

Hydro Ottawa Limited EB-2019-0261 Exhibit 2 Tab 1 Schedule 1 UPDATED May 5, 2020 Page 1 of 19

#### **UPDATED** RATE BASE OVERVIEW

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#### 3 1. INTRODUCTION

4 This Schedule provides an overview of Hydro Ottawa's distribution rate base and a discussion 5 of year-over-year variances.

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- 7 In accordance with the OEB's Chapter 2 Filing Requirements for Electricity Distribution Rate
- 8 Applications, as updated on July 12, 2018 and amended on July 15, 2019, the rate base used to
- 9 determine the revenue requirement for the Test Years should be presented. This Schedule
- 10 provides yearly information on Hydro Ottawa's rate base, including information on forecast net
- 11 fixed assets, calculated on a mid-year average basis, along with working capital allowance
- 12 ("WCA"). Net fixed assets are gross assets in service minus accumulated amortization and
- 13 contributed capital.

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- 15 The capital expenditure plan for the 2021-2025 period is outlined in UPDATED Exhibit 2-4-1:
- 16 Capital Expenditure Summary, Exhibit 2-4-2: Capital Expenditure Details, and Exhibit 2-4-3:
- 17 Distribution System Plan. Details regarding WCA can be found in **UPDATED** Exhibit 2-3-1:
- 18 Working Capital Requirement.

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#### 20 2. SUMMARY OF 2016-2020 APPROVED AND ACTUAL RATE BASE

- 21 Table 1 below shows Hydro Ottawa's approved rate base values for 2016-2020, as per the
- 22 Approved Settlement Agreement governing the utility's 2016-2020 rate term. Table 1 provides
- 23 the opening, closing, and average balances for gross assets and accumulated depreciation. The
- 24 table further provides the closing balance for net fixed assets and Hydro Ottawa's WCA.

- 26 Amounts in Table 1 do not include fixed assets related to items that have been removed from
- 27 base rates, and recorded into Regulatory Accounts, as per the Approved Settlement
- 28 Agreement. These items are the following: the utility's new administrative and operations

<sup>&</sup>lt;sup>29</sup> Ontario Energy Board, *Decision and Order*, EB-2015-0004 (December 22, 2015).



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- 1 facilities, as described in **UPDATED** Attachment 2-1-1(A): New Administrative Office and
- 2 Operations Facilities; and Connection Cost Recovery Agreement ("CCRA") payments, as
- 3 described in UPDATED Exhibit 9-1-3: Group 2 Accounts.

## Table 1 – Summary of Approved 2016-2020 Rate Base With Adjustments (\$'000s)

	2016	2017	2018	2019	2020
Opening Gross Assets	\$810,428	\$882,472	\$962,598	\$1,050,061	\$1,111,912
Closing Gross Assets	\$882,472	\$962,598	\$1,050,061	\$1,111,912	\$1,218,811
Average Gross Assets	\$846,450	\$922,535	\$1,006,329	\$1,080,986	\$1,165,362
Opening Accumulated Depreciation	\$(70,764)	\$(110,130)	\$(152,675)	\$(198,050)	\$(245,195)
Closing Accumulated Depreciation	\$(110,130)	\$(152,675)	\$(198,050)	\$(245,195)	\$(293,565)
Average Accumulated Depreciation	\$(90,447)	\$(131,402)	\$(175,363)	\$(221,623)	\$(269,380)
Opening Net Book Value	\$739,664	\$772,342	\$809,923	\$852,011	\$866,717
Closing Net Book Value	\$772,342	\$809,923	\$852,011	\$866,717	\$925,246
Average Net Book Value	\$756,003	\$791,132	\$830,967	\$859,364	\$895,981
Working Capital Allowance	\$77,116	\$78,617	\$81,882	\$76,760	77,820
RATE BASE <sup>2</sup>	\$833,119	\$869,749	\$912,849	\$936,124	\$973,801

7 To facilitate comparisons with Table 1, the updated version of Table 2 below shows Hydro

- 8 Ottawa's approved 2016-2020 rate base without adjustments for the inclusion of the new
- 9 administrative and operations facilities and new CCRA.

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<sup>10 &</sup>lt;sup>2</sup> Totals may not sum due to rounding.



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## Table 2 – AS ORIGINALLY SUBMITTED – Summary of 2016-2020 Rate Base Without Adjustments (\$'000s)

	Approved	Hi	storical Yea	Bridge	Years	
	2016	2016	2017	2018	2019	2020
Opening Gross Assets	\$810,428	\$822,731	\$902,630	\$992,882	\$1,089,257	\$1,177,108
Closing Gross Assets	\$882,472	\$902,630	\$992,882	\$1,089,257	\$1,177,108	\$1,257,217
Average Gross Assets	\$846,450	\$862,681	\$947,756	\$1,041,070	\$1,133,182	\$1,217,162
Opening Accumulated Depreciation	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,925)	\$(232,568)
Closing Accumulated Depreciation	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,925)	\$(232,568)	\$(279,866)
Average Accumulated Depreciation	\$(90,447)	\$(91,509)	\$(129,855)	\$(171,099)	\$(213,247)	\$(256,217)
Opening Net Book Value	739,664	751,151	791,193	844,609	895,332	944,540
Closing Net Book Value	\$772,342	\$791,193	\$844,609	\$895,332	\$944,539	\$977,351
Average Net Book Value	\$756,003	\$771,172	\$817,901	\$869,971	\$919,936	\$960,945
Working Capital Allowance	\$77,116	\$82,676	\$75,590	\$74,431	\$76,221	\$77,789
RATE BASE (net of exclusions) <sup>3</sup>	\$833,119	\$853,848	\$893,491	\$944,402	\$996,157	\$1,038,734

#### 4 Table 2 – UPDATED FOR 2019 ACTUALS – Summary of 2016-2020 Rate Base Without Adjustments (\$'000s) 5

	Approved	Historical Years				Bridge Years
	2016	2016	2017	2018	2019	2020
Opening Gross Assets	\$810,428	\$822,731	\$902,630	\$992,882	\$1,089,257	\$1,182,029
Closing Gross Assets	\$882,472	\$902,630	\$992,882	\$1,089,257	\$1,182,029	\$1,263,967
Average Gross Assets	\$846,450	\$862,681	\$947,756	\$1,041,070	\$1,135,643	\$1,222,998
Opening Accumulated Depreciation	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,925)	\$(225,440)
Closing Accumulated Depreciation	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,925)	\$(225,440)	\$(272,718)
Average Accumulated Depreciation	\$(90,447)	\$(91,509)	\$(129,855)	\$(171,099)	\$(209,682)	\$(249,079)
Opening Net Book Value	\$739,664	\$751,151	\$791,193	\$844,609	\$895,332	\$956,589
Closing Net Book Value	\$772,342	\$791,193	\$844,609	\$895,332	\$956,589	\$991,249
Average Net Book Value	\$756,003	\$771,172	\$817,901	\$869,971	\$925,961	\$973,919
Working Capital Allowance	\$77,116	\$82,676	\$75,590	\$74,431	\$73,638	\$77,997
RATE BASE (net of exclusions) <sup>4</sup>	\$833,119	\$853,848	\$893,491	\$944,402	\$999,599	\$1,051,916

 $<sup>\</sup>stackrel{6}{7}\,\,\,^{3}$  Totals may not sum due to rounding.  $^{4}$  Totals may not sum due to rounding.



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- 1 The updated version of Table 3 below reconciles Hydro Ottawa's approved, Historical Year, and
- 2 Bridge Year rate base for 2016-2020, adjusted to include the new administrative and operations
- 3 facilities and new CCRA. UPDATED Appendix 2-BA includes the fixed assets related to items
- 4 held outside base rates (see **UPDATED** Attachments 2-2-1(A) through (J)). The revenue
- 5 requirement related to the aforementioned assets is approved to be recorded in regulatory
- 6 assets during the 2016-2020 period. Hydro Ottawa is requesting to place these assets (i.e. new
- 7 facilities and new CCRA) into rate base at their net book value in the 2021 Test Year.



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## Table 3 – AS ORIGINALLY SUBMITTED – Summary of Adjustments to Rate Base

2 2016-2020 (\$'000s)

	Approved	Hi	storical Yea	rs	Bridge	Years
	2016	2016	2017	2018	2019	2020
	Gros	s Assets				
Opening Gross Assets - net of exclusions	\$810,428	\$822,731	\$902,630	\$992,882	\$1,089,257	\$1,177,108
Excluded Item: New Facilities	\$19,493	\$19,493	\$19,493	\$19,697	\$19,693	\$99,543
Excluded Item: New CCRA	\$0	\$0	\$0	\$706	\$3,381	\$13,258
Adjusted Opening Gross Assets⁵	\$829,921	\$842,224	\$922,123	\$1,013,285	\$1,112,335	\$1,289,909
Closing Gross Assets - net of exclusions	\$882,472	\$902,630	\$992,882	\$1,089,257	\$1,177,108	\$1,257,217
Excluded Item: New Facilities	\$19,493	\$19,493	\$19,697	\$19,697	\$99,543	\$99,543
Excluded Item: New CCRA	\$0	\$0	\$706	\$3,381	\$13,258	\$14,169
Adjusted Closing Gross Assets	\$901,965	\$922,123	\$1,013,285	\$1,112,335	\$1,289,909	\$1,370,929
Accumulated Depreciation						
Opening Accumulated Depreciation - net of exclusions	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,925)	\$(232,568)
Excluded Item: New Facilities	\$0	\$0	\$0	\$0	\$0	\$1,792
Excluded Item: New CCRA	\$0	\$0	\$0	\$0	\$36	\$162
Adjusted Opening Accumulated Depreciation	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,961)	\$(234,522)
Net Closing Accumulated Depreciation - net of exclusions	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,925)	\$(232,568)	\$(279,866)
Excluded Item: New Facilities	\$0	\$0	\$0	\$0	\$(1,792)	\$(4,452)
Excluded Item: New CCRA	\$0	\$0	\$0	\$36	\$(162)	\$(459)
Adjusted Closing Accumulated Depreciation	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,961)	\$(234,522)	\$(284,777)
	Adjusted N	et Book Val	ue			
Adjusted Opening Net Book Value	\$759,157	\$770,644	\$810,686	\$865,012	\$918,374	\$1,055,387
Adjusted Closing Net Book Value	\$791,835	\$810,686	\$865,012	\$918,374	\$1,055,387	\$1,086,152
Adjusted Average Net Book Value	\$775,496	\$790,665	\$837,849	\$891,693	\$986,881	\$1,070,769
Working Capital Allowance	\$77,116	\$82,676	\$75,590	\$74,431	\$76,221	\$77,789
ADJUSTED RATE BASE <sup>6</sup>	\$852,612	\$873,341	\$913,439	\$966,124	\$1,063,102	\$1,148,558

<sup>&</sup>lt;sup>4</sup> <sup>5</sup> This aligns with UPDATED Attachments 2-2-1(A) through (E): OEB Appendices 2-BA - Fixed Asset Continuity

<sup>5</sup> Schedules for the years 2016 through 2025, and includes new facilities and new CCRA.
6 Totals may not sum due to rounding.



