in Service - Detailed Accounts

Distribution Plant

1805 Land

1806 Land Rights (if applicable)

1808 Buildings and Fixtures

1810 Leasehold Improvements

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Article 220 - Uniform System of Accounts Income Statement Distribution Expenses - Operations

5005 Operation Supervision and Engineering

This account shall include the cost of labour and expenses incurred in the general supervision and direction of the operation of the distribution system. Direct supervision of specific activities, such as station operation, line operation, meter department operation, etc., shall be charged to the appropriate operations account in the 5000 series based on the nature of the activity in relation to the account descriptions. (See Article 230 *Definitions and Instructions* No. 4.)

5010 Load Dispatching

This account shall include the cost of labour, materials used and expenses incurred in load dispatching operations pertaining to the distribution of electricity.

Example items:

Labour:

- Directing switching
- Arranging and controlling clearances for construction, maintenance, test and emergency purposes
- Controlling system voltages
- Preparing operating reports
- · Obtaining reports on the weather and special events

Expenses:

- Communication service provided for system control purposes
- System record and report forms
- · Meals, traveling and incidental expenses
- · SCADA equipment related expenses

5012 Station Buildings and Fixtures Expenses

This account shall include the cost of labour, materials used and expenses incurred in operating distribution station building and fixtures recorded in Account 1808 Buildings and Fixtures and Account 1810 Leasehold Improvements.

Example items:

Labour:

- · Standing watch, guarding and patrolling station and station yard
- · Sweeping, mopping and tidying station
- · Care of grounds, including snow removal, cutting grass, etc

Station Supplies and Expenses:

- Taxes (e.g. property taxes), light, heat, telephone
- Building service expenses
- · Tool expenses
- Transportation expenses
- Meals, traveling and incidental expenses

The accounts shall be sub-divided to show the cost of operating individual stations.

5014 Transformer Station Equipment - Operating Labour

These accounts shall include labour with payroll burden incurred in operating the transformer station equipment recorded in Account 1815. The accounts shall be subdivided to obtain the cost of operating individual stations. General supervision shall be recorded in Account 5005.

Example items:

- · Supervision specific to transformer station equipment operation
- Adjusting station equipment where such adjustment primarily affects performance, such as regulating the flow of cooling water, adjusting current in fields of a machine or changing voltage of regulators, changing station transformer taps
- Inspecting, testing and calibrating station equipment for the purpose of checking its performance
- Keeping station log and records and preparing reports on station equipment operation
- Operating switching and other station equipment

5015 Transformer Station Equipment - Operating Supplies and Expenses

These accounts shall include the cost of material, trucking and other expenses incurred in operating the transformer station equipment recorded in Account 1815.

Example items:

- Operating supplies, such as lubricants, commutator brushes, water, and rubber goods
- · Station meter and instrument supplies, such as ink and charts
- Station record and report forms
- · Small hand tools
- · Transportation expenses
- Meals, traveling, and incidental expenses

5016 Distribution Station Equipment - Operating Labour

These accounts shall include labour with payroll burden incurred in operating the transformer station equipment recorded in Account 1820. The accounts shall be subdivided to obtain the cost of operating individual stations. General supervision shall be recorded in Account 5005.

Example items:

- Supervision specific to transformer station equipment operation
- Adjusting station equipment where such adjustment primarily affects performance, such as regulating the flow of cooling water, adjusting current in fields of a machine or changing voltage of regulators, changing station transformer taps
- Inspecting, testing and calibrating station equipment for the purpose of checking its performance
- Keeping station log and records and preparing reports on station equipment operation
- Operating switching and other station equipment

Note: If the utility owns storage battery equipment used for supplying electricity to customers in periods of emergency, the cost of operating labour should be recorded in this account and the cost of supplies, such as acid, gloves, hydrometers, thermometers, soda, automatic cell fillers, acid

proof shoes, etc., shall be included in Account 5017. If significant in amount, a separate subdivision in each account shall be maintained for such expenses.

5017 Distribution Station Equipment - Operating Supplies and Expenses

These accounts shall include the cost of material, trucking and other expenses incurred in operating the transformer station equipment recorded in Account 1820.

Example items:

- Operating supplies, such as lubricants, commutator brushes, water, and rubber goods
- · Station meter and instrument supplies, such as ink and charts
- Station record and report forms
- Small hand tools
- Transportation expenses
- · Meals, traveling, and incidental expenses

5020 Overhead Distribution Lines and Feeders - Operation Labour

This account shall include labour with payroll burden incurred in operating overhead lines from the low voltage connection in the distribution station to the customers' premises but not operating labour incurred in relation to customer premises (Account 5070).

Example items

- Supervision specific to line operation
- Changing line transformer taps
- Inspecting and testing lightning arresters, line circuit breakers, switches and grounds
- Inspecting and testing line transformers for the purpose of determining load, temperature or operating performance
- Patrolling lines
- · Load tests and voltages surveys of feeders and circuits

5025 Overhead Distribution Lines and Feeders - Operation Supplies and Expenses

These accounts shall include the cost of material, trucking and other expenses incurred in operating overhead lines from the low voltage connection in the distribution station to the customer's premises but not operating supplies and expenses incurred in relation to customer premises (Account 5075).

Line Supplies and Expenses examples:

- Voltage surveys, either routine or upon request of customers, including voltage tests at customers' main switch
- Transferring loads, switching and reconnecting circuits and equipment for operation purposes
- Electrolysis surveys
- Inspecting and adjusting line testing equipment
- · Tool expenses
- · Transportation expenses
- · Meals, traveling and incidental expense
- · Operating supplies, such as instrument charts, rubber goods, etc

5030 Overhead Subtransmission Feeders - Operation

These accounts shall include labour with payroll burden, material, trucking and other expenses incurred in inspecting, patrolling and testing the overhead sub transmission feeder system.

5035 Overhead Distribution Transformers - Operation

This account shall include labour with payroll burden, material, trucking and other expenses incurred in removing and resetting overhead transformers and devices and also the inspection and testing while in service. The account shall be subdivided as necessary.

Note: The cost of the original setting shall be charged to Account 1850, Line Transformers.

5040 Underground Distribution Lines and Feeders - Operation Labour

These accounts shall include labour with payroll burden incurred in operating underground distribution lines from the low voltage connection in the municipal distribution station to the customers' premises but not operating labour incurred in relation to customer premises (Account 5070).

Line Labour examples:

- · Supervision specific to line operation
- Changing line transformer taps
- Inspecting and testing lightning arresters, line circuit breakers, switches and grounds
- Inspecting and testing line transformers for the purpose of determining load, temperature or operating performance
- Patrolling lines
- · Load tests and voltages surveys of feeders and circuits

5045 Underground Distribution Lines and Feeders - Operation Supplies and Expenses

These accounts shall include the cost of material, trucking and other expenses incurred in operating underground distribution lines from the low voltage connection in the municipal distribution station to the customers' premises but not operating supplies and expenses incurred in relation to customer premises (Account 5070).

Example items

- Voltage surveys, either routine or upon request of customers, including voltage tests at customers' main switch
- Transferring loads, switching and reconnecting circuits and equipment for operation purposes
- · Electrolysis surveys
- · Inspecting and adjusting line testing equipment
- · Tool expenses
- Transportation expenses
- · Meals, traveling and incidental expense
- · Operating supplies, such as instrument charts, rubber goods, etc

5050 Underground Subtransmission Feeders - Operation

These accounts shall include labour with payroll burden, material, trucking and other expenses incurred in inspecting, patrolling and testing the underground subtransmission feeder system.

5055 Underground Distribution Transformers - Operation

This account shall include labour with payroll burden, material, trucking and other expenses incurred in removing and resetting underground transformers and devices and also the inspection and testing while in service. The account shall be subdivided as necessary.

Note: The cost of the original setting shall be charged to Account 1850, Line Transformers.

5060 Street Lighting and Signal System Expenses

This account shall include the cost of labour, materials used and expenses incurred in the operation of such plant owned by the utility, if authorized by the Board and where such work is done regularly as a part of the street lighting and signal system service.