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# Table 3 – UPDATED FOR 2019 ACTUALS – Summary of Adjustments to Rate Base

2016-2020 (\$'000s)

	Approved	d Historical Years				Bridge Years
	2016	2016	2017	2018	2019	2020
	Gross	s Assets				
Opening Gross Assets - net of exclusions	\$810,428	\$822,731	\$902,630	\$992,882	\$1,089,257	\$1,182,029
Excluded Item: New Facilities	\$19,493	\$19,493	\$19,493	\$19,697	\$19,697	\$99,545
Excluded Item: New CCRA	\$0	\$0	\$0	\$706	\$3,381	\$12,892
Adjusted Opening Gross Assets <sup>7</sup>	\$829,921	\$842,224	\$922,123	\$1,013,285	\$1,112,335	\$1,294,466
Closing Gross Assets - net of exclusions	\$882,472	\$902,630	\$992,882	\$1,089,257	\$1,182,029	\$1,263,967
Excluded Item: New Facilities	\$19,493	\$19,493	\$19,697	\$19,697	\$99,545	\$99,545
Excluded Item: New CCRA	\$0	\$0	\$706	\$3,381	\$12,892	\$13,802
Adjusted Closing Gross Assets	\$901,965	\$922,123	\$1,013,285	\$1,112,335	\$1,294,466	\$1,377,314
Accumulated Depreciation						
Opening Accumulated Depreciation - net of exclusions	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,925)	\$(225,440)
Excluded Item: New Facilities	\$0	\$0	\$0	\$0	\$0	\$(1,778)
Excluded Item: New CCRA	\$0	\$0	\$0	\$0	\$36	\$(216)
Adjusted Opening Accumulated Depreciation	\$(70,764)	\$(71,580)	\$(111,437)	\$(148,273)	\$(193,889)	\$(227,434)
Net Closing Accumulated Depreciation - net of exclusions	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,925)	\$(225,440)	\$(272,718)
Excluded Item: New Facilities	\$0	\$0	\$0	\$0	\$(1,778)	\$(4,438)
Excluded Item: New CCRA	\$0	\$0	\$0	\$36	\$(216)	\$(513)
Adjusted Closing Accumulated Depreciation	\$(110,130)	\$(111,437)	\$(148,273)	\$(193,961)	\$(227,434)	\$(277,670)
	Adjusted N	et Book Val	ue			
Adjusted Opening Net Book Value	\$759,157	\$770,644	\$810,686	\$865,012	\$918,374	\$1,067,032
Adjusted Closing Net Book Value	\$791,835	\$810,686	\$865,012	\$918,374	\$1,067,032	\$1,099,644
Adjusted Average Net Book Value	\$775,496	\$790,665	\$837,849	\$891,693	\$992,703	\$1,083,338
Working Capital Allowance	\$77,116	\$82,676	\$75,590	\$74,431	\$73,638	\$77,997
ADJUSTED RATE BASE <sup>8</sup>	\$852,612	\$873,341	\$913,439	\$966,124	\$1,066,341	\$1,161,335

<sup>&</sup>lt;sup>3</sup> This aligns with Attachments UPDATED 2-2-1(A) through (E): OEB Appendices 2-BA - Fixed Asset Continuity

<sup>4</sup> Schedules for the years 2016 through 2025, and includes new facilities and new CCRA.

8 Totals may not sum due to rounding.



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1 The difference between the closing 2020 gross assets after accounting for 2019 actuals in the

2 updated version of Table 2 above and the opening 2021 gross assets in Table 4, as updated

<sup>3</sup> below, relate to adding back into rate base assets whose revenue requirement was recorded

4 into a Regulatory Account in 2016-2020.

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#### AS ORIGINALLY SUBMITTED

2020 Closing Gross Assets	\$1,257,217
New Administrative Office & Operations Facilities	\$99,543
CCRA	\$14,169
2021 Opening Gross Assets	\$1,370,929

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#### **UPDATED FOR 2019 ACTUALS**

2020 Closing Gross Assets	\$1,263,967
New Administrative Office & Operations Facilities	\$99,545
CCRA	\$13,802
2021 Opening Gross Assets	\$1,377,314

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Similarly, after accounting for 2019 actuals, the difference between the closing 2020 accumulated depreciation in the updated version of Table 2 above and the opening 2021 accumulated depreciation in Table 4, as updated below, also relates to adding back into rate base assets whose revenue requirement was recorded into a Regulatory Account in 2016-2020.

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#### **AS ORIGINALLY SUBMITTED**

2020 Closing Accumulated Depreciation	\$279,866
New Administrative Office & Operations Facilities	\$4,452
CCRA	\$459
2021 Opening Accumulated Depreciation	\$284,777



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#### **UPDATED FOR 2019 ACTUALS**

2020 Closing Accumulated Depreciation	\$272,719
New Administrative Office & Operations Facilities	\$4,438
CCRA	\$513
2021 Opening Accumulated Depreciation	\$277,670

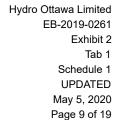
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- 3 Hydro Ottawa's previously-owned facilities (Albion land and building, and Merivale land and
- 4 building) were disposed of in September 2019 and November 2019, respectively. Those
- 5 previously-owned facilities' net book value was therefore removed from rate base as of the
- 6 applicable months.

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#### 8 3. SUMMARY OF PROPOSED 2021-2025 RATE BASE

9 Table 4, as updated below, provides a summary of Hydro Ottawa's proposed rate base for the 10 2021-2025 rate period.





## Table 4 – AS ORIGINALLY SUBMITTED – Summary of 2021-2025 Rate Base (\$'000s)<sup>9</sup>

	Test Years					
	2021	2022	2023	2024	2025	
Opening Gross Assets	\$1,370,929	\$1,517,861	\$1,634,839	\$1,710,177	\$1,790,724	
Closing Gross Assets	\$1,517,861	\$1,634,839	\$1,710,177	\$1,790,724	\$1,911,057	
Average Gross Assets	\$1,444,395	\$1,576,350	\$1,672,508	\$1,750,450	\$1,850,891	
Opening Accumulated Depreciation	\$(284,777)	\$(334,623)	\$(389,254)	\$(446,435)	\$(505,659)	
Closing Accumulated Depreciation	\$(334,623)	\$(389,254)	\$(446,435)	\$(505,659)	\$(568,753)	
Average Accumulated Depreciation	\$(309,700)	\$(361,938)	\$(417,845)	\$(476,047)	\$(537,206)	
Opening Net Book Value	\$1,086,152	\$1,183,238	\$1,245,585	\$1,263,741	\$1,285,065	
Closing Net Book Value	\$1,183,238	\$1,245,585	\$1,263,741	\$1,285,065	\$1,342,304	
Average Net Fixed Assets	\$1,134,695	\$1,214,412	\$1,254,663	\$1,274,403	\$1,313,685	
Working Capital Allowance	\$83,965	\$89,510	\$94,956	\$102,402	\$106,078	
RATE BASE <sup>10</sup>	\$1,218,659	\$1,303,922	\$1,349,619	\$1,376,805	\$1,419,763	

## 3 Table 4 - UPDATED FOR 2019 ACTUALS - Summary of 2021-2025 Rate Base (\$'000s)<sup>11</sup>

			Test Years		
	2021	2022	2023	2024	2025
Opening Gross Assets	\$1,377,314	\$1,519,485	\$1,640,374	\$1,715,712	\$1,796,259
Closing Gross Assets	\$1,519,485	\$1,640,374	\$1,715,712	\$1,796,259	\$1,916,592
Average Gross Assets	\$1,448,400	\$1,579,930	\$1,678,043	\$1,755,985	\$1,856,426
Opening Accumulated Depreciation	\$(277,670)	\$(327,398)	\$(381,867)	\$(438,922)	\$(498,020)
Closing Accumulated Depreciation	\$(327,398)	\$(381,867)	\$(438,922)	\$(498,020)	\$(560,987)
Average Accumulated Depreciation	\$(302,534)	\$(354,633)	\$(410,395)	\$(468,471)	\$(529,503)
Opening Net Book Value	\$1,099,644	\$1,192,087	\$1,258,507	\$1,276,789	\$1,298,240
Closing Net Book Value	\$1,192,087	\$1,258,507	\$1,276,789	\$1,298,240	\$1,355,605
Average Net Fixed Assets	\$1,145,866	\$1,225,297	\$1,267,648	\$1,287,515	\$1,326,923
Working Capital Allowance	\$84,870	\$90,411	\$95,934	\$103,375	\$107,049
RATE BASE <sup>12</sup>	\$1,230,736	\$1,315,708	\$1,363,582	\$1,390,890	\$1,433,972

<sup>&</sup>lt;sup>4</sup> <sup>9</sup> Figures in Table 4 include Facilities and CCRA.

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<sup>5 10</sup> Totals may not sum due to rounding.

<sup>6 &</sup>lt;sup>11</sup> Figures in the updated version of Table 4 include Facilities and CCRA.

<sup>7 12</sup> Totals may not sum due to rounding.



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#### 1 4. 2016-2020 RATE BASE VARIANCES - APPROVED VS. ACTUALS

- 2 Table 5, as updated below, shows the variances between the OEB-approved rate base amounts
- 3 (Table 1 above) and the Historical Year and Bridge Year amounts (Table 2, as updated above),
- 4 without adjustments to rate base for inclusions of assets that are requested for inclusion in rate
- 5 base as of January 1, 2021.

Table 5 – AS ORIGINALLY SUBMITTED – Variances in 2016-2020 Rate Base Without Adjustments - OEB-Approved vs. Historical and Bridge Year Amounts (\$'000s)

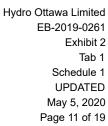
	Actual			Bridge		
	2016	2017	2018	2019	2020	
Opening Gross Assets	\$12,303	\$20,158	\$30,284	\$39,196	\$65,196	
Closing Gross Assets	\$20,158	\$30,284	\$39,196	\$65,196	\$38,406	
Average Gross Assets	\$16,231	\$25,221	\$34,740	\$52,196	\$51,801	
Opening Accumulated Depreciation	\$(816)	\$(1,307)	\$4,402	\$4,125	\$12,627	
Closing Accumulated Depreciation	\$(1,307)	\$4,402	\$4,125	\$12,627	\$13,699	
Average Accumulated Depreciation	\$(1,062)	\$1,548	\$4,264	\$8,376	\$13,163	
Average Net Fixed Assets	\$15,169	\$26,769	\$39,004	\$60,572	\$64,964	
Working Capital Allowance	\$5,560	\$(3,027)	\$(7,452)	\$(539)	\$(31)	
RATE BASE <sup>13</sup>	\$20,729	\$23,742	\$31,553	\$60,033	\$64,933	

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<sup>10 &</sup>lt;sup>13</sup> Totals may not sum due to rounding.





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# Table 5 – UPDATED FOR 2019 ACTUALS – Variances in 2016-2020 Rate Base Without Adjustments - OEB-Approved vs. Historical and Bridge Year Amounts (\$'000s)

		Actual				
	2016	2017	2018	2019	2020	
Opening Gross Assets	\$12,303	\$20,158	\$30,284	\$39,196	\$70,117	
Closing Gross Assets	\$20,158	\$30,284	\$39,196	\$70,117	\$45,156	
Average Gross Assets	\$16,231	\$25,221	\$34,740	\$54,656	\$57,636	
Opening Accumulated Depreciation	\$(816)	\$(1,307)	\$4,402	\$4,125	\$19,755	
Closing Accumulated Depreciation	\$(1,307)	\$4,402	\$4,125	\$19,755	\$20,847	
Average Accumulated Depreciation	\$(1,062)	\$1,548	\$4,264	\$11,940	\$20,301	
Average Net Fixed Assets	\$15,169	\$26,769	\$39,004	\$66,597	\$77,937	
Working Capital Allowance	\$5,560	\$(3,027)	\$(7,452)	\$(3,122)	\$176	
RATE BASE <sup>14</sup>	\$20,729	\$23,742	\$31,553	\$63,475	\$78,115	

4 The following section provides high-level rate base variance explanations. For additional details

5 regarding capital variances, please refer to **UPDATED** Exhibit 2-4-1: Capital Expenditure

6 Summary or Attachment 2-4-3(E): Material Investments. For more information on Capital

7 Additions, please see **UPDATED** Exhibit 2-2-1: Assets - Property, Plant & Equipment Continuity

8 Schedule. In addition, for details related to WCA, please see UPDATED Exhibit 2-3-1: Working

9 Capital Requirement.

#### 11 4.1. 2016 ACTUAL vs. 2016 APPROVED

- Hydro Ottawa's average net fixed assets were \$15.2M higher than the OEB-approved amounts. This was largely due to increases in emergency renewal work related to severe storms, increased spending in the Corrective Renewal Program, and CCRA true-up payments to Hydro One Networks Inc. ("HONI") related to the Hinchey substation.
- An additional \$5.6M in WCA was required in 2016 as a result of higher Power Supply Expenses than estimated, mainly in relation to the commodity and Global Adjustment expense. This was partially offset by a lower Wholesale cost than estimated.

<sup>&</sup>lt;sup>20</sup> <sup>14</sup> Totals may not sum due to rounding.



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### 1 4.2. 2017 ACTUAL vs. 2017 APPROVED

- Hydro Ottawa's average net fixed assets for 2017 were \$26.8M higher than approved amounts due, in part, to the previous year's balance and an increase in 2017 in customer-driven demand work related to the following: residential and commercial infills and/or subdivisions; the City of Ottawa's Light Rail Transit project; and unforecasted embedded generation nameplate credit. In addition, a new Human Resources software module was added to the enterprise resource planning system upgrade project, which increased its overall project cost.
- In 2017, \$3.0M less WCA was required mainly as a result of lower Power Supply Expenses than estimated. The larger than estimated Global Adjustment expense was offset by the lower than anticipated Commodity and Wholesale expense.

13 **4.3. 2018 ACTUAL vs. 2018 APPROVED** 

- Hydro Ottawa's average net fixed assets for 2018 were \$39.0M higher than approved amounts due, in large part, to the previous year's balance, emergency work from three severe storms (including the September 2018 tornadoes), and a sustained increase in System Access demands, including from museums and large industrial complexes.
- In 2018, \$7.4M less WCA was required as a result of a lower Power Supply Expenses than estimated. With the exception of the Transmission Connection charge, which had a negative variance, all other charges were lower than anticipated or very close to the estimate.

23 **4.4. 2019 BRIDGE YEAR vs. 2019 APPROVED** 

As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets for 2019 are set to be \$60.6M higher than approved amounts due, in part, to the previous year's balance and the capitalization of three large substation projects (Merivale DS, Overbrook DS, and Richmond South DS). For more details on these projects, please refer to Exhibit 2-4-3: Distribution System Plan.



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• For 2019, the WCA is set to be mainly in-line with approved amounts, as Hydro Ottawa has maintained the original estimate of Power Supply Expenses from the 2016-2020 rate application for 2019. With the goal of being consistent with the working capital rate used in the Test Years, Hydro Ottawa has used 7.5% as the working capital rate percentage for the 2019 Bridge Year.

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#### 2019 ACTUAL vs. 2019 APPROVED

- Accounting for 2019 actuals, Hydro Ottawa's average net fixed assets for 2019 are \$66.6M higher than the 2019 approved. The \$6.0M variance from the 2019 forecast to the 2019 actual net fixed assets is mainly due to the increase in system access in residential subdivisions.
- In 2019, the main driver for \$3.1M less WCA was lower Power Supply Expenses than estimated. When accounting for 2019 actuals, Hydro Ottawa used the OEB-approved 7.55% for the working capital percentage rate for 2019.

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#### 16 4.5. 2020 BRIDGE YEAR vs. 2020 APPROVED

- Hydro Ottawa's average net fixed assets for the 2020 Bridge Year is budgeted to be \$65.0M higher than the previously approved amount for 2020, largely as a result of overages in the previous years' balances.
- For 2020, the WCA is mainly in-line with approved amounts, as Hydro Ottawa has maintained the original estimate of Power Supply Expenses from the 2016-2020 rate application for 2020. With the goal of being consistent with the working capital rate used in the Test Years, Hydro Ottawa has used 7.5% as the working capital rate percentage for 2020 in the utility's original Application. To be consistent with the Approved Settlement Agreement, Hydro Ottawa has used the OEB approved 7.52% as the working capital percentage rate for the 2020 Bridge Year.



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#### 1 5. 2016-2025 YEAR-OVER-YEAR RATE BASE VARIANCES

- 2 The updated version of Table 6 below provides the year-over-year change in rate base from
- 3 2016-2025. Further details for the annual changes are provided in the subsections which follow.

## 5 Table 6 – AS ORIGINALLY SUBMITTED – Year-over-Year Change in Rate Base (\$'000s)

	2017 vs. 2016	2018 vs. 2017	2019 vs. 2018	2020 vs. 2019	2021 vs. 2020	2022 vs. 2021	2023 vs. 2022	2024 vs. 2023	2025 vs. 2024
Opening Gross Assets	\$79,899	\$90,252	\$96,375	\$87,851	\$193,821	\$146,933	\$116,978	\$75,337	\$80,548
Closing Gross Assets	\$90,252	\$96,375	\$87,851	\$80,109	\$260,645	\$116,978	\$75,337	\$80,548	\$120,333
Average Gross Assets	\$85,076	\$93,314	\$92,113	\$83,980	\$227,233	\$131,955	\$96,158	\$77,943	\$100,440
Opening Accumulated Depreciation	\$(39,857)	\$(36,836)	\$(45,652)	\$(38,643)	\$(52,209)	\$(49,846)	\$(54,631)	\$(57,182)	\$(59,224)
Closing Accumulated Depreciation	\$(36,836)	\$(45,652)	\$(38,643)	\$(47,298)	\$(54,757)	\$(54,631)	\$(57,182)	\$(59,224)	\$(63,094)
Average Accumulated Depreciation	\$(38,347)	\$(41,244)	\$(42,148)	\$(42,971)	\$(53,483)	\$(52,238)	\$(55,906)	\$(58,203)	\$(61,159)
Average Net Fixed Assets	\$46,729	\$52,070	\$49,965	\$41,009	\$173,750	\$79,717	\$40,251	\$19,740	\$39,282
Working Capital Allowance	\$(7,086)	\$(1,159)	\$1,790	\$1,568	\$6,176	\$5,545	\$5,446	\$7,446	\$3,676
RATE BASE <sup>15</sup>	\$39,643	\$50,911	\$51,755	\$42,577	\$179,926	\$85,262	\$45,697	\$27,186	\$42,958

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 $<sup>^{7}</sup>$  Totals may not sum due to rounding.



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## Table 6 – UPDATED FOR 2019 ACTUALS – Year-over-Year Change in Rate Base (\$'000s)

	2017 vs. 2016	2018 vs. 2017	2019 vs. 2018	2020 vs. 2019	2021 vs. 2020	2022 vs. 2021	2023 vs. 2022	2024 vs. 2023	2025 vs. 2024
Opening Gross Assets	\$79,899	\$90,252	\$96,375	\$92,772	\$195,285	\$142,172	\$120,889	\$75,337	\$80,548
Closing Gross Assets	\$90,252	\$96,375	\$92,772	\$81,938	\$255,519	\$120,889	\$75,337	\$80,548	\$120,333
Average Gross Assets	\$85,076	\$93,314	\$94,573	\$87,355	\$225,402	\$131,530	\$98,113	\$77,943	\$100,440
Opening Accumulated Depreciation	\$(39,857)	\$(36,836)	\$(45,652)	\$(31,515)	\$(52,230)	\$(49,728)	\$(54,469)	\$(57,055)	\$(59,097)
Closing Accumulated Depreciation	\$(36,836)	\$(45,652)	\$(31,515)	\$(47,279)	\$(54,680)	\$(54,469)	\$(57,055)	\$(59,097)	\$(62,967)
Average Accumulated Depreciation	\$(38,347)	\$(41,244)	\$(38,583)	\$(39,397)	\$(53,455)	\$(52,099)	\$(55,762)	\$(58,076)	\$(61,032)
Average Net Fixed Assets	\$46,729	\$52,070	\$55,990	\$47,958	\$171,947	\$79,432	\$42,351	\$19,866	\$39,408
Working Capital Allowance	\$(7,086)	\$(1,159)	\$ (793)	\$ 4,358	\$ 6,874	\$ 5,541	\$ 5,523	\$ 7,441	\$ 3,674
RATE BASE <sup>16</sup>	\$39,643	\$50,911	\$ 55,197	\$ 52,317	\$ 178,820	\$ 84,972	\$ 47,874	\$ 27,308	\$ 43,082

#### 3 5.1. 2017 ACTUAL vs. 2016 ACTUAL

- Hydro Ottawa's average net fixed assets for 2017 were \$46.7M higher than 2016 due to capital additions in 2017.
- In 2017, WCA was \$7.1M less than 2016 due to a decrease in Power Supply Expenses.

## 8 5.2. 2018 ACTUAL vs. 2017 ACTUAL

- Hydro Ottawa's average net fixed assets for 2018 were \$52.1M higher than 2017 due to
   capital additions in 2018.
- In 2018, WCA was \$1.2M less compared to 2017. This decrease was the result of lower
   Power Supply Expenses.

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<sup>13 &</sup>lt;sup>16</sup> Totals may not sum due to rounding.



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#### 1 5.3. 2019 BRIDGE YEAR vs. 2018 ACTUAL

- As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets
   for 2019 are set to be \$50.0M higher than 2018 due to capital additions in 2019.
  - In 2019, WCA is likewise estimated to be \$1.8M more than 2018 due to an increase in Power Supply Expenses, as submitted in Hydro Ottawa's original Application.

## 2019 ACTUAL vs. 2018 ACTUAL

- Accounting for 2019 actuals, Hydro Ottawa's average net fixed assets for 2019 were \$56.0M higher than 2018 due to capital additions in 2019.
- In addition, WCA was \$0.8M less than 2018 mainly as a result of a lower approved WCA percentage.

#### 13 **5.4. 2020 BRIDGE YEAR vs. 2019 BRIDGE YEAR**

- As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets for 2020 are budgeted to be \$41.0M higher than 2019 due to capital additions in 2020.
- In 2020, WCA is likewise estimated to increase \$1.6M over 2019 due to anticipated increases in Power Supply Expenses, as submitted in Hydro Ottawa's original Application.

#### 2020 BRIDGE YEAR vs. 2019 ACTUAL

- Hydro Ottawa's average net fixed assets for 2020 are budgeted to be \$48M higher than 2019 actual net fixed assets due to capital additions in 2020.
- In Bridge Year 2020, WCA is estimated to increase \$4.4M over 2019 actuals due to anticipated increases in Power Supply Expenses and Operations, Maintenance and Administration Expenses.

#### 27 5.5. **2021 TEST YEAR vs. 2020 BRIDGE YEAR**

As originally submitted, Hydro Ottawa's average net fixed assets for 2021 are budgeted
 to be \$173.8M higher than 2020 due to capital additions in 2021. Accounting for 2019



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- actuals, however, the 2021 average net fixed assets are budgeted to be \$171.9M higher than 2020. These include \$50.0M in additions related to Cambrian Municipal Transformer Station ("MTS").<sup>17</sup> In addition, the inclusion of adjustments to rate base of items that were previously held outside base rates (i.e. new facilities and new CCRA for 2016-2020 see section 2 above) is likewise planned, with these assets being added at their net book value in the 2021 Test Year.
  - In 2021, the WCA (as originally submitted) is estimated to increase \$6.2M over 2020 mainly due to increases in Power Supply Expenses. Based on 2019 actuals, the WCA is estimated to increase \$6.9M over 2020. For more information on WCA, please refer to UPDATED Exhibit 2-3-1: Working Capital Requirement.<sup>18</sup>

## 12 **5.6. 2022 TEST YEAR vs. 2021 TEST YEAR**

- As submitted by the utility in its original Application, Hydro Ottawa's average net fixed assets for 2022 are budgeted to be \$79.7M higher than 2021 due to capital additions in 2022. Based on 2019 actual net fixed assets, Hydro Ottawa's average net fixed assets for 2022 are budgeted to be \$79.4M higher than 2021. These additions include \$26.9M related to Cambrian MTS.
  - In 2022, the WCA is estimated to increase \$5.5M over 2021 mainly due to increases in Power Supply Expenses.

#### 21 5.7. 2023 TEST YEAR vs. 2022 TEST YEAR

As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets for 2023 are budgeted to be \$40.3M higher than 2022 due to capital additions in 2023.
 Based on 2019 actual net fixed assets, Hydro Ottawa's average net fixed assets for 2022 are budgeted to be \$42.4M higher than 2021.

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<sup>&</sup>lt;sup>26</sup> For more information on Cambrian MTS, please see Attachment 2-4-3(E): Material Investments.