Example items:

Labour:

- Supervision specific to street lighting and signal systems operation
- · Replacing lamps and consequential cleaning of glassware and fixtures
- · Routine patrolling for lamp outages, extraneous nuisances or encroachments, etc
- · Testing lines and equipment including voltage and current measurement
- Winding and inspection of time switch and other controls

Materials and Expenses:

- Street lamp renewals
- Transportation and tool expense
- Meals, traveling, and incidental expenses

Note: Where the utility does not own the street lighting assets, the revenues and expenses from the provision or maintenance of street lighting services should be recorded in Account 4375, Revenues from Non-Utility Operations and 4380, Expenses from Non-Utility Operations, respectively.

5065 Meter Expenses

This account shall include the cost of labour, materials used and expenses incurred in the operation of customer meters and associated equipment.

Example items:

Labour:

- · Supervision specific to meter operation
- Clerical work on meter history and associated equipment record cards, test cards, and reports
- Disconnecting and reconnecting, removing and reinstalling, sealing and unsealing meters and other metering equipment in connection with initiating or terminating services including the cost of obtaining meter readings, if incidental to such operation
- Consolidating meter installations due to elimination of separate meters for different rates of service
- Changing or relocating meters, instrument transformers, time switches, and other metering equipment
- Resetting time controls, checking operation of demand meters and other metering equipment, when done as an independent operation
- · Inspecting and adjusting meter testing equipment
- Inspecting and testing meters, instrument transformers, time switches, and other metering equipment on premises or in shops excluding inspecting and testing incidental to maintenance
- · Replacing or removing broken meters

Materials and Expenses:

- Meter seals and miscellaneous meter supplies
- Transportation expenses
- · Meals, traveling, and incidental expenses
- Tool expenses
- Replacing or removing broken meters

Note: The cost of the first setting, including the government inspection fee, and testing of a meter is chargeable to utility plant Account 1860, Meters. The cost of removing and resetting for government inspection, including the fees, shall be a charge to this account.

5070 Customer Premises - Operating Labour

This account shall include labour with payroll burden related to providing service on assets on customers' premises which are included in Account 1855, Services.

Example items:

- Inspecting premises, including check of wiring for code compliance
- · Investigating, locating, and clearing grounds on customers' wiring
- Investigating service complaints, including load tests of motors and lighting and power circuits on customers' premises; field investigations of complaints on bills or of voltage
- Radio, television and similar interference work including erection of new aerials on customers' premises and patrolling of lines, testing of lightning arresters, inspection of pole hardware, etc., and examination of customers' wiring to locate cause of interference
- Investigation of current diversion including setting and removal of check meters discovery and settlement of current diversion
- Changes in customer wiring and any other labour cost identifiable as caused by current diversion

Note A: Amounts billed customers for any work, the cost of which is charged to this account, shall be transferred to Account 4235, Miscellaneous Service Revenues.

Note B: Do not include in this account expenses incurred in connection with merchandising.

5075 Customer Premises - Materials and Expenses

This account shall include trucking, materials and other expenses related to providing services to assets on customers' premises which are included in Account 1855, Services.

Examples of services include inspection, voltages tests and the like related to labour examples listed in 5070, Customer Premises - Operating Labour.

Example items:

Materials and Expenses:

- · Lamp and fuse renewals
- · Materials used in the course of performing inspection, voltage tests, etc
- · Tool expense
- · Transportation expense, including pickup and delivery charges
- · Meals, traveling and incidental expenses
- Rewards paid for discovery of current diversion

Note A: Amounts billed customers for any work, the cost of which is charged to this account, shall be transferred to Account 4235, Miscellaneous Service Revenues.

Note B: Do not include in this account expenses incurred in connection with merchandising and contract work.

5085 Miscellaneous Distribution Expenses

This account shall include the cost of labour, materials used and expenses incurred in distribution system operation not provided for elsewhere.

Example items:

Labour:

- General records of physical characteristics of lines and substations, such as capacities, etc
- · Ground resistance records
- Joint pole maps and records
- · Distribution system voltage and load records
- Preparing maps and prints
- Service interruption and trouble records
- General clerical and stenographic work except that chargeable to account 5065, Meter expenses

Material and Expenses:

- Operating records covering poles, transformers, manholes, cables, and other distribution facilities. Exclude meter records chargeable to Account 5065, Meter Expenses and station records chargeable to Account 5012, Station Building and Fixtures Expenses
- Janitorial work at distribution office buildings including snow removal, cutting grass, etc
- · Communication service
- Building service expenses
- Miscellaneous office supplies and expenses, printing, and stationery, maps and records and first aid supplies
- · Research, development, and demonstration expenses

5090 Underground Distribution Lines and Feeders - Rental Paid

This account shall include rents of property of others used, occupied, or operated in connection with the distribution system, including payments to the government authorities and others for the use and occupancy of public lands and reservations for underground distribution line rights of way. (See Article 230 *Definitions and Instructions* No. 5.) Records should permit identification of payments and parties to whom they were made.

5095 Overhead Distribution Lines and Feeders - Rental Paid

This account shall include rents of property of others used, occupied, or operated in connection with the distribution system, including payments to the government authorities and others for the use and occupancy of public lands and reservations for overhead distribution line rights of way. (See Article 230 *Definitions and Instructions* No. 5.) Records should permit identification of payments and parties to whom they were made.

5096 Other Rent

This account shall include rents for property of others used, occupied or operated in connection with the operation of the distribution system. Include rentals paid for railroad crossings, rights of ways, payments to government bodies and others for use of public or private land, etc., not otherwise included in Accounts 5090, Underground Distribution Lines and Feeders Rental Paid or 5095, Overhead Distribution Lines and Feeders - Rental Paid.

5105 Maintenance Supervision and Engineering

This account shall include the cost of labour and expenses incurred in the general supervision and direction of maintenance of the distribution system that cannot be directly allocated to any particular job/project. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account in the 5100 series based on the nature of the activity in relation to the account descriptions. (See Article 230 *Definitions and Instructions* No. 4.)

5110 Maintenance of Buildings and Fixtures - Distribution Stations

This account shall include the cost of labour, materials used and expenses incurred in maintenance of structures, the book cost of which is included in Account 1808, Buildings and Fixtures, and 1810, Leasehold Improvements.

5112 Maintenance of Transformer Station Equipment

This account shall include the cost of labour, materials used and expenses incurred in maintenance of plant, the book cost of which is included in Account 1815, Transformer Station Equipment - Normally Primary above 50kV.

5114 Maintenance of Distribution Station Equipment

This account shall include the cost of labour, materials used and expenses incurred in maintenance of plant, the book cost of which is included in Account 1820, Distribution Station Equipment - Normally Primary below 50kV, and Account 1825, Storage Battery Equipment.

Records should permit the identification of expenses relating to each type of equipment listed above.

5120 Maintenance of Poles, Towers and Fixtures

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of overhead distribution line facilities, the book cost of which is included in Account 1830, Poles, Towers and Fixtures.

Example items:

Work of the following character on poles, towers, and fixtures:

- Installing additional clamps or removing clamps or strain insulators on guys in place.
- Moving line or guy pole in relocation of pole or section of line.
- · Painting poles, towers, cross arms, or pole extensions.
- · Readjusting and changing position of guys or braces.
- Realigning and straightening poles, cross arms, braces, pins, racks, brackets, and other pole fixtures.
- Reconditioning reclaimed pole fixtures.
- · Relocating crossarms, racks, brackets, and other fixtures on poles.
- · Repairing pole supported platform.
- · Repairs by others to jointly owned poles.
- · Shaving, cutting rot, or treating poles or crossarms in use or salvaged for reuse.
- · Stubbing poles already in service.
- Supporting conductors, transformers, and other fixtures and transferring them to new poles during pole replacements.
- · Maintaining pole signs, stencils, tags, etc.

The accounts shall be subdivided to show costs for subtransmission feeders and distribution lines and feeders separately.

5125 Maintenance of Overhead Conductors and Devices

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of overhead distribution line facilities, the book cost of which is included in Account 1835, Overhead Conductors and Devices.

Example items:

Work of the following character on overhead conductors and devices:

- Overhauling and repairing line cutouts, line switches, line breakers, and capacitor installations
- · Cleaning insulators and bushings
- Refusing line cutouts
- Repairing line oil circuit breakers and associated relays and control wiring.
 Repairing grounds
- Resagging, retying, or rearranging position or spacing of conductors
- Standing by phones, going to calls, cutting faulty lines clear or similar activities at times of emergency
- · Sampling, testing, changing, purifying, and replenishing insulating oil
- Transferring loads, switching, and reconnecting circuits and equipment for maintenance purposes
- Repairing line testing equipment

The accounts shall be subdivided to show costs for subtransmission feeders and distribution lines and feeders separately.