<sup>&</sup>lt;sup>27</sup> <sup>18</sup> Please refer to UPDATED Exhibit 2-3-1: Working Capital Requirement for details related to WCA for all of the Test



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• In 2023, the WCA is estimated to increase \$5.4M over 2022 mainly due to increases in Power Supply Expenses. Accounting for 2019 actuals has resulted in a slight change in WCA. It is now estimated to increase \$5.5M over 2022.

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#### 5 5.8. 2024 TEST YEAR vs. 2023 TEST YEAR

- As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets for 2024 are budgeted to be \$19.7M higher than 2023 due to capital additions in 2024.
   Based on 2019 actual net fixed assets, Hydro Ottawa's average net fixed assets for 2024 are budgeted to be \$19.9M higher than 2023.
- In 2014 2024, the WCA is estimated to increase \$7.4M over 2023 due mainly to increases in Power Supply Expenses.

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#### 13 5.9. 2025 TEST YEAR vs. 2024 TEST YEAR

- As submitted in the utility's original Application, Hydro Ottawa's average net fixed assets for 2025 are budgeted to be \$39.3M higher than 2024 due to capital additions in 2025.
   Based on 2019 actual net fixed assets, Hydro Ottawa's average net fixed assets for 2025 are budgeted to be \$39.4M higher than 2024.
  - In 2025, the WCA is estimated to increase \$3.7M over 2024 mainly due to increases in Power Supply Expenses.

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#### 21 6. FACILITIES RENEWAL PROGRAM

Appended to this Schedule is UPDATED Attachment 2-1-1(A): New Administrative Office and Operations Facilities, which contains detailed information with respect to Hydro Ottawa's Facilities Renewal Program ("FRP"). This includes the assessment of prudence of the expenditures over \$66.0M, as required in the Approved Settlement Agreement governing the utility's 2016-2020 rate term.

- 28 In UPDATED Attachment 2-1-1(A): New Administrative Office and Operations Facilities, Table
- 29 12 and the revenue requirement for the FRP have been updated. There was a small change in



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- 1 the final total cost of the project (under \$1,000). In light of the immateriality of this change, the
- 2 Attachment was not updated to reflect it.

- 4 In addition, appended to this Schedule is a copy of the formal report that was prepared by the
- 5 Fairness Commissioner who was engaged by Hydro Ottawa at the outset of the FRP Request
- 6 for Qualifications process. The Fairness Commissioner ultimately concluded that "the
- 7 procurement process for the Facilities Renewal Program Design Build up to the completion of
- 8 the evaluation process was conducted in a fair, open and transparent manner." Please see
- 9 Attachment 2-1-1(B): Fairness Commissioner Report for further details.



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#### **UPDATED NEW ADMINISTRATIVE OFFICE AND OPERATIONS FACILITIES**

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#### 3 1. EXECUTIVE SUMMARY

#### 4 1.1. BACKGROUND

Hydro Ottawa was formed as a result of the amalgamation of five municipalities in the year 2000. At the time of amalgamation, the most advantageous option was to move all central functions to a new, purpose-built facility and to create distributed work centres for all construction and maintenance functions. However, due to the time constraints associated with the amalgamation and the magnitude of the capital decision to be made, all facilities were retained for the time being. As part of its distribution rate application filed in June 2011 (hereinafter referred to as its "2012 Cost of Service application"), a Facilities Strategy was presented and it described the status of facilities and the need to further evaluate and identify the best development solution. At that time Hydro Ottawa requested funding to purchase land, but not did not seek funding for the overall project.

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In its 2016-2020 Custom Incentive Rate-Setting ("Custom IR") application<sup>2</sup> filed April 29, 2015 (hereinafter referred to as its "2016-2020 Custom IR application"), Hydro Ottawa proposed to construct new facilities on two parcels of land that were purchased in 2012 and 2013, namely the Eastern Operations and Administrative Office Building ("East Campus") and a Southern Operations & Warehouse ("South Campus"), collectively referred to as "New Administration and Operations Facilities". In that application, the estimated cost of the New Administration and Operations Facilities was \$92.3M. This funding was for land and to construct new facilities that, amongst other objectives, would:

<sup>&</sup>lt;sup>24</sup> Hvdro Ottawa Limited, 2012 Cost of Service Distribution Rate Application, EB-2011-0054 (June 17, 2011).

 <sup>&</sup>lt;sup>25</sup> <sup>2</sup> Hydro Ottawa Limited, 2016-2020 Custom Incentive Rate-Setting Distribution Rate Application, EB-2015-0004 (April 29, 2015).



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- a) replace end of life buildings;
- b) move Hydro Ottawa's operational centers out of high traffic residential districts to sites
   with ready access to major highways within the Ottawa area;
- 4 c) consolidate operations and administrative staff; and
- 5 d) upgrade the operational centers in order to provide better response to customers.

7 In its Decision and Order dated December 22, 2015³ ("2015 Decision"), the OEB assessed and 8 approved the need for the New Administration and Operation Facilities.

The OEB also approved provisional funding of up to \$66.0M to enable Hydro Ottawa to proceed with the Request for Proposal process while ensuring that the final cost of the New Administration and Operation Facilities would be subject to a prudence review at a future date.

In order for Hydro Ottawa to track actual project cost versus the provisional funding amount, the

14 OEB established a series of deferral accounts.

16 Concurrent with the 2016-2020 Custom IR proceeding, in August 2015 a Request for Qualifications ("RFQ") process was initiated in order to identify potential contractors capable of providing Design Build services in support of the construction of new facilities.

In September 2015 the Strategic Initiatives Oversight Committee ("SIOC") of the Hydro Ottawa Board reviewed the project cost estimate and agreed that based on early indications of increased costs, the budget for the project would be capped at \$96.5M plus interest and overhead. By January 2016 a more detailed estimate of project costs was completed, identifying estimated costs of \$124.7M. This higher project cost estimate was unacceptable to Hydro Ottawa senior management and the Board of Directors and direction was provided to reduce the estimated project cost and scope. Based on this direction a revised plan and estimate was developed, re-confirming a project budget of \$96.5M plus interest and overhead. A Request for

<sup>28</sup> Ontario Energy Board, *Decision and Order*, EB-2015-0004 (December 22, 2015).

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- 1 Proposals ("RFP") was then sent to the top four qualified respondents identified through the
- 2 RFQ process. Competitive bids were received and evaluated and a Design-Build contractor was
- 3 selected for the project.

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- 5 In order to ensure that the procurement process was conducted in a fair, open and transparent
- 6 manner, a Fairness Commissioner was engaged from the outset of the RFQ process to the
- 7 conclusion of the RFP phase. The Commissioner was satisfied that due process was followed.
- 8 The report in its entirety is included in this Application as Attachment 2-1-1(B): Fairness
- 9 Commissioner Report. The project was actively managed by a project team and ongoing
- 10 oversight was provided by Hydro Ottawa senior management and the Hydro Ottawa Board of
- 11 Directors through the SIOC.

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#### 13 1.2. DESCRIPTION OF FACILITIES

14 The new facilities consist of two campuses, described as follows:

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- The East Campus is located at 2711 Hunt Club Rd. and is the new eastern operations centre and administration office. This facility consists of three distinct buildings comprised of:
  - a) an Administrative Office Building ("EC-1"),
- b) an Operations Centre ("EC-2"), and
- c) a Paper Insulated Lead Covered ("PILC") Cable Storage Facility ("EC-3").

2223

There is also a solar generation net metering facility on the property.

2425

Hydro Ottawa moved into this property in stages over the January to May 2019 period.

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2. The South Campus is located at 201 Dibblee Rd. and is the Operations Centre for the south and western portion of Hydro Ottawa service territory. This facility is one



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building ("SC-1") that includes office space, an enclosed garage, warehousing and stores, metering and transformer shops, and storage space. There is also a solar generation net metering facility on the property.

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Hydro Ottawa moved into this property in May 2019.

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The location of the new facilities at Hunt Club Rd. and Dibblee Rd. can be seen in Figure 1.

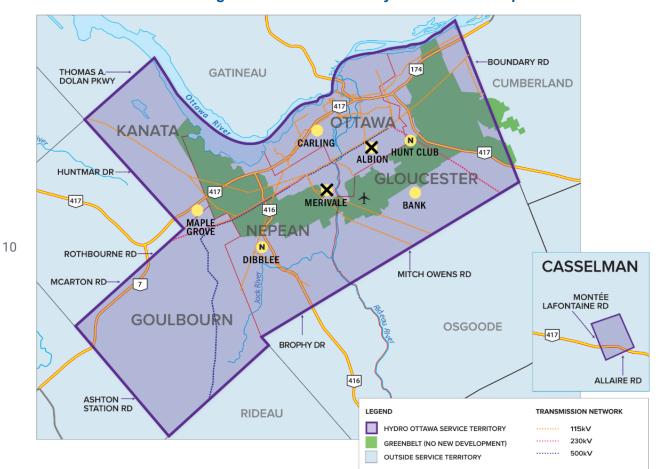


Figure 1 – Service Territory and Location Map



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- 1 In total, 293,873 square feet of New Administration and Operations facilities space has been
- 2 constructed. Table 1 provides a summary of the location, functionality and size of these new
- 3 facilities.

4 5

## **Table 1 – Building Size (Square Feet)**

	Office	Garage	Warehouse / Storage Space	Total
East Campus - Hunt Club Rd.				
EC-1 Building	127,132			127,132
EC-2 Building	10,780	46,735		57,515
EC-3 Building			10,318	10,318
Sub-Total for East Campus	137,912	46,735	10,318	194,965
South Campus - Dibblee Rd.				
SC-1 Building	22,644	42,773	33,491	98,908
TOTAL	160,556	89,508	43,809	293,873

- 7 The main buildings at the East Campus can be seen in Figures 2 and 3 below. The main
- 8 building at the South Campus can be seen in Figure 4 below.



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Figure 2 – East Campus 1



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Figure 3 – East Campus 2 and 3





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Figure 4 – South Campus 1



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#### 4 1.3. COST OF NEW FACILITIES

- 5 The total cost of the New Administration and Operations Facilities investment is \$99.5M
- 6 including land (\$80.0M excluding land). This amount is included in rate base for the 2021-2025
- 7 Test Years in this Application. These costs are summarized below in Table 2 below.



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#### Table 2 – Total Cost of New Administration and Operations Facilities

	Construction + Interest & OH	Land	Total Cost
East Campus			
EC-1 Administrative Office	\$47,311,660		
EC-2 East Operations Centre	\$9,682,771		
EC-3 PILC Storage	\$2,524,621		
	\$59,519,052	\$12,694,254	\$72,213,306
South Campus			
SC-1 South Operations Centre and Warehouse	\$20,530,091	\$6,800,443	\$27,330,534
TOTAL	\$80,049,143	\$19,494,697	\$99,543,840

3 In summary, subsequent to the \$92.3M requested in its 2016-2020 Custom IR proceeding,

4 through the detailed design, estimation, procurement phase and construction process, overall

5 project costs came in \$7.2M higher than the preliminary estimate. Table 3 provides a breakdown

6 of the total project cost compared to the cost projections proposed in its 2016-2020 Custom IR

7 proceeding.

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Table 3 – Comparison of Final Cost to Costs filed in Previous Application

Total Project (\$)	Total Cost	As Filed in 2016-2020 Custom IR Application	Variance (\$)	Variance (%)
- Land	\$19,494,697	\$19,514,000	\$(19,303)	0%
- Construction	\$76,526,966	\$68,902,690	\$7,624,276	11%
Subtotal	\$96,021,663	\$88,416,690		
- Interest & O/H	\$3,522,176	\$3,930,289	\$(408,113)	-10%
TOTAL	\$99,543,840	\$92,346,979	\$7,196,861	8%

11 1.4. PROJECT BENEFITS AND PRUDENCY

12 The guiding principles for the project were collaboration, innovation, flexibility & adaptability,

13 health & wellness and sustainability. Through the construction of the East Campus and South

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1 Campus facilities the identified objectives are being met and the expected benefits are starting

2 to be achieved. These benefits include operational efficiency in areas such as responsiveness

3 to customer trouble calls and outages, work team collaboration, logistics and inventory

4 management, safety and wellbeing, and reduced environmental impact.