5130 Maintenance of Overhead Services

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of overhead distribution line facilities, the book cost of which is included in Account 1855, Services.

Example items:

Work of the following character on overhead services:

- · Moving position of service either on pole or on customers' premises
- · Pulling slack in service wire
- · Retying service wire
- · Refastening or tightening service bracket

5135 Overhead Distribution Lines and Feeders - Right of Way

These accounts shall include labour with payroll burden, material, trucking, and other expenses incurred in connection with tree trimming, etc. and other costs incurred in maintaining right of way subsequent to construction of a line.

These accounts may be further subdivided as follows:

- Labour and Payroll Burden
- Material
- Truck Expense
- · Other Expense

5145 Maintenance of Underground Conduit

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of underground distribution line facilities, the book cost of which is included in account 1840, Underground Conduit.

Example items

- · Cleaning ducts, manholes, and sewer connections
- · Moving or changing position of conduit or pipe
- · Minor alterations of hand holes, manholes, or vaults
- · Refastening, repairing, or moving racks, ladders, or hangers in manholes or vaults
- · Plugging and shelving ducts
- Repairs to sewers, drains, walls, and floors, rings and covers

The accounts shall be subdivided to show costs for sub transmission feeders and distribution lines and feeders separately.

5150 Maintenance of Underground Conductors and Devices

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of underground distribution line facilities, the book cost of which is included in Account 1845, Underground Conductors and Devices.

Example items:

Work of the following character on underground conductors and devices:

- Repairing circuit breakers, switches, cutouts, network protectors, and associated relays and control wiring
- · Repairing grounds
- Retraining and reconnecting cables in manholes including transfer of cables from one duct to another
- · Repairing conductors and splices
- Repairing or moving junction boxes and potheads
- Refireproofing cables and repairing supports

- Repairing electrolysis preventive devices for cables
- · Repairing cable bonding systems
- · Sampling, testing, changing, purifying and replenishing insulating oil
- Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes
- · Repairing line testing equipment
- Repairing oil or gas equipment in high voltage cable systems and replacement of oil or gas

The accounts shall be subdivided to show costs for sub transmission feeders and distribution lines and feeders separately.

5155 Maintenance of Underground Services

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of underground distribution line facilities, the book cost of which is included in the underground portion of Account 1855, Services.

Example items:

Work of the following character on underground services:

- Cleaning ducts
- · Repairing any underground service plant

5160 Maintenance of Line Transformers

This account shall include the cost of labour, materials used and expenses incurred in maintenance of distribution line transformers, the book cost of which is included in Account 1850, Line Transformers. The cost shall include renewing oil, painting and the like, necessary to keep the equipment in service.

Note: All lightning arresters on the distribution system, excluding pothead arresters, are considered to be transformer equipment or devices and the maintenance thereof is chargeable to this account. Records shall be kept to separately show costs related to overhead and underground transformers.

5165 Maintenance of Street Lighting and Signal Systems

This account shall include the cost of labour, materials used and expenses incurred in maintenance of plant, the book cost of which is included in Account 1875, Street Lighting and Signal Systems.

5170 Sentinel Lights - Labour

This account shall include labour related to servicing rental sentinel lights.

5172 Sentinel Lights - Materials and Expenses

This account shall include trucking, materials and other expenses related to servicing rental sentinel lights.

5175 Maintenance of Meters

This account shall include the cost of labour, materials used and expenses incurred in the maintenance of meters and meter testing equipment, the book cost of which is included in Account 1860, Meters, and Account 1945, Measurement and Testing Equipment, respectively.

The cost shall include cleaning and painting and other work necessary to keep the equipment in service. The labour and expenses incident to the operation of the meter repair department shall be a charge to these accounts.

5178 Customer Installations Expenses - Leased Property

This account shall include the cost of labour, materials used and expenses incurred in work on customer installations of leased property included in account 1870, Leased Property on Customer Premises and in rendering services to customers of the nature of those indicated by the list of items hereunder.

Example items:

Labour:

- Supervision specific to customer installations work
- Installing, connecting, reinstalling, or removing leased property on customers' premises
- Testing, adjusting, and repairing customers' fixtures and appliances in shop or on premises
- · Cost of changing customers' equipment due to changes in service characteristics

Materials and Expenses:

- · Materials used in servicing customers' fixtures, appliances and equipment
- · Power, light, heat, telephone, and other expenses of appliance repair department
- · Tool expense
- Transportation expense, including pickup and delivery charges
- · Meals, traveling and incidental expenses

5195 Maintenance of Other Installations on Customer Premises

This account shall include the cost of labour, materials used and expenses incurred in maintenance of plant the book cost of which is included in Account 1865, Other Installations on Customer Premises.

5205 Purchase of Transmission and System Services

This account will be used to record expenses related to purchase of transmission and system services.

5210 Transmission Charges

This account will be used to record Transmission Charges incurred.

5215 Transmission Charges Recovered

This account will be used to record Transmission Charges recovered from customers. Records shall be maintained so that the quantity of electricity supplied each party and the related revenues shall be readily available.

Article 220 – Uniform System of Accounts Electric Plant in Service - Detailed Accounts A. Intangible Plant

1606 Organization

This account shall include all fees paid to federal or provincial governments for the privilege of incorporation and expenditures incident to organizing the corporation, and putting it into readiness to do business.

Example items

- Cost of obtaining certificates authorizing an enterprise to engage in the public utility business
- · Fees and expenses for incorporation
- · Fees and expenses for mergers or consolidations
- · Office expenses incident to organizing the utility
- Stock and minute books and corporate seal.

Note A: This account shall not include any discounts upon securities issued or assumed; nor shall it include any costs incident to negotiating loans, selling bonds or other evidences of debt or expenses in connection with the authorization, issuance or sale of capital stock.

Note B: When charges are made to this account for expenses incurred in mergers, consolidations, or reorganizations, etc. amounts previously included herein or in similar accounts in the books of the entities concerned shall be excluded from this account.

Note C: This account shall include amounts related to transfer by-laws.

1608 Franchises and Consents

- A. This account shall include amounts paid to the federal, provincial, or other government in consideration for franchises, consents, water power licenses, or certificates, running in perpetuity or for a specified term of more than one year, together with necessary and reasonable expenses incident to procuring such franchises, consents, water power licenses, or certificates of permission and approval.
- B. If a franchise, consent, water power license or certificate is acquired by assignment, the charge to this account shall not exceed the amount paid by the utility.
- C. The amortization related to any item in this account shall be recorded in Account 2120, Accumulated Amortization of Electric Utility Plant Intangibles.
- D. Records supporting this account shall be kept so as to show separately the book cost of each franchise or consent.

Note: Annual or other periodic payments under franchises shall not be included herein but in the appropriate operating expense account.

1609 Capital Contributions Paid

This account shall include capital contributions paid by a distributor to a host distributor, a transmitter or a generator for capital expenditures (e.g., under a Connection and Cost Recovery Agreement) that meet the IAS 38 Intangible Assets requirements for classification as an intangible asset. The amortization related to any item in this account shall be recorded in Account 2120, Accumulated Amortization of Electric Utility Plant – Intangibles.

1610 Miscellaneous Intangible Plant

A. This account shall include the cost of patent rights, licenses, privileges, capitalizable load profile development costs and other intangible property necessary or valuable in the conduct of utility operations and not specifically chargeable to any other account.

- B. The amortization related to any item in this account shall be recorded in Account 2120, Accumulated Provision for Amortization of Electric Utility Plant Intangibles.
- C. This account shall be maintained in such a manner that the utility can furnish full information with respect to the amounts included herein.

1611 Computer Software

This account shall include the cost of developed or purchased computer operating and application software that is material in amount.

Example items:

- Accounting packages
- Customer Information System (CIS)
- Groupware packages (e.g. e-mail, scheduling & conferencing programs, etc.)
- · Database management system packages
- · Software development tools.
- · Primary development tools.

1612 Land Rights

and Feeders - Tree Trimming.

This account(s) shall include the cost of rights, interests and privileges held by the utility in land owned by others. See Article 230 Definitions and Instructions No. 8 for detail guidance. Note: Do not include in this account the cost of permits to erect poles, towers, etc., or to trim trees. See Account 1830, Poles, Towers and Fixtures, and Account 5135, Overhead Distribution Lines

OVERHEAD COSTS

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- 3 Overhead capitalization is a function of the overall type and nature of the capital work
- 4 being executed by Toronto Hydro. There have been no changes in the utility's overhead
- 5 expense capitalization policy since its last rebasing application. In accordance with
- 6 section 2.2.2.4 of the OEB's Filing Requirements for Electricity Distribution Rate
- 7 Applications (July 12, 2018), OEB Appendix 2-D has been filed at Exhibit 2A, Tab 5,
- 8 Schedule 2, Appendix A.

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1. BACKGROUND

- 11 Consistent with the OEB's expectations, Toronto Hydro converted to International
- Financial Reporting Standards ("IFRS") effective January 1, 2015. This application
- represents Toronto Hydro's second rebasing application under Modified International
- 14 Financial Reporting Standards ("MIFRS").

¹ Filing Requirements, s. 2.0.9 - "Accounting Matters".

Toronto Hydro Electric-System Limited EB-2018-0165 Exhibit 2A Tab 5 Schedule 2 Appendix A ORIGINAL 1 of 1

OEB Appendix 2-D Overhead Expense

Applicants are to provide a breakdown of OM&A before capitalization in the below table. OM&A before capitalization may be broken down by cost center, program, drivers or another format best suited to focus on capitalized vs. uncapitalized OM&A.

OM&A Before Capitalization	2015 Historical Year	2016 Historical Year	2017 Historical Year	2018 Bridge Year	2019 Bridge Year	2020 Test Year
Operations	146.9	155.1	153.6	159.7	166.7	169.0
Maintenance	73.6	65.1	68.5	69.1	71.2	72.0
Billing and Collecting	36.8	34.0	35.9	40.8	41.5	45.8
Community Relations	3.5	2.5	2.4	2.6	2.7	2.8
Administrative and General	90.4	98.2	104.5	103.4	104.9	109.4
Taxes Other Than Income Taxes	5.2	4.6	5.3	5.6	5.4	5.5
Donations	1.0	1.0	1.0	0.9	0.9	1.0
Total OM&A Before Capitalization (B)	\$ 357.4	\$ 360.6	\$ 371.1	\$ 382.0	\$ 393.4	\$ 405.6

Applicants are to provide a breakdown of capitalized OM&A in the below table. Capitalized OM&A may be broken down using the categories listed in the table below if possible. Otherwise, applicants are to provide its own break down of capitalized OM&A.

							Directly	
Capitalized OM&A	2015	2016	2017	2018	2019	2020	Attributable?	Explanation for Change
	Historical Year	Historical Year	Historical Year	Bridge Year	Bridge Year	Test Year	(Yes/No)	in Overhead Capitalized
Labour Capitalization	(99.1)	(95.6)	(101.1)	(105.4)	(109.8)	(112.5)	Yes	
Vehicle Capitalization	(4.2)	(4.3)	(4.5)	(3.8)	(3.9)	(4.1)	Yes	
Material Handling On-cost	(10.2)	(10.8)	(10.3)	(11.6)	(11.6)	(11.5)	Yes	
Total Capitalized OM&A (A)	(113.4)	(110.8)	(115.9)	(120.8)	(125.2)	(128.1)		
% of Capitalized OM&A (=A/B)	-32%	-31%	-31%	-32%	-32%	-32%		

1 COST OF ELIGIBLE INVESTMENTS FOR THE CONNECTION OF QUALIFYING

2 GENERATION FACILITIES

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- 4 Section 2.2.2.7 of the OEB's Filing Requirements for Electricity Distributor Rate
- 5 Applications¹ contemplates that a distributor will file for provincial rate protection
- associated with any costs incurred to make eligible investments.²

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- 8 In accordance with the cost responsibility rules in the OEB's Distribution System Code
- 9 ("DSC"), costs incurred by a distributor for the purpose of connecting or enabling the
- connection of a Renewable Energy Generation ("REG") facility to its distribution system
- are considered eligible investments for the purpose of provincial rate recovery under s.
- 12 79.1 of the Ontario Energy Board Act, 1998.³

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1. REG CONNECTIONS

- 15 Significant renewable generation activity exists across Toronto Hydro's distribution
- system. As of December 31, 2017, Toronto Hydro connected 1,750 REG projects
- 17 representing over 96 MW of capacity, and has undertaken approximately 540 MW of
- pre-assessment capacity reviews. Toronto Hydro anticipates 1,312 new REG
- connections during the 2018 through 2024 period, with a corresponding capacity of 116
- 20 MW. By the end of 2024, Toronto Hydro anticipates that approximately 212 MW of REG
- capacity will be connected to its distribution system.⁴

¹ Ontario Energy Board, Filing Requirements for Electricity Distributor Rate Applications, Chapter 2 (July 12, 2018).

 $^{^2}$ As described in section 79.1 of the *Ontario Energy Board Act, 1998* (the "Act") and O. Reg. 330/09 made under the Act.

³ O. Reg. 330/09, at s. 1(2).

⁴ For further information, please refer to Customer Connections (Exhibit 2B, Section E5.1).

- Some REG projects are currently unable to connect to Toronto Hydro's system due to
- short-circuit limits on station equipment, feeder thermal limits, fault current, anti-
- islanding, and limited ability to transfer loads between feeders in the event of a
- 4 contingency. The primary constraint at this time is short circuit capacity at the station
- 5 bus.

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2. ELIGIBLE INVESTMENTS SUMMARY

- 8 To address interconnection constraints at the distribution level, Toronto Hydro proposes
- 9 to undertake a number of Renewable Enabling Improvement ("REI") investments as part
- of its 2020-2024 Distribution System Plan ("DSP"), which is filed at Exhibit 2B.

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2.1 Generation Protection, Monitoring, and Control

- 13 Installation of Bus-Tie Reactors: Bus-tie reactors lower the short circuit current on the
- station bus and distribution system by insertion of an impedance at the bus-tie point.
- 15 This method of fault mitigation has been successfully applied by PowerStream, Guelph
- Hydro, and Hydro One Networks Inc. ("Hydro One"). Toronto Hydro proposes to work
- with Hydro One to install bus-tie reactors at Ellesmere, Esplanade, Fairbank, Horner, and
- Sheppard TS to eliminate the existing fault current constraint, which will enable REG
- connections. For additional details, please refer to the Generation Protection,
- 20 Monitoring, and Control Program (Exhibit 2B, Section E5.5).

21 22

- Remote Monitoring and Control of Generation (SCADA): During the 2015-2019 plan
- period, Toronto Hydro has been installing monitoring and control systems for all new
- 24 distributed generation ("DG") connections. This has provided system planners and
- operators with the visibility required to monitor generation to load ratios in real time to
- ensure all DG sites are de-energized in the event of a system fault. With the continued

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implementation of the Generation Protection, Monitoring, and Control program (Exhibit

2 2B, E5.5), Toronto Hydro will be able to actively monitor and control DGs in real time to

ensure these ratios are within tolerable levels and the anti-islanding feature of DG

facilities can properly operate in the event of a distribution system fault. These real-

time monitoring and control systems communicate with REG resources via

6 communication networks connected to the utility's supervisory control and data

acquisition ("SCADA") system to enable safe operation of the distribution system and

8 feeder management of bi-directional distribution grid flows. The system has the ability

9 to forecast resources and coordinate with Toronto Hydro's distribution outage

management system, thereby enabling greater REG penetration providing real-time

visibility. Toronto Hydro's requirement for monitoring and control is modelled after

requirements developed by the IESO. Consistent with the DSC, the costs associated

with this investment program pertains only to renewable generation resources, as

conventional generation projects bear the cost of monitoring and control requirements.

15 For additional details, please refer to the Generation Protection, Monitoring, and

Control program (Exhibit 2B, Section E5.5).