5

6 The buildings have been "right sized" and Hydro Ottawa has reduced its workplace space

7 standards. Office sizes are now lower than the Federal Government workplace space standards

8 for most positions and office space per employee is lower than benchmarked LDCs. Land is

9 fully utilized and there is room for nominal future office staff growth through the use of flexible

10 office design and touch-down work stations. Overall, project costs compare favourably to other

1 LDCs when escalation and land costs are taken into consideration.

12

13 The project was prudently managed throughout each phase and had an active governance,

4 reporting and cost control structure. Potentially higher-than-anticipated costs were identified in

15 advance and decisions made on a timely basis regarding appropriate trade-offs and changes.

16

17 Hydro Ottawa has received "value for money" from this project with the stated objectives of the

8 project being achieved and costs comparing favourably to similar construction projects. This

19 was a "once in a generation" capital project and the results will benefit Hydro Ottawa customers

20 over many years to come.

21

22 The following sections provide details on the background of the project, a description of the

23 facilities constructed, a summary of project costs and a demonstration of the various aspects of

24 overall project prudency.



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#### 1 2. BACKGROUND

#### 2 2.1. HISTORY OF NEW ADMINISTRATION AND OPERATIONS FACILITIES PROJECT

In its 2012 Cost of Service application, Hydro Ottawa provided evidence that discussed a strategy to address the future use of facilities acquired through the amalgamation of five municipalities. This evidence also identified the need for new facilities to meet future Administration and Operations facility needs. The facilities strategy identified and evaluated four options that would address the facility needs of Hydro Ottawa. These options were:

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- 1. Retain Existing Facilities;
- 2. Consolidate all of the inside Administrative Staff at the Albion Road Facility;
- 3. Consolidate all of the inside Administrative Staff at the Merivale Road Facility; or
  - 4. Construct New Facilities at Optimal Locations.

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After considering the four options, it was decided that the lowest cost and best value option to pursue was Option 4 "Construct New Facilities at Optimal Locations". At that time, approval was sought and subsequently received to include \$4.0M in capital expenditures to acquire land for the new facilities. Funding for the actual construction cost was not sought in that application with the expectation being that construction would take place over the 2013-2015 period and approval for these costs would be included in a future rate application.

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Subsequent to the OEB's Decision in Hydro Ottawa's 2012 Cost of Service application, the purchase of land and the construction of the new facilities was deferred. Over the 2012-2014 period appropriate land was identified and purchased and more detailed plans were developed for the construction of new facilities.

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Over the course of Hydro Ottawa's 2016-2020 Custom IR proceeding, the utility presented evidence in support of a request to spend \$92.3M on land and buildings for New Administration and Operations Facilities at two new locations, as presented in Table 4 below.



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#### Table 4 – 2016-2020 Custom IR Application - Facilities Project Estimate (\$'000s)

	East Campus	South Campus	Total
Land	\$12,716	\$6,798	\$19,514
Construction	\$56,813	\$16,020	\$72,833
TOTAL	\$69,529	\$22,818	\$92,347

2

3 Hydro Ottawa and intervenors participated in a settlement conference and subsequently filed a

4 Settlement Agreement dated September 18, 2015. As part of that agreement, the parties

5 accepted,

6 7

8

"... Hydro Ottawa's evidence that the proposed budget of \$73 million (without land) for the construction of Hydro Ottawa's new operating centers and administrative facilities as set out in project description and business case contained in Exhibit B-1-2 and Exhibit B-1(A) is an appropriate spending level on the capital spending for the proposed facilities. The Parties agree that the new facilities represents a once in a generation investment."

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Subsequent to filing the Settlement Agreement, the OEB convened an oral hearing on September 30, 2015 to ask questions on the proposed Settlement Agreement. At this hearing, various aspects of the agreement were discussed including the new facilities and the use of deferral accounts. In the OEB's subsequent Decision on the Settlement Proposal,<sup>5</sup> the OEB said:

18 19

"The OEB does not approve the settlement proposal as filed. The OEB does not find sufficient evidence to determine prudence of the following:

202122

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- The \$73 million cost estimate of the new administration and operations buildings (the New Buildings).
- The need for approximately 9 acres of land in excess of the building requirements at a cost of \$4 million "to expand in future, if necessary". 6

<sup>&</sup>lt;sup>26</sup> Hydro Ottawa Limited, Settlement Proposal, EB-2015-0004 (September 15, 2015), page 15.

<sup>&</sup>lt;sup>27</sup> Ontario Energy Board, *Decision on Settlement Proposal and Procedural Order No. 11,* EB-2015-0004 (November 28, 23, 2015)

<sup>28 23, 2015).</sup> 29 <sup>6</sup> *Ibid*, page 2.



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1 Notwithstanding this determination, it is critical to note that the OEB also stated the following:

"The OEB finds that **Hydro Ottawa has demonstrated the need for the New Buildings**. The current buildings are at the end of their useful lives and at capacity from a staffing perspective". (Emphasis added)

7 With respect to funding, the OEB Findings stated that:

"The OEB is prepared to approve Y-factor treatment based on the recovery of up to \$66 million combined for the proposed New Buildings and the land.... The \$66 million was determined by the OEB as a reasonable amount to enable Hydro Ottawa to proceed with the Request for Proposal process while ensuring that any additional cost of the New Buildings and the land is subject to a prudence review at a future date... While Hydro Ottawa has applied for recovery of up to \$92 million for the New Buildings and land in the Custom IR term, the OEB is only prepared at this point to accept up to \$66 million."

"The OEB expects that Hydro Ottawa will provide the evidence to support its spending above \$66 million for the New Building and land and proposed rate base additions as part of its next rebasing application. The evidence would need to demonstrate prudence of the cost of the New Buildings, land and the associated benefit to customers.<sup>8</sup>

The Settlement Agreement was updated accordingly and re-filed on December 7, 2015 to include the following section:

"The Parties agree, pursuant to Procedural Order No. 11 that Hydro Ottawa may proceed to issue a Request for Proposal and that Hydro Ottawa is approved to incur expenses up to \$66 million for the land and buildings associated with the New Facilities as described in Hydro Ottawa's Custom IR Application. The Parties agree that this approval is based on the OEB's assessment of and concurrence with Hydro Ottawa of its need for the New Facilities. The \$66 million includes \$15 million for the cost of land and \$51 million towards the construction of the New Facilities. The Parties acknowledge the OEB's statement that the \$66 million is in no way determinative of the final amount the OEB will accept as being prudently incurred and that the OEB will assess prudence for additions above \$66 million based on evidence to support spending above \$66 million as supplied by Hydro

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<sup>35 &</sup>lt;sup>7</sup> *Ibid*, page 3.

<sup>&</sup>lt;sup>36</sup> <sup>8</sup> *Ibid*, pages 4-5.



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1 Ottawa at its next rebasing. For clarity the Parties understand that the original agreement 2 reached on September 18, 2015 was for \$93 million which comprised of \$19 million for the land and \$73 million for the buildings construction. In Procedural Order No. 11 the 3 Board approved expenses up to \$66 million comprising of \$15 million for the land, \$51 5 million for the New Facilities."9 6 7 The OEB issued its Decision in the proceeding on December 22, 2015. With respect to the proposed new facilities the OEB said: 9 "However, the OEB did not find sufficient evidence to determine prudence of the \$73 10 million cost estimate of the New Buildings and the \$19 million cost of land. While the 11 OEB found that Hydro Ottawa had established the need for the New Buildings, the 12 excess building and land capacity was not supported by the evidence."10 (Emphasis 13 14 added) 15 16 Based on its review of the evidence, the OEB stated that it was prepared to approve Y- factor 17 treatment based on the recovery of up to \$66M combined for the proposed New Buildings and 18 the land. The decision stated that: 19 "The \$66 million was determined by the OEB as a reasonable amount to enable Hydro 20 Ottawa to proceed with the Request for Proposal process while ensuring that any 21 22 additional cost of the New Buildings and the land is subject to a prudence review at a future date."11 23 24 25 Further to the OEB direction provided in the 2016-2020 Custom IR Decision, Hydro Ottawa is

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#### 29 2.2. RECAP OF THE NEED FOR NEW FACILITIES

30 The need for new facilities was established in the 2016-2020 Custom IR proceeding where

26 now providing information by way of this Application to support the prudency of expenditures

27 related to land purchased and the construction of buildings for new facilities.

<sup>34</sup> <sup>11</sup> *Ibid*, page 5.

<sup>&</sup>lt;sup>9</sup> Hydro Ottawa Limited, 2016-2020 Custom Incentive Rate-Setting Amended September 18th, 2015 Settlement

<sup>32</sup> *Proposal*, EB-2015-0004 (Originally filed September 18, 20015; refiled December 7, 2015), page 18.
33 <sup>10</sup> Ontario Energy Board, *Decision and Order*, EB-2015-0004 (December 22, 2015), page 5.



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"The OEB finds that **Hydro Ottawa has demonstrated the need for the New Buildings**. The current buildings are at the end of their useful lives and at capacity from a staffing perspective." (Emphasis Added)

3

1

2

The following provides a summary of evidence previously submitted in support of the need for new facilities. The need for new facilities was identified 20 years ago when Hydro Ottawa amalgamated from five former municipalities namely Ottawa Hydro, Gloucester Hydro, Nepean Hydro, Kanata Hydro and Goulbourn Hydro. Due to the short timeframe given for amalgamation and the magnitude of capital required, Hydro Ottawa opted to temporarily keep the facilities that existed at that time. These facilities are now between 45 and 60 years old, not in optimal locations, were designed and built in a different era and are at the end of their useful life. These facilities are also at capacity, in need of major repair and no longer meet operational needs. Key reasons in support of the established need for the new facilities are:

14

#### 15 Asset End of Life

Hydro Ottawa's investment in new facilities is a once in a generation investment. This investment was identified 20 years ago to better locate the operation centres within the service territory, to consolidate administrative functions, to modernize the work environment and to provide for future growth. Buildings such as the Albion Road facility are 60 years old and were designed and built in an era to meet a very different need from what is currently and prospectively served.

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#### 23 Public Safety

- Due to commercial and residential growth in the areas surrounding Hydro Ottawa facilities, truck and employee traffic poses safety risks to the general public. At the Albion Road facility for example, school children board and debark from school buses just outside the Hydro Ottawa
- Ontario Energy Board, Decision on Settlement Proposal and Procedural Order No. 11, EB-2015-0004 (November 23, 2015), page 3.



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- 1 facility. Wide turning bucket trucks must navigate heavily populated residential streets posing a
- 2 risk to public safety.

3

#### 4 Operational Efficiency

Hydro Ottawa's move to new facilities is further motivated by the need to consolidate its administrative and operational staff promoting organizational and operational synergies. Consolidating administrative, technical and operational staff will permit greater operating efficiencies by increasing opportunities for collaboration and cross-functional teamwork. In addition to providing a greater foundation for productive collaboration, the new facilities are located close to major traffic arteries in the City of Ottawa and significantly reduce travel time to work locations by work crews resulting in improved customer service and response times. The East Campus location decreases travel time to the core service area, and the South Campus improves the access to main warehousing and expanded south/west service areas and is aligned with the growth of the City.

15

#### Employee Health and Safety

Hydro Ottawa's existing facilities are being extended beyond their useful lives and are unable to meet future requirements without major renovations or requiring new construction/leasing off-site facilities. The current facilities have many deficiencies several of which present possible health and safety concerns for Hydro Ottawa staff, crews and customers and/or require substantial investment to replace or repair. For example there have been elevator motor failures trapping staff, rodent infestations, poor air quality and there is uneven pavement and flooring causing a risk of slips and falls. The building also requires major investment to upgrade the building envelope (roof, windows, flooring, HVAC system) to facilitate a more favourable work environment.