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2.2 Energy Storage

19 Toronto Hydro plans to install five energy storage systems on three distribution feeders

that are forecast to have high generator to minimum load ratios over the 2020-2024

period. These energy storage systems represent a total aggregated peak capacity of 2.5

22 MW and aggregated energy capacity of 10 MWh. Toronto Hydro's infrastructure was

not designed to accommodate two-way, variable REG resources. These energy storage

systems will balance energy flows in specific areas, allowing renewable generation

connections to proceed and helping defer the need for conventional infrastructure

- upgrades. For additional details, please refer to the Energy Storage Systems program
- 2 (Exhibit 2B, Section E7.2).
- The IESO reviewed Toronto Hydro's plans for REG investments and found that: (i) the
- 4 utility's plans are substantially consistent with that of IESO; and (ii) although specific
- 5 REG investments are not included in the most recent Integrated Regional Resource Plan
- 6 ("IRRP"), addressing barriers to connecting additional DG within Toronto Hydro's service
- area is consistent with regional planning principles. IESO concurs that removing
- 8 technical barriers to new DG connections can provide lasting benefits. For more
- 9 information, please refer to the IESO Comment Letter filed at Exhibit 2B, Section B,
- 10 Appendix F.

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3. ELIGIBLE INVESTMENTS COSTS

- Table 1, below, summarizes the costs associated with Toronto Hydro's planned REI
- investments over the 2020 to 2024 plan period. Toronto Hydro is not proposing any
- specific Renewable Expansion⁵ ("RE") investments during 2020-2024. However, certain
- demand response investments in the Station Expansion program (Exhibit 2B, Section
- 17 E7.4) are expected to improve the utility's ability to connect REG facilities.

Table 1: Renewable Enabling Improvements ("REI") from 2020-2024 (\$ Millions)

Capital Program	2020	2021	2022	2023	2024	Total
Generation, Protection, Monitoring, and Control	3.7	2.3	2.4	2.5	2.7	8.6
Energy Storage	1.0	1.0	1.0	1.0	1.0	5.0
Totals	4.7	3.3	3.4	3.5	3.7	13.6

⁵ As defined in Section 3.2.30 of the Distribution System Code.

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4. PROVINCIAL RATE PROTECTION

- 2 Toronto Hydro applied the six percent direct benefit percentage provided by the OEB
- with respect to REI investments to calculate the provincial rate protection amounts. The
- detailed breakdown is provided in the OEB Appendices 2-FA and 2-FB at Exhibit 2A, Tab
- 5 8, Schedules 2 and 3.6

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- 7 Two versions of the OEB Appendices 2-FA and 2-FB are filed: one for Energy Storage and
- 8 one for Generation, Protection, Monitoring, and Control systems. This is necessary as
- 9 the life spans of these assets are different.

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- 11 Further, the OEB Appendices reflect opening balances, which arise from the REI
- investments approved by the OEB in the utility's 2015-2019 Rate Application.⁷ The
- opening balances reflect the current forecast for those programs previously approved
- by the OEB.

⁶ Appendix 2-FC provided in Schedule 4 is not applicable.

⁷ EB-2014-0116, Toronto Hydro-Electric System Limited Decision and Order (December 29, 2015).

OEB Appendix 2-FA Renewable Generation Connection Investment Summary (past investments or over the future rate setting period) - Energy Storage

Enter the details of the Renewable Generation Connection projects as described in the appropriate section of the Filing Requirements. All costs entered on this page will be transferred to the appropriate cells in the appendices that follow.

For Part A. Renewable Enabling Improvements (REI), these amounts will be transferred to Appendix 2 - FB

For Part B, Expansions, these amounts will be transferred to Appendix 2 - FC

If there are more than five projects proposed to be in-service in a certain year, please amend the tables below and ensure that the formulae for the Total Amounts in any given rate year are updated.

Based on the current methodology and allocation, amounts allocated represent 6% for REI Connection Investments and 17% for Expansion Investments. (EB-2009-0349, 6-10-2010, p. 15, note 9)

There are two scenarios described below. Separate sets of spreadsheets (2-FA, 2-FB, 2-FC) should be submitted for each scenario as required.

Scenario 1: Past Investments with No Recovery. The distributor has made investments in the past (during the IRM Years), but has not received approval for these projects and therefore did not receive revenue from the IESO under Regulation 330/09 and did not receive ratepayer revenue for the direct benefit portion of the investment.

The WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage should correspond to the distributor's last Cost of Service approval.

The Direct Benefit portion of the calculated Revenue Requirement for each year should be summed and can be applied for recovery from the distributor's ratepayers through a rate rider.

The Provincial Recovery portion of the calculated Revenue Requirement for each year should be summed and can be applied for recovery from the IESO through a separate order.

Scenario 2: Investments in the Test Year and Beyond. Distributor plans to make investments in 2017 and/or beyond. These investments should be added to 2-FA in the appropriate year.

The WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage should correspond to the distributor's current application.

Part A									Te	st Year
REI Investments (Direct Benefit at 6%)		2020		2021		2022		2023		2024
Project 1										_
REI Investments (Direct Benefit at 6%)										
Capital Costs	\$1,	000,000	\$1,	000,000	\$1,	000,000	\$1,	000,000	\$1,	000,000
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Project 2										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0 \$0		\$0 \$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0 \$0		\$0 \$0		\$0		\$0
OMAA (Ongoing)		ΨΟ		ΨΟ		ΨΟ		ΨΟ		ΨΟ
Project 3										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Project 4										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Project 5										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Total Capital Costs	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000
Total OM&A (Start-Up)	\$		\$,	\$,	\$		\$	
Total OM&A (Ongoing)	\$	-	\$		\$		\$		\$	-
(- 5- 5)			•		·		·			

OEB Appendix 2-FA Renewable Generation Connection Investment Summary (past investments or over the future rate setting period) - Energy Storage

Part B					Test Year
Expansion Investments (Direct Benefit at 17%)	2016	2017	2018	2019	2020
Project 1					
Name: Expansion Connection Project					
Capital Costs	\$0	\$0	\$0	\$0	\$0
OM&A (Start-Up)	\$0	\$0	\$0	\$0	\$0
OM&A (Ongoing)	\$0	\$0	\$0	\$0	\$0
Project 2					
Name: Expansion Connection Project					
Capital Costs	\$0	\$0	\$0	\$0	\$0
OM&A (Start-Up)	\$0	\$0	\$0	\$0	\$0
OM&A (Ongoing)	\$0	\$0	\$0	\$0	\$0
Project 3					
Name: Expansion Connection Project					
Capital Costs	\$0	\$0	\$0	\$0	\$0
OM&A (Start-Up)	\$0	\$0	\$0	\$0	\$0
OM&A (Ongoing)	\$0	\$0	\$0	\$0	\$0
Project 4					
Name: Expansion Connection Project					
Capital Costs	\$0	\$0	\$0	\$0	\$0
OM&A (Start-Up)	\$0	\$0	\$0	\$0	\$0
OM&A (Ongoing)	\$0	\$0	\$0	\$0	\$0
(gg)	**		•••	•	
Project 5					
Name: Expansion Connection Project					
Capital Costs	\$0	\$0	\$0	\$0	\$0
OM&A (Start-Up)	\$0	\$0	\$0	\$0	\$0
OM&A (Ongoing)	\$0	\$0	\$0	\$0	\$0
Total Capital Costs	\$ -	\$ -	\$ -	\$ -	\$ -
Total OM&A (Start-Up)	\$ -	\$ -	\$ -	\$ -	\$ -
Total OM&A (Ongoing)	\$ -	\$ -	\$ -	\$ -	\$ -

OEB Appendix 2-FB Calculation of Renewable Generation Connection Direct Benefits/Provincial Amount: Renewable Enabling Improvement Investments **Energy Storage**

This table will calculate the distributor/provincial shares of the investments entered in Part A of Appendix 2-FA. Finite radius will calculate the distribution/profincial strates of the investments entered in Fath of Appendix 2-FA.

Enter values in green shaded cells: WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage. For historical investments, enter these variables for your last cost of service test year. For 2020 and beyond, enter variables as in the application. Rate Riders are not calculated for the Test Year as these assets and costs are already in the distributor's rate base/revenue requirement.