26

#### 27 **2.3. KEY OBJECTIVES**

28 Key objectives of the Facilities Renewal Program were to:



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replace end of life buildings;

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- move Hydro Ottawa's operational centers out of high traffic residential districts to sites with ready access to major highways within the Ottawa area;
- consolidate operations and administrative staff;
  - upgrade the operational centers in order to enhance customer service and satisfaction;
- increase overall operating efficiencies through proper location, integration and
   streamlining of services;
  - facilitate organizational synergies by consolidating administrative and technical staff and adapting modern technologies and innovative workplace standards;
- provide leadership in energy conservation and sustainability;
- create a healthy, flexible and multi-functional work environment for Hydro Ottawa employees; and
  - achieve Leadership in Energy and Environmental Design ("LEED") Gold certification for the East Campus Administrative Office building and LEED Silver for East and South Operation Buildings, and maximize energy efficiency.

#### 17 2.4. TIMELINE OF KEY DATES

- 18 The following summarizes key milestones and dates culminating in the completion of the new 19 facilities project:
  - December 28, 2011, 2012 Cost of Service proceeding: OEB Decision accepted need to proceed with development work on new facilities including land purchase.
- December 24, 2013: Initial RFQ was posted and closed on February 28, 2014
- April 2015: Retained a third party project advisor to do a peer review on the project procurement and intended Design Build contract
- April 29, 2015: Hydro Ottawa filed its 2016-2020 Custom IR application which included a request for \$92.3M for the Facilities Renewal Program; The \$92.3M was based on a high level (Class D) feasibility estimate



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- July 30, 2015: Peer review report on design build procurement for new facilities
   prepared, recommending improvements in the RFQ/RFP documentation and to revise
   and re-initiate the process
- August 26, 2015: Updated RFQ issued
- September 22, 2015: SIOC agreed that total project cost would be capped at \$96.5M
   plus capitalized interest and overhead
- November 23, 2015: RFQ submissions evaluated and results communicated, four
   qualified proponents identified
- December 22, 2015:: OEB Decision concurred with the need for new facilities and approved provisional funding of \$66.0M with requirement to demonstrate prudency for any amounts in excess of that amount
- January 20, 2016: a more thorough estimate (Class C) of \$124.7M plus capitalized
   interest and overhead was developed
- February 3, 2016: SIOC review and decision to make necessary design changes and scope reductions and re-confirm project budget at \$96.5M plus capitalized interest and overhead
- May 18, 2016: Completed value engineering and revised design validation and a
   detailed Class B estimate prepared
- May 26, 2016: RFP issued to four qualified proponents
- October 14, 2016: Fairness Commissioner report issued, confirming fairness of RFP process
- October 18, 2016: Final results of RFP evaluation communicated; M. Sullivan & Son chosen as Design-Builder
- October 2016 May 2019: Ongoing project construction, monitoring and cost control
- May 2019: Project completed at a cost of \$80.0M (\$99.5M including land, capitalized interest and overhead) and staff move to new facilities



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### 1 3. DESCRIPTION OF FACILITIES

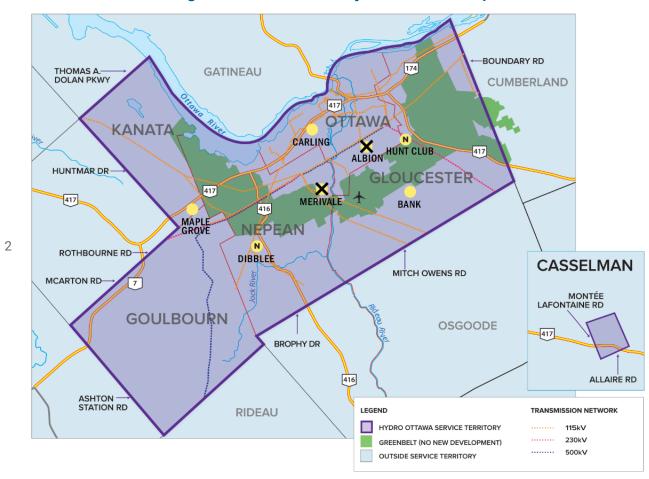
- 2 Hydro Ottawa's Facilities Renewal Program involved construction of new facilities on two
- 3 parcels of land purchased in 2012 and 2013, namely the Eastern Operations and Administrative
- 4 Office Campus and a Southern Operations & Warehouse. The location of the New
- 5 Administration and Operations Facilities are indicated on the the map of Hydro Ottawa's service
- 6 territory in Figure 5 below.



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Figure 5 – Service Territory and Location Map



- 3 In total, 293,873 square feet of New Administration and Operations facilities space has been
- 4 constructed. Table 5 below provides a summary of the location, functionality, and size of these
- 5 new facilities.



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### 1 3.1. THE EAST CAMPUS

- 2 The East Campus is located at 2711 Hunt Club Rd. This facility consists of three distinct
- 3 buildings comprised of:

4

- 5 1. EC-1: The Administrative Office Building
- 2. EC-2: The Operations Centre for eastern sector of Hydro Ottawa service territory, and
- 7 3. EC-3: PILC Cable storage facility

8

- 9 The East Campus land parcel was purchased in April 2013 and is located at the corner of Hunt
- 10 Club Rd. and Hawthorne Ave. near Highway 417 (see Figure 6 below). Table 5 provides site
- 11 specific details of the East Campus.

Table 5 - East Campus Overview

	TOTAL EAST CAMPUS	EC-1	EC-2 / EC-3
acres	21.08	9.07	12.01
sq. ft	137,912	127,132	10,780
sq. ft	46,735		46,735
sq. ft	10,318		10,318
acres	2.07		
#	439		
#	40		
#	42		
#	419		
#	140		
\$	\$59,519,052	\$47,311,660	\$12,207,392
\$	\$12,694,254	\$5,459,235	\$7,235,019
\$	\$72,213,306	\$52,770,894	\$19,442,411
	sq. ft sq. ft sq. ft acres # # # # # \$	CAMPUS       acres     21.08       sq. ft     137,912       sq. ft     46,735       sq. ft     10,318       acres     2.07       #     439       #     40       #     419       #     140       \$     \$59,519,052       \$     \$12,694,254	CAMPUS       acres     21.08     9.07       sq. ft     137,912     127,132       sq. ft     46,735       sq. ft     10,318       acres     2.07       #     439       #     40       #     419       #     140       \$     \$59,519,052     \$47,311,660       \$     \$12,694,254     \$5,459,235



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1 Three separate buildings are part of the East Campus with a total building footprint of 194,965

2 Sq. Ft. The largest structure, the Administrative Office Building, is a reinforced concrete building

3 consisting of three floors of administrative office space, a partial lower level and structural steel

4 roof over the top level mechanical floor for a total of 127,132 Sq. Ft.

5

6 The Eastern Operation Centre is a 57,515 Sq. Ft. single-storey building with a pre-engineered

7 garage and a conventional masonry and steel structure for the office space and material

8 management functions, plus the necessary operational muster rooms, boot washing, lockers

9 and shower areas. This building has an indoor garage for parking 42 heavy duty fleet vehicles,

10 and also provides kitting bays, material kanbans, and overhead and underground tool storage

11 rooms.

12

13 The enclosed PILC Storage Facility is a 10,318 Sq. Ft. Paper Insulated Lead Covered cable

14 storage building with a clear span pre-engineered steel frame superstructure which is supported

15 on a reinforced concrete foundation. This building is a warehouse to store and process

16 overhead and underground cable and provides protection from the elements.

17

18 The East Campus also has a 2.52 acre solar yard and an exterior material storage yard.

19

20 Images of the East site and main buildings are included in Figures 6 and 7 below.



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Figure 6 – EC-1 and EC-2 Buildings



Figure 7 – EC-3 Building, Solar Field and Berm



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### 1 3.2. THE SOUTH CAMPUS

- 2 The South Campus is located at 201 Dibblee Rd. and is the Operations Centre for the south and
- 3 western portion of Hydro Ottawa's service territory. This facility is predominantly operational and
- 4 is contained in one building that includes office space, an enclosed garage and
- 5 warehouse/storage space and a transformer shop. There is also a solar generation facility on
- 6 the property.

7

10

- 8 The overall site plan and photographs of the constructed facilities can be seen provided in
- 9 Figures 8 and 9 below.

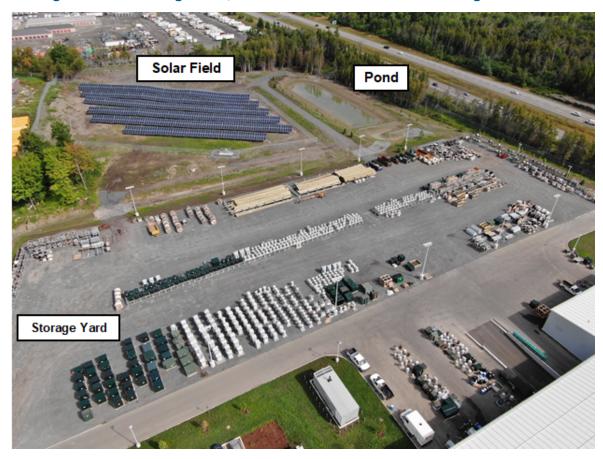






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# Figure 9 – SC Storage Yard, Solar Field and Storm Water Management Pond





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1 Key statistics regarding the South Campus facility are provided in Table 6.

2

### **Table 6 – South Campus Overview**

Site Specific Information		TOTAL SOUTH CAMPUS
Site Size	acres	20.26
Office Area	sq. ft	22,644
Garage Area	sq. ft	42,773
Indoor Material Storage	sq. ft	33,491
Yard Space	acres	2.77
Employee parking spaces (all outdoor)	#	101
Outdoor fleet vehicle parking spaces	#	36
Indoor fleet vehicle parking spaces	#	54
Inside Staff	#	18
Outside Staff	#	76
Building cost excluding land	\$	\$20,530,091
Land	\$	\$6,800,443
Building cost including land	\$	\$27,330,534

4

5 The South Campus consists of one 98,908 Sq.Ft. building made up of three separate components comprised of (a) a pre-engineered garage, and (b) warehouse and transformer structures, which book-end (c) a central one storey conventional reinforced masonry and steel structure with office space, muster and meeting areas, lockers and showers, and the metering calibration, repair and storage functions.

10

11 The South Campus site includes the following features:

12 13

- Indoor heavy duty fleet vehicle parking;
- Indoor kitting bays, material kanbans, tool and equipment storage areas;
- Office and operations support areas;



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- Outdoor storage and equipment yard;
- Outdoor fleet parking area;
  - Retention receiving area 10-ton overhead crane;
- Warehouse;
  - Metering calibration, workshop and storage; and
- Transformer shop

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#### 8 3.3. STAFF IN NEW FACILITIES

9 Where staffing numbers are presented in this document, Hydro Ottawa is using headcount not

10 FTEs, as headcount more accurately reflects space usage needs. For example, when students

11 are hired in the summer there is a need to have space for the whole person, not a calculated

12 FTE amount.

13

14 The East Campus facility includes space for staff of both Hydro Ottawa and other affiliates of

15 Hydro Ottawa Holding Inc. ("Holding Company"). Cost transfers associated with the shared use

16 of the East Campus space are transacted consistent with the Affiliate Relationships Code as

17 discussed in Exhibit 4-2-1: Shared Services and Corporate Cost Allocation. Given that the East

18 Campus facility was built to accommodate both regulated and affiliate company staff, Table 7

19 provides staff level headcount information for Hydro Ottawa and affiliates.

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# Table 7 – Number of Staff at New Facilities - Hydro Ottawa and Affiliates

(Headcount - June 30, 2019)	East Campus	South Campus
Administration (Inside)	419	18
Operations (Outside)	140	76
TOTAL	559	94

22

23 The East Campus includes Hydro Ottawa staff associated with the following functions:

24 Executive Team, Information Management and Information Technology, Human Resources,



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- 1 Finance, Customer Service, Communications and Public Affairs, Distribution Operations –
- 2 Central & East, Distribution Asset Management, Distribution Operations Underground, System
- 3 Operations, Business Performance, GIS and Records, Policies and Standards, Design & Asset,
- 4 Distribution Operations Business Performance and Scheduling, Stations East and Engineering.
- 5 In addition, as noted above, the East Campus includes space for staff from affiliate companies.