				2020				2021				2022			2023			2024		
			Direc	t Benefit	Provincial		Dir	ect Benefit	Provincial		Dire	ect Benefit	Provincial		Direct Benefit	Provincial		Direct Bene	fit	Provincial
		Total		6%	94%	Total		6%	94%	Total		6%	94%	Total	6%	94%	Total	6%		94%
Net Fixed Assets (average)		\$ 8,507,196	\$	510,432	\$ 7,996,765	\$ 8,863,3	312 \$	531,799	\$ 8,331,513	\$ 9,152,	61 \$	549,166	8,603,595	9,375,543	\$ 562,533	\$ 8,813,011	-,,	\$ 571	900 \$	8,959,760
Incremental OM&A (on-going, N/A for Pro-		\$0	\$	-		\$0	\$	-		\$0	\$			\$0	\$ -		\$0	\$	-	
Incremental OM&A (start-up, applicable fo		\$0	\$	- 3	-	\$0	\$	-	5 -	\$0	\$	- 3	-	\$0	\$ -	\$ -	\$0	\$	- \$	-
WCA Rate Base	6.4%		\$	- :	\$ - \$ 7,000,705		\$	531,799	<u> </u>		\$	549,166	8,603,595	-	\$ -	\$ -		\$ 571	- \$	0.050.700
Rate Base			\$	510,432	7,996,765		\$	531,799	8,331,513		\$	549,166 \$	8,603,595		\$ 562,533	\$ 8,813,011		\$ 5/1	900 \$	8,959,760
Deemed ST Debt	4%		\$	20,417	\$ 319,871		\$	21,272	333,261		\$	21,967	344,144		\$ 22,501	\$ 352,520		\$ 22	876 \$	358,390
Deemed LT Debt	56%		\$	285,842	\$ 4,478,188		\$	297,807	4,665,647		\$	307,533	4,818,013		\$ 315,018	\$ 4,935,286		\$ 320	264 \$	5,017,465
Deemed Equity	40%		\$	204,173	\$ 3,198,706		\$	212,719	\$ 3,332,605		\$	219,666 \$	3,441,438		\$ 225,013	\$ 3,525,204		\$ 228	760 \$	3,583,904
ST Interest	2.61%		\$	533	8,349		\$	555	8,698		\$	573	8,982		\$ 587	\$ 9,201			597 \$	9,354
LT Interest	3.71%		\$	10,605	166,141		\$	11,049	173,096		\$	11,409	178,748		\$ 11,687	\$ 183,099			882 \$	186,148
ROE	8.82%		\$	18,008	282,126		\$	18,762	293,936		\$	19,375 \$	303,535	_	\$ 19,846				177 \$	316,100
Cost of Capital Total			\$	29,146	456,615		\$	30,366	\$ 475,729		\$	31,357	491,265	-	\$ 32,121	\$ 503,223		\$ 32	655 \$	511,602
OM&A			\$	- 5	.		\$	- :	· -		\$	- 9			s -	\$ -		\$	- \$	-
Amortization		\$ 610,551	\$	36,633	\$ 573,918	\$ 677,2	218 \$	40,633	636,585	\$ 743,	84 \$	44,633	699,251	\$ 810,551	\$ 48,633	\$ 761,918	877,218	\$ 52	633 \$	824,585
Grossed-up PILs			-\$	15,509 -	\$ 242,974		-\$	11,080 -	173,581		-\$	7,244 -\$	113,493	-	-\$ 3,894	-\$ 61,009		-\$	943 -\$	14,768
Revenue Requirement			•	50.270	787,560		•	59,919	938,733		•	68,746	1,077,023	-	\$ 76.859	\$ 1,204,132		¢ 94	346 \$	1,321,419
Novembe Requirement			Ψ	55,270	<i>y</i> 767,300		φ	55,919	y 530,733		پ	55,746 4	1,077,023	-	ψ 70,039	ψ 1,204,132		Ψ 04	040 Ø	1,021,419
				_				_												
Provincial Rate Protection				3	\$ 787,560				\$ 938,733			\$	1,077,023			\$ 1,204,132			\$	1,321,419
Monthly Amount Paid by IESO				3	\$ 65,630				\$ 78,228			\$	89,752			\$ 100,344			\$	110,118

Note 1: The difference between the actual costs of approved eligible investments and revenue received from the IESO should be recorded in a variance account. The Board may provide regulatory accounting guidance regarding a variance account either in an individual proceeding or on a generic basis.

Note 2: For the 2016 Test Year, Costs and Revenues of the Direct Benefit are to be included in the test year applicant Rate Base and Revenues.

PILs Calculation

r ies Galculation	2020	2021	2022	2023	2024
Income Tax	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial
Net Income - ROE on Rate Base Amortization (6% DB and 94% P) CCA (6% DB and 94% P) Taxable income	\$ 18,008 \$ 282,126 \$ 36,633 \$ 573,918 -\$ 97,656 -\$ 1,529,952 -\$ 43,015 -\$ 673,908	\$ 18,762 \$ 293,936 \$ 40,633 \$ 636,585 -\$ 90,125 -\$ 1,411,961 -\$ 30,730 -\$ 481,441	\$ 19,375 \$ 303,535 \$ 44,633 \$ 699,251 -\$ 84,100 -\$ 1,317,569 -\$ 20,093 -\$ 314,783	\$ 19,846 \$ 310,923 \$ 48,633 \$ 761,918 -\$ 79,280 -\$ 1,242,055 -\$ 10,801 -\$ 169,214	\$ 20,177 \$ 316,100 \$ 52,633 \$ 824,585 -\$ 75,424 -\$ 1,181,644 -\$ 2,614 -\$ 40,959
Tax Rate (to be entered)	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%
Income Taxes Payable Gross Up	-\$ 11,399.08 -\$ 178,585.59	-\$ 8,143.52 -\$ 127,581.85	-\$ 5,324.52 -\$ 83,417.48	-\$ 2,862.24 -\$ 44,841.79	-\$ 692.82 -\$ 10,854.21
Income Taxes Payable Grossed Up PILs	-\$ 15,508.95 -\$ 242,973.60 -\$ 15,509 -\$ 242,974	-\$ 11,079.62 -\$ 173,580.75 -\$ 11,080 -\$ 173,581	-\$ 7,244.25 -\$ 113,493.18 -\$ 7,244 -\$ 113,493	-\$ 3,894.21 -\$ 61,009.24 -\$ 3,894 -\$ 61,009	-\$ 942.61 -\$ 14,767.63 -\$ 943 -\$ 14,768

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OEB Appendix 2-FB Calculation of Renewable Generation Connection Direct Benefits/Provincial Amount: Renewable Enabling Improvement Investments Energy Storage

			2020	П	2021		2022		2023		2024
Net Fixed Assets		_				_		_	2020		
Enter applicable amortization in years:	15										
Opening Gross Fixed Assets	.0	\$	8.658.265	\$	9.658.265	\$	10.658.265	\$	11.658.265	\$	12,658,265
Gross Capital Additions		\$	1.000.000	\$	1.000.000	\$	1.000.000	\$	1.000.000	\$	1,000,000
Closing Gross Fixed Assets		\$	9,658,265	\$	10.658.265	\$	11.658.265	\$	12.658.265	\$	13.658.265
Growing Grown Mod / todato			0,000,200	Ψ	10,000,200	Ψ	11,000,200	Ψ	12,000,200	Ψ_	10,000,200
Opening Accumulated Amortization		\$	345,793	\$	956,344	\$	1,633,562	\$	2,377,446	\$	3,187,997
Current Year Amortization (before additions)		\$	577,218	\$	643,884	\$	710,551	\$	777,218	\$	843,884
Additions (half-year)		\$	33,333	\$	33,333	\$	33,333	\$	33,333	\$	33,333
Closing Accumulated Amortization		\$	956,344	\$	1,633,562	\$	2,377,446	\$	3,187,997	\$	4,065,215
Opening Net Fixed Assets		\$	8,312,472	\$	8,701,921	\$	9,024,703	\$	9,280,819	\$	9,470,268
Closing Net Fixed Assets		\$	8,701,921	\$	9,024,703	\$	9,280,819	\$	9,470,268	\$	9,593,050
Average Net Fixed Assets		\$	8,507,196	\$	8,863,312	\$	9,152,761	\$	9,375,543	\$	9,531,659
UCC for PILs Calculation											
			2020		2021		2022		2023		2024
Opening UCC		\$	7,638,041	\$	7,010,433	\$	6,508,346	\$	6,106,677	\$	5,785,342
Capital Additions (from Appendix 2-FA)		\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000
UCC Before Half Year Rule		\$	8,638,041	\$	8,010,433	\$	7,508,346	\$	7,106,677	\$	6,785,342
Half Year Rule (1/2 Additions - Disposals)		\$	500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000
Reduced UCC		\$	8,138,041	\$	7,510,433	\$	7,008,346	\$	6,606,677	\$	6,285,342
CCA Rate Class (to be entered)	8		8		8		8		8		8
CCA Rate (to be entered)	20%		20%		20%		20%		20%		20%
CCA		\$	1,627,608	\$	1,502,087	\$	1,401,669	\$	1,321,335	\$	1,257,068
Closing UCC		\$	7,010,433	\$	6,508,346	\$	6,106,677	\$	5,785,342	\$	5,528,273

OEB Appendix 2-FA

Renewable Generation Connection Investment Summary (past investments or over the future rate setting period) - Generation Protection Monitoring and Control

Enter the details of the Renewable Generation Connection projects as described in the appropriate section of the Filing Requirements. All costs entered on this page will be transferred to the appropriate cells in the appendices that follow.