- 7 The South Campus includes Hydro Ottawa staff associated with the following functions:
- Metering, Distribution Operations South, Stations South, Engineering, Business Planning and
- 9 Scheduling and Materials Management.

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#### **PROJECT BENEFITS** 11 **3.4.**

12 Key Principles that guided the design of the buildings were:

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- Collaboration: A flexible and adaptable workplace that encourages collaboration and new ways of working and making decisions;
- Health & Wellbeing: Put physical and mental wellbeing, as well as sustainable living, at the forefront of your daily routine; and
  - Innovation: A resilient workforce that embraces change and disruption through innovative ways of thinking and working.

- 21 As discussed in section 2.1 above, the OEB agreed that Hydro Ottawa had demonstrated the 22 need for the new facilities. Hydro Ottawa identified several factors that drove the established 23 need, some of which include: (i) the replacement of aging buildings that are at the end of their 24 useful lives; (ii) a relocation of operational centers out of high traffic residential districts; (iii) 25 increase of overall operating efficiencies through proper location, integration and streamlining of 26 services; and (iv) an upgrade of the operational centers in order to provide better operational 27 response to customers.



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1 Hydro Ottawa's old facilities were between 45 and 60 years old and were designed and built in a

2 different era and according to outdated standards. In light of this, at the core of the new facilities'

3 design was not only to address Hydro Ottawa's need for new facilities but also to take

4 advantage of modern best building practices and to build healthy and sustainable facilities.

5 There is research that demonstrates employers who care about the environmental impact of

6 their buildings as well as the health and wellbeing of their staff are rewarded by improved

7 productivity and loyalty, which can be worth more than their initial investment. 13

8

9 Hydro Ottawa completed construction of the new facilities in May 2019. Staff moved into the 10 facilities over a series of moves during the January to May 2019 period. By designing and 11 building the new facilities, Hydro Ottawa addressed operational and safety needs. The utility 12 also expects that the new facilities will improve employee workplace wellness and productivity 13 and reduce the environmental footprint of building operations. The new facilities are sustainable, 14 energy efficient and certified to LEED Gold standards. The resulting benefits of the new facilities 15 are described in more detail below.

16

#### 17 **3.4.1. Operational Efficiency**

One of the objectives of the new facilities was to enhance operational efficiency. This objective involves consolidating operations and administrative staff as well as upgrading operational centers in order to provide better response to customers and create better, more efficient working conditions. The resulting benefits in this regard include the following but not limited to:

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 Work team collaboration: Consolidating administrative, technical and operational staff allows for greater operating efficiencies and opportunities. Having various work teams (e.g. Underground Lines, Overhead Lines, 24/7, Stations, Designers, Engineers) within the Operations Centers or adjacent, in the case of EC-1, allows for more efficient

World Green Building Council, *Building the Business Case: Health, Wellbeing and Productivity in Green Offices* (October 2016).



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collaboration amongst these work groups that improves timely information communication and reduces travel time. This, in turn, results in more effective work planning and execution as well as improved response time. Hydro Ottawa's underground and metering groups are able to allocate their resources between the East and South campuses to enable more efficient delivery of projects across the service territory and reduce overall travel time. Meeting rooms and common spaces in operations centres help to promote collaboration. For example, the use of "Ready Rooms" allows for improved tail boarding amongst teams at the beginning of the work day. Meeting room technology improves timely information communication and reduces travel time as meetings across the service territory can be conducted virtually. Also, the use of touchdown locations in operations centres allows designers, engineers and other work groups to temporarily work from various locations to better support field activities.

Accessibility: The new facilities are located in close proximity to major traffic arteries in the City of Ottawa (Highway 417 in the East and Highway 416 in the South portions of Hydro Ottawa service territory). This reduces travel time to work locations by work crews resulting in better customer service and improved incident response times. Consolidated 24/7 operation located more centrally within the city, leading to better accessibility to ready access to highways 416 and 417, leads to improved incident response times.

• Logistics: At both the East Campus and the South Campus, there are better designed yards to load/unload and store large material and equipment (pole trailers, transformers, semi-truck deliveries, etc.). There are also multiple tool cribs providing for the separation and improved organization of material and operating equipment for individual teams within work groups and safety and accident prevention is enhanced with larger garage entrances and exits, including one-way traffic flow. The specific building for PILC cable EC-3 has space and a dedicated crane for loading and unloading reels and scrapping



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cable in an efficient manner. The EC-3 building also provides a facility which significantly decreases the risk of cross contamination of lead and asbestos by providing separate washing facilities and storage for designated substances.

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Warehouse benefits: Having a centralized warehouse reduces overall inventory
administration. It provides for a more efficient layout for stock-picking and workflow. It
also eliminates travel between sites, reduces potential communication gaps and
standardizes site specific procedures for ease of training. Improved highway proximity
also improves delivery access for third party supply chain providers.

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- *Indoor vehicle parking*: The operational benefits of indoor parking for heavy duty fleet vehicles include:
  - reduced warm-up time resulting in higher productivity, and lower greenhouse emissions that would result from outside cold weather idling;
  - expected longer average service life of vehicles;
  - improved functionality of live line tools on aerial devices as these tools must be kept clean and dry in order to maintain dielectric strength and insulation levels.
     The former facility was severely constrained in this regard as the newer bucket trucks did not fit in the garages; and
  - keeping electronic test equipment, mobile computers, first aid supplies, rubber cover up and live line tools in an above freezing environment.

22

#### 23 **3.4.2**. Safety

Another objective of the new facilities was to move Hydro Ottawa's operational centers out of high traffic residential areas to sites that have an easy access to major highways. Due to commercial and residential growth in the areas surrounding Hydro Ottawa facilities, truck and employee traffic posed safety risks to the general public. For example, at the Albion Road facility, school children boarded and debarked from school buses just outside the Hydro Ottawa



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facility. Wide turning trucks had to navigate heavily populated residential streets posing a risk to public safety. Through their location in commercial and light industrial areas close to main highways, the new facilities largely resolve this concern. Furthermore, the new facilities enhance safety and accident prevention for Hydro Ottawa's employees by having larger garage entrances and exits, with one-way traffic flow and separated staff vehicle parking and routes.

6

# 7 3.4.3. Employee Wellness and Productivity

8 Hydro Ottawa is committed to improving health, wellbeing and productivity of its employees. The 9 new facilities were designed and built with the goal to create a healthy working environment that 10 enhances the health, wellbeing and productivity of Hydro Ottawa's employees. In 2017, a 11 multidisciplinary team of experts from Harvard University carried out a study to identify the 12 elements and effects of healthy indoor environments as well as to understand the interaction 13 between personal and public health, productivity, and building design (the "Study"). 14 Some of 14 the highlights of the Study include the following:

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People work more efficiently in environments with good air quality. Common indoor pollutants that pose risks to human health include nitrogen oxides, carbon monoxide, ozone, particulate matter, and volatile organic compounds ("VOCs") found in building materials, printer emissions, cleaning supplies, paint, glue, furniture, and other materials. Exposure has been linked to numerous health problems, such as cancer and respiratory diseases, as well as absenteeism, poor productivity, and low cognitive function.

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 Buildings constructed with low-VOC materials and finishes reduce exposure to toxic substances. Studies show employees who work in buildings where fresh air is adequately circulated and distributed are more productive and healthier than those who work in poorly ventilated spaces. A low-VOC, high-ventilation office space with superior air quality improves cognitive function by as much as 101%.

<sup>&</sup>lt;sup>28</sup> <sup>14</sup> Harvard T.H. Chan School of Public Health, *The 9 Foundations of a Healthy Building* (February 2017).



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• Comfortable temperature and humidity levels are less likely to make workers feel sick or get sick. A study on workplace thermal conditions found that workers experienced itchy and watery eyes, headaches, and throat irritation when exposed to poor ventilation, humidity, and heat. When indoor environments are too warm, occupants can experience symptoms of "sick building syndrome," such as headaches, dizziness, fatigue, and flu-like symptoms, as well as negative moods, heart rate changes, and respiratory problems. Temperature and humidity may also influence disease transmission, as cold, dry environments are more likely to spread the flu virus, and warm, humid environments are conducive to the growth of mold and fungus.

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Good lighting leads to better sleep at night and better productivity during the day. Lack of
natural light has been associated with physiological and sleep problems and depression.

Exposure to daylight and access to windows at work have been linked to better sleep
duration, an improved mood, less sleepiness, lower blood pressure, and increased
physical activity. Office workers with access to natural light have a better circadian
rhythm, which is important for sound sleep and cognitive function.

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Reducing the noise level improves productivity and job satisfaction. With about 70% of offices now having an open floor plan, more workers are susceptible to distractions from noise. A survey of more than 1,200 senior executives and nonexecutive employees found that 53% reported ambient noise reduced their work satisfaction and productivity. Exposure to environmental noise can increase accidents and impair employee performance and productivity, especially during difficult and complex tasks, and has been linked to higher blood pressure, changes in heart rate, and hypertension. Sound masking was included in the administration building to eliminate ambient noise.

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27 Through designing and building the new facilities according to healthy and green building 28 standards, Hydro Ottawa expects to achieve the following benefits: (i) maximize employee



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1 performance and productivity, (ii) attract and retain high-quality employees, (iii) reduce impacts

2 of presenteeism and absenteeism and (iv) promote improved health for employees.

3

4 The new facilities are functional – not opulent. They have modern audio-visual and information technologies and amenities that help to promote employee collaboration, innovation and flexibility. The offices have been ergonomically designed and furnished in order to create a productive work environment (e.g. sit/stand desks). The office design will lead to reduced absenteeism, reduced sick time, increased staff morale and retention and recruitment success.

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# 10 3.4.4. Environmental Footprint of the New Facilities

Hydro Ottawa is committed to reducing the environmental impacts of its building operations.

Buildings can generate up to 35% of all greenhouse gases, 35% of landfill waste comes from
construction and demolition activities, and up to 70% of municipal water is consumed in and
around buildings. As such, making buildings greener can have a substantial impact on larger
environmental goals. Furthermore, in recognition of the potential negative impacts associated
with the design, construction and operation of the municipal building inventory, the City of
Ottawa enacted a policy that requires all new municipal buildings to be designed and delivered
in accordance with the Certified performance level of the LEED green building rating system.

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LEED certification provides independent, third-party verification that a building has been designed and built using strategies aimed at achieving high performance in key areas of human and environmental health: location and transportation, sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. There are four certification levels: Platinum, Gold, Silver and Certified. Regardless of the certification level achieved, all projects must meet mandated prerequisites and then choose from 110 available credit points to reach the desired certification level. The LEED Platinum level certification achieves the highest honor and the LEED Certified level achieves fundamental performance. Hydro Ottawa's new facilities have been built and certified to LEED Gold standards. The project



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1 budget called for the Operations buildings, namely EC-2 and SC-1, to be designed and built to a

2 LEED Silver standard. However, through negotiations with the Design-Builder, these facilities

were built to a LEED Gold standard at no incremental cost.

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5 In addition to the above mentioned LEED certification, the new facilities also provide

6 environmental benefits as they receive a portion of their electrical power through on-site solar

7 generation. Overall, the new facilities help to reduce the environmental impact of Hydro

8 Ottawa's building operations.

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# 10 3.5 CUSTOMER ENGAGEMENT

As noted above the Facilities Renewal Program has been considered by Hydro Ottawa since amalgamation 20 years ago. As part of Hydro Ottawa's 2012 Cost of Service application, a Facilities Strategy was presented and it described the status of facilities and the need to further evaluate and identify the best development solution. At that time, Hydro Ottawa requested funding to purchase land, but did not seek funding for the overall project. The rate hearing process was a public, open and transparent process. The plans were reviewed by the OEB in that proceeding. In addition, at the proceeding intervenor groups, representing various public interests, participated in the process and reviewed Hydro Ottawa's plans.

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20 On April 29, 2015 Hydro Ottawa submitted its 2016-2020 Custom IR application to the OEB.