For Part A, Renewable Enabling Improvements (REI), these amounts will be transferred to Appendix 2 - FB

For Part B, Expansions, these amounts will be transferred to Appendix 2 - FC

If there are more than **five** projects proposed to be in-service in a certain year, please amend the tables below and ensure that the formulae for the Total Amounts in any given rate year are updated.

Based on the current methodology and allocation, amounts allocated represent 6% for REI Connection Investments and 17% for Expansion Investments. (EB-2009-0349, 6-10-2010, p. 15, note 9)

There are two scenarios described below. Separate sets of spreadsheets (2-FA, 2-FB, 2-FC) should be submitted for each scenario as required.

Scenario 1: Past Investments with No Recovery. The distributor has made investments in the past (during the IRM Years), but has not received approval for these projects and therefore did not receive revenue from the IESO under Regulation 330/09 and did not receive ratepayer revenue for the direct benefit portion of the investment.

The WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage should correspond to the distributor's last Cost of Service approval.

The Direct Benefit portion of the calculated Revenue Requirement for each year should be summed and can be applied for recovery from the distributor's ratepayers through a rate rider.

The Provincial Recovery portion of the calculated Revenue Requirement for each year should be summed and can be applied for recovery from the IESO through a separate order.

Scenario 2: Investments in the Test Year and Beyond. Distributor plans to make investments in 2017 and/or beyond. These investments should be added to 2-FA in the appropriate year.

The WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage should correspond to the distributor's current application.

Part A									Te	st Year
REI Investments (Direct Benefit at 6%)	2	020	1	2021		2022		2023		2024
Project 1										
Generation Protection (Bus Tie Reactors)										
Capital Costs	\$72	20,000	\$9	89,000	\$1,	041,000	\$1,	115,750	\$1,	134,250
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Project 2										
Monitoring and Control Systems	^		•		•		•		•	- 10
Capital Costs		73,750	\$1,2	267,500	\$1,	332,500	\$1,	413,750	\$1,	543,750
OM&A (Start-Up)		\$ 0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
Project 3										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0 \$0		\$0		\$0		\$0		\$ 0
OM&A (Ongoing)		\$0 \$0		\$0		\$0		\$0 \$0		\$0 \$0
OWAA (Ongoing)		ΨΟ		ΨΟ		ΨΟ		ΨΟ		ΨΟ
Project 4										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
(3 3)						·				
Project 5										
Name: REI Connection Project										
Capital Costs		\$0		\$0		\$0		\$0		\$0
OM&A (Start-Up)		\$0		\$0		\$0		\$0		\$0
OM&A (Ongoing)		\$0		\$0		\$0		\$0		\$0
T. (10 - % 10 - %	•	0.000 750	•	0.050.500	•	0.070.500	•	0 500 500	•	0.070.000
Total Capital Costs	\$	3,693,750	\$	2,256,500	\$	2,373,500	\$	2,529,500	\$	2,678,000
Total OM&A (Start-Up)	\$	-	\$	-	\$	-	\$	-	\$	-
Total OM&A (Ongoing)	\$		\$	-	\$	-	\$	-	\$	-

OEB Appendix 2-FA

Renewable Generation Connection Investment Summary (past investments or over the future rate setting period) - Generation Protection Monitoring and Control

Part B							Test Year
Expansion Investments (Direct Benefit at 17%)	2016		2017		2018	2019	2020
Project 1							
Name: Expansion Connection Project							
Capital Costs	\$0		\$0		\$0	\$0	\$0
OM&A (Start-Up)	\$0		\$0		\$0	\$0	\$0
OM&A (Ongoing)	\$0		\$0		\$0	\$0	\$0
Project 2							
Name: Expansion Connection Project							
Capital Costs	\$0		\$0		\$0	\$0	\$0
OM&A (Start-Up)	\$0		\$0		\$0	\$0	\$0
OM&A (Ongoing)	\$0		\$0		\$0	\$0	\$0
Project 3							
Name: Expansion Connection Project							
Capital Costs	\$0		\$0		\$0	\$0	\$0
OM&A (Start-Up)	\$0		\$0		\$0	\$0	\$0
OM&A (Ongoing)	\$0		\$0		\$0	\$0	\$0
Project 4							
Name: Expansion Connection Project							
Capital Costs	\$0		\$0		\$0	\$0	\$0
OM&A (Start-Up)	\$0		\$0		\$0	\$0	\$0
OM&A (Ongoing)	\$0		\$0		\$0	\$0	\$0
Project 5							
Name: Expansion Connection Project							
Capital Costs	\$0		\$0		\$0	\$0	\$0
OM&A (Start-Up)	\$0		\$0		\$0	\$0	\$0
OM&A (Ongoing)	\$0		\$0		\$0	\$0	\$0
Total Capital Costs	\$	- \$	-	- \$	-	\$ -	\$ -
Total OM&A (Start-Up)	\$	- \$	-	- \$	-	\$ -	\$ -
Total OM&A (Ongoing)	\$	- \$	-	- \$	-	\$ -	\$ -

OEB Appendix 2-FB

Calculation of Renewable Generation Connection Direct Benefits/Provincial Amount: Renewable Enabling Improvement Investments Generation Protection, Monitoring, and Control

This table will calculate the distributor/provincial shares of the investments entered in Part A of Appendix 2-FA.

Enter values in green shaded cells: WCA percentage, debt percentages, interest rates, kWh, tax rates, amortization period, CCA Class and percentage. For historical investments, enter these variables for your last cost of service test year. For 2020 and beyond, enter variables as in the application.

Rate Riders are not calculated for the Test Year as these assets and costs are already in the distributor's rate base/revenue requirement.

					2020		1		2	021					2022					2023				2024		
				Direc	ct Benefit	Provincial			Direct I	Benefit	Provincial			Direc	t Benefit	Prov	/incial		Dire	ct Benefit	Provincial		Di	rect Benefit	P	rovincial
			Total		6%	94%		Total		6%	94%		Total		6%		4%	Total		6%	94%	To		6%		94%
Net Fixed Assets (average)		\$ 1	3,646,667	\$	818,800	\$ 12,827,86	7 \$ 1	6,006,820	\$	960,409 \$	15,046,411	\$ 1	7,610,664	\$	1,056,640	\$ 16,	,554,024	\$ 19,264,344	\$	1,155,861	\$18,108,483		978,360 \$	1,258,702	\$	19,719,658
Incremental OM&A (on-going, N/A for Prov			\$0	\$	-	_		\$0	\$				\$0	\$	-			\$0	\$	-	_	\$		-		
Incremental OM&A (start-up, applicable for			\$0	\$	-	\$ -		\$0	\$	- \$	-		\$0	\$	- :	\$	-	\$0	\$	-	\$ -	\$	0 \$	-	\$	-
WCA	6.4%			\$		\$ -	_		\$	- \$		-		\$		\$			\$		\$ -		<u>\$</u>		\$	
Rate Base				\$	818,800	\$ 12,827,86	,		\$	960,409 \$	15,046,411			\$	1,056,640	\$ 16,	,554,024		\$	1,155,861	\$ 18,108,483		\$	1,258,702	\$	19,719,658
Deemed ST Debt	4%			\$	32,752	\$ 513,11	5		\$	38,416 \$	601,856			\$	42,266	\$	662,161		\$	46,234	\$ 724,339		\$	50,348	\$	788,786
Deemed LT Debt	56%			\$	458,528	\$ 7,183,60	6		\$	537,829 \$	8,425,990			\$	591,718	\$ 9,	,270,253		\$	647,282	\$10,140,750		\$	704,873	\$	11,043,009
Deemed Equity	40%			\$	327,520	\$ 5,131,14	,		\$	384,164 \$	6,018,564			\$	422,656	\$ 6,	,621,610		\$	462,344	\$ 7,243,393		\$	503,481	\$	7,887,863
OT L	0.040/			•	055				•	4.000 0	45.700			•	4.400	•	47.000		_	4.007				4044	•	00.507
ST Interest LT Interest	2.61% 3.71%			\$	855 17,011	\$ 13,39			\$	1,003 \$	15,708 312,604			\$	1,103 21,953		17,282		\$	1,207 24.014	\$ 18,905 \$ 376,222		\$	1,314 26,151	\$	20,587 409,696
ROE	3.71% 8.82%			ð.	28.887	\$ 266,513 \$ 452,56			Ф	19,953 \$ 33.883 \$	530,837			Ď.	37,278		343,926 584,026		ý.				þ.	44,407	D.	695,710
Cost of Capital Total	0.02%			Φ.	46,753	\$ 732.47			Φ	54.839 \$	859,150	-		· ·	60.334		945.235		9	-, -, -	\$ 638,867 \$ 1,033,994		<u> </u>	71.872	φ	1,125,992
cost of capital rotal				Ψ	40,733	φ 732,47	_	•	Ψ	54,055 ¢	033,130	-	•	Ψ	00,334	φ .	343,233		Ψ.	00,000	ψ 1,033,994		Ψ	71,072	Ψ	1,125,552
OM&A				\$	-	\$ -			\$	- \$	-			\$	-	\$	-		\$	-	\$ -		\$	-	\$	-
Amortization		\$	560,879	\$	33,653	\$ 527,22		669,065	\$	40,144 \$	628,921	\$	753,247	\$	45,195	\$	708,052	\$ 842,393	\$,	\$ 791,849	\$ 9	937,074 \$	56,224	\$	880,850
Grossed-up PILs				-\$	1,745	-\$ 27,34)		-\$	809 -\$	12,671			\$	430	\$	6,735		\$	1,722	\$ 26,982		\$	3,069	\$	48,078
Revenue Requirement				\$	78,661	\$ 1,232,35	_	•	\$	94,174 \$	1,475,400		•	\$	105,959	\$ 1,0	,660,022		\$	118,265	\$ 1,852,825		\$	131,165	\$	2,054,920
Provincial Rate Protection						\$ 1,232,35	-			\$	1,475,400				Ξ	\$ 1,	,660,022				\$ 1,852,825				\$	2,054,920
Monthly Amount Paid by IESO						\$ 102,69	5			\$	122,950	•			_	\$	138,335				\$ 154,402				\$	171,243

Note 1: The difference between the actual costs of approved eligible investments and revenue received from the IESO should be recorded in a variance account. The Board may provide regulatory accounting guidance regarding a variance account either in an individual proceeding or on a generic basis.

Note 2: For the 2016 Test Year, Costs and Revenues of the Direct Benefit are to be included in the test year applicant Rate Base and Revenues.

PII s Calculation

PILs Calculation					
	2020	2021	2022	2023	2024
Income Tax	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial	Direct Benefit Provincial
Net Income - ROE on Rate Base Amortization (6% DB and 94% P)	\$ 28,887 \$ 452,567 \$ 33,653 \$ 527,226	\$ 33,883 \$ 530,837 \$ 40,144 \$ 628,921	\$ 37,278 \$ 584,026 \$ 45,195 \$ 708,052	\$ 40,779 \$ 638,867 \$ 50,544 \$ 791,849	\$ 44,407 \$ 695,710 \$ 56,224 \$ 880,850
CCA (6% DB and 94% P) Taxable income	-\$ 67,380 -\$ 1,055,624 -\$ 4,840 -\$ 75,831	-\$ 76,270 -\$ 1,194,904 -\$ 2,243 -\$ 35,145	-\$ 81,281 -\$ 1,273,399 \$ 1,192 \$ 18,679	-\$ 86,546 -\$ 1,355,880 \$ 4,777 \$ 74,836	-\$ 92,120 -\$ 1,443,212 \$ 8,512 \$ 133,348
Tax Rate (to be entered)	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%	26.50% 26.50%
Income Taxes Payable Gross Up	-\$ 1,282.67 -\$ 20,095.16	-\$ 594.47 -\$ 9,313.39	\$ 315.95 \$ 4,949.92	\$ 1,265.85 \$ 19,831.58	\$ 2,255.56 \$ 35,337.15
Income Taxes Payable Grossed Up PILs	-\$ 1,745.13 -\$ 27,340.35 -\$ 1,745 -\$ 27,340	-\$ 808.80 -\$ 12,671.27 -\$ 809 -\$ 12,671	\$ 429.87 \$ 6,734.59 \$ 430 \$ 6,735	\$ 1,722.24 \$ 26,981.74 \$ 1,722 \$ 26,982	\$ 3,068.79 \$ 48,077.76 \$ 3,069 \$ 48,078

Toronto Hydro-Electric System Limited
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Exhibit 2A
Tab 6
Schedule 5
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OEB Appendix 2-FB Calculation of Renewable Generation Connection Direct Benefits/Provincial Amount: Renewable Enabling Improvement Investments Generation Protection, Monitoring, and Control

			2020		2021		2022		2023		2024
Net Fixed Assets		-									
Enter applicable amortization in years:	27.5										
Opening Gross Fixed Assets			13,577,298	\$	17,271,048	\$	19,527,548	\$	21,901,048	\$	24,430,548
Gross Capital Additions		\$	3,693,750	\$	2,256,500	\$	2,373,500	\$	2,529,500	\$	2,678,000
Closing Gross Fixed Assets		\$	17,271,048	\$	19,527,548	\$	21,901,048	\$	24,430,548	\$	27,108,548
Opening Accumulated Amortization		\$	1,497,066	\$	2,057,945	\$	2,727,011	\$	3,480,258	\$	4,322,651
Current Year Amortization (before additions)		\$	493,720	\$	628,038	\$	710,093	\$	796,402	\$	888,384
Additions (half-year)		\$	67,159	\$	41,027	\$	43,155	\$	45,991	\$	48,691
Closing Accumulated Amortization		\$	2,057,945	\$	2,727,011	\$	3,480,258	\$	4,322,651	\$	5,259,725
Opening Net Fixed Assets		\$	12,080,232	\$	15,213,103	\$	16,800,537	\$	18,420,790	\$	20,107,897
Closing Net Fixed Assets		\$	15,213,103	\$	16,800,537	\$	18,420,790	\$	20,107,897	\$	21,848,823
Average Net Fixed Assets		\$	13,646,667	\$	16,006,820	\$	17,610,664	\$	19,264,344	\$	20,978,360
UCC for PILs Calculation											
			2020		2021		2022		2023		2024
Opening UCC		•	12.190.681	\$	14,761,427	•	15,746,752	\$	16,765,572	\$	17.852.646
		\$, ,	\$		\$				ф	, ,
Capital Additions (from Appendix 2-FA) UCC Before Half Year Rule		- \$	3,693,750	-	2,256,500	\$	2,373,500	\$	2,529,500	\$	2,678,000
		\$	15,884,431	\$	17,017,927	\$	18,120,252	\$	19,295,072	\$	20,530,646
Half Year Rule (1/2 Additions - Disposals)		\$	1,846,875		1,128,250	\$	1,186,750		1,264,750		1,339,000
Reduced UCC	47	\$	14,037,556 47	\$	15,889,677 47	\$	16,933,502 47	\$	18,030,322 47	\$	19,191,646 47
CCA Rate Class (to be entered)					**		**		**		**
CCA Rate (to be entered)	8%	_	8%	•	8%	•	8%	•	8%	•	8%
CCA		\$	1,123,004	\$	1,271,174	\$	1,354,680	\$	1,442,426	\$	1,535,332
Closing UCC		\$	14,761,427	\$	15,746,752	\$	16,765,572	\$	17,852,646	\$	18,995,315