1 This application presented evidence in support of a request to spend \$92.3M on land and

2 buildings for New Administration and Operations Facilities at two new locations, and outlined the

need for the facilities. During the customer consultation process that preceded the filing of the

24 2016-2020 Custom IR application, Hydro Ottawa engaged customers on the matter of these

25 facilities. For example, the workbook survey utilized by the company to solicit feedback from

26 customers included such questions as what customers' views were on Hydro Ottawa having



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1 proper facilities to house its staff, vehicles, and tools. In addition, as part of the OEB

2 proceeding to review the application, Hydro Ottawa held a public meeting on July 7, 2015,

during which information about the new facilities and the plan to recover costs through a Y

Factor was shared. 16

5

During the hearing process information on the Facilities Renewal Program was once again

7 scrutinized by both the OEB and the intervenor community, with the intervenor community and

OEB Staff agreeing to total projected funding amount as part of the initial Settlement Agreement

dated September 15, 2015.<sup>17</sup> In addition, as a result of this proceeding the OEB found that

10 Hydro Ottawa had established the need for the New Buildings.

11

12 During the scoping process for the new facilities in late 2015 and early 2016, a revised estimate

13 indicated that the cost to construct the facilities as planned would be \$124.7M (see section 4.1

of this Attachment). Hydro Ottawa considered this cost to be unacceptable from a customer

15 rates perspective and the scope of the project was re-visited to bring the budget down to

\$96.5M excluding interest and overhead. This consideration of customer impacts resulted in a

reduction in cost of approximately \$28M. The project was completed in 2019, on-time and on

budget for a final total cost of \$99.6M including interest and overhead. An average residential

customer in Ottawa will see approximately \$0.93 per month on their bill as a result of the new

20 facilities.

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22 Throughout this period, management of Hydro Ottawa reported to its Board of Directors and,

23 through its shareholder the Holding Company, to the City of Ottawa on the status of the project.

<sup>&</sup>lt;sup>24</sup> <sup>15</sup> Innovative Research Group, Customer Consultation Report: 2016 Rate Application Review Prepared for Hydro

<sup>25</sup> Ottawa Limited (April 2015). This report can be found in Hydro Ottawa's 2016-2020 Custom Incentive Rate-Setting

<sup>26</sup> Distribution Rate Application, EB-2015-0004 (April 29, 2015), Attachment A-3(A): Customer Engagement Report,

 <sup>27</sup> page 135.
 28 Hydro Ottawa Limited, 2016-2020 Custom Incentive Rate-setting Application Presentation to the Ontario Energy

<sup>29</sup> *Board*, (July 7, 2015), page 29. 30 <sup>17</sup> Hydro Ottawa Limited, *Settlement Proposal*, EB-2015-0004 (September 15, 2015), page 15.



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- 1 This project has been highlighted in Hydro Ottawa's annual report every year since 2012. The
- 2 annual report is part of a package that is provided by the Chair of the Hydro Ottawa Board to the
- 3 Mayor of Ottawa and Ottawa City Council at their Annual General Meeting ("AGM") held in June
- 4 each year.

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- 6 The new facilities are also identified on Hydro Ottawa's public web site and were mentioned in
- 7 the customer engagement effort associated with this Application. 18

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# 9 4. PROJECT COSTS

#### 10 4.1. OVERALL COSTS

- 11 Since 2015, as the project progressed, cost estimates were refined. These cost refinements
- 12 resulted in increases from the initial estimated cost as more detailed design information became
- 13 available. In order to control costs to a level closer to the original budget, adjustments were
- 14 made in a number of different areas such as project scope, office size and building finish. The
- 15 progression of key project estimates is presented in the following table:

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#### Table 8 – Summary of Project Costs

	EB-2015- 0004	SIOC Approved	EB-2015- 0004	Updated	SIOC	EB-2019- 0261
	Submitted	Budget	Approved	Estimate	Re-Confirmed	Final Cost
Total Project						
- Land	\$19,514	\$19,514	\$15,000	\$19,514	\$19,514	\$19,495
- Construction	\$68,903	\$76,986	\$51,000	\$105,186	\$76,986	\$76,527
	\$88,417	\$96,500	\$66,000	\$124,700	\$96,500	\$96,022
- Interest & O/H	\$3,930					\$3,522
TOTAL	\$92,347					\$99,544
	April 29, 2015	Sept. 22, 2015	Dec. 20, 2015	Jan. 20, 2016	Feb. 3, 2016	Sept. 30, 2019

<sup>&</sup>lt;sup>19</sup> See Exhibit 1-2-2: Customer Engagement on the 2021-2025 Rate Application for details.



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At the time, the initial \$92.3M estimate was developed for the 2016-2020 Custom IR application, minimal detailed design information had been prepared. As the project progressed and further planning and design information was prepared, it became apparent to Hydro Ottawa that the cost of the project as initially envisaged would be higher than estimated. In September 2015, the SIOC of the Hydro Ottawa Board of Directors discussed potential cost cutting measures and

agreed that the budget for the project would be capped at \$96.5M plus interest and overhead.

By early 2016, further detailed costing information was developed and the estimated cost of the project increased to \$124.7M (plus interest and overhead). This information was presented to the SIOC at a meeting on February 3, 2016. This increase was unacceptable to Hydro Ottawa senior management and to the SIOC, and action was taken to reduce various aspects of the project costs. These reductions included reducing the size of the Administrative Office Building, reducing office workplace standards (Workplace 2.0 modified) and retaining the Bank Street facility for fleet and training. Based on the proposed cost reduction measures, the Hydro Ottawa

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Detailed design requirements were then updated to reflect these changes and a Request for Proposals was issued on May 26, 2016 to the four proponents qualified through the RFQ process. The RFP responses were evaluated and M. Sullivan and Son was chosen to be the Design Build contractor for the project.

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Upon completion of the new facilities project, the total project costs were \$99.5M (\$19.5M for land, \$76.5M for construction and \$3.5M for Allowance for Funds Used During Construction ("AFUDC") and burdens), this represents an increase of \$7.2M or 7.8% over the preliminary estimate of \$92.3M in the last rate application. With respect to the hard construction costs of approximately \$57.5M, discussed in section 4.2, these came in below the detailed design (Class B) estimate of May 2016 by 2% or \$1.2M.

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15 SIOC re-confirmed the project budget to be \$96.5M.



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- 1 The overall project cost excluding interest, AFUDC, and overhead was \$96.0M (\$0.5M under
- 2 the Hydro Ottawa Board-approved figure of \$96.5M). The contingency provided for in the Hydro
- 3 Ottawa Board budget of \$96.5M was used primarily to address issues encountered during
- 4 construction such as:

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- 6 (i) development charges and municipal requirements from the City of Ottawa;
- 7 (ii) unexpected site conditions (e.g. soil issues at the East Campus);
- 8 (iii) "protected vegetation" at field operations site; and
- 9 iv) technological security and operational improvements.

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#### 11 4.2. QUANTITY SURVEY REPORT

- 12 A "Quantity Survey Report" dated May 18, 2016 was prepared by an independent professional construction cost estimator. The purpose of the report was to provide Hydro Ottawa a realistic
- 14 estimate of expected probable direct and indirect construction costs for the East Campus and
- 15 South Campus new facilities. This report was based on the experience of the professional
- 16 construction cost estimator, historical costing information and familiarity with the construction
- 17 industry in the Ottawa area. This estimate was prepared in accordance with generally accepted
- 18 principles and practices for estimating construction projects.

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20 The methodology followed as described in the report is as follows:

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"From the documentation and information provided, quantities of all major elements were assessed or measured from the drawings and outline specifications where possible and priced at rates considered competitive for a project of this type under a fixed price sub-contract in Ottawa, Ontario.

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28 29 Pricing shown reflects probable construction costs obtainable in the Ottawa area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every trade."



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Estimated project costs as per the Quantity Survey report are presented in Table 9 below. This estimate relates to "hard" construction costs and excludes costs such as land, furniture and furnishings, development fees, professional fees, overheads and financing charges. It is noted that actual costs came in \$1.2M or 2.1% lower than the estimate that was prepared over three years prior. This demonstrates both the rigour of the estimate and also active cost management and control throughout the project life cycle. The hard construction costs as shown below represent 72% of the total construction costs excluding land. The higher than estimated costs on EC-1 is largely attributable to construction issues noted earlier, offset by savings largely in SC-1. Note that the functionality of initially envisioned separate SC-2 building (standalone storage) was incorporated into SC-1 thereby saving hard construction costs on this campus.

11 12

Table 9 – Final Building(s) Cost Compared to Quantity Survey Estimate

(\$)	Quantity Survey May 18, 2016	Final Actual Cost	Variance	Variance %
East Campus				
EC-1	\$29,087,871	\$32,629,279	\$3,541,408	12.2%
EC-2	\$9,355,861	\$7,686,656	\$(1,669,205)	-17.8%
EC-3	\$1,828,092	\$1,989,609	\$161,517	8.8%
	\$11,183,953	\$9,676,265	\$(1,507,688)	-13.5%
Sub-Total EC	\$40,271,824	\$42,305,544	\$2,033,720	5.0%
South Campus				
SC-1	\$18,122,397			
SC-2	\$348,605			
Sub-Total SC	\$18,471,002	\$15,210,734	\$(3,260,268)	-17.7%
TOTAL	\$58,742,826	\$57,516,278	\$(1,226,548)	-2.1%



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- 1 Planned building sizes that served as the basis for the costing in the Quantity Survey report are
- 2 presented in Table 10 below. As compared to the Quantity Survey report, total actual building
- 3 constructed square footage was 10,705 Sq. Ft (or 3.8%) greater than estimated.

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# Table 10 – Final Actual Building(s) Size Compared to Quantity Survey Report (Square Feet)

East Campus	Quantity Survey May 18, 2016	Final Actual	Variance	Variance %		
East Campus						
EC-1	120,825	127,132	6,307	5.2%		
EC-2	57,727	57,515	(212)	-0.4%		
EC-3	10,361	10,318	(43)	-0.4%		
	68,088	67,833	(255)	-0.4%		
Subtotal EC	188,913	194,965	6,052	3.2%		
South Campus						
SC-1	90,503					
SC-2	3,752					
Subtotal SC	94,255	98,908	4,653	4.9%		
TOTAL	283,168	293,873	10,705	3.8%		

- 8 In summary, with respect to the direct construction costs as estimated in the Quantity Survey
- 9 report, actual project costs were 2.1% lower than estimated and actual building square footage
- 10 delivered was 3.8% higher than estimated. The result is essentially more building space for a
- 11 lower price than planned.



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**Table 11 – Other Development Costs** 

	Budget	Final Actual Cost	Variance	Variance %
Design Build Costs	\$58,900,000	\$57,516,278	\$(1,383,722)	-2.3%
Other Development Costs <sup>19</sup>	\$18,300,000	\$19,010,689	\$710,689	3.9%
Land	\$19,300,000	\$19,494,697	\$194,697	1.0%
Sub-total	\$96,500,000	\$96,021,665	\$(478,335)	-0.5%
Interest		\$2,838,753		
Overhead		\$683,423		
TOTAL		\$99,543,840		

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3 The main building structures of the new East Campus and South Campus facilities have been

4 designed and constructed to have a service life of 75 years. Other components of the new

5 facilities such as the roofing system, parking lot and internal furnishings and equipment have

6 shorter service lives consistent with the Kinectrics study and engineering and operational

7 experience.<sup>20</sup>

8

#### 9 4.3. SALE OF FORMER ADMINISTRATIVE AND OPERATIONAL FACILITIES

10 Hydro Ottawa's New Facilities Plan included the sale of buildings that were to be vacated upon completion of the new construction.

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13 The original New Facilities Plan called for the sale of the Bank Street location and the

14 development of new training and fleet facilities. However, in order to help control project costs, it

15 was decided by the Executive Management Team and SIOC to retain the Bank Street facility for

16 training centre and fleet management purposes instead of building new facilities for these

17 functions.

<sup>&</sup>lt;sup>18</sup> Other Development Costs include cash allowances, professional fees, furniture, equipment, and permits.

<sup>&</sup>lt;sup>19</sup> Kinetrics Inc., Asset Depreciation Study for Use by Electricity Distributors, EB-2010-0178 (July 8, 2010).



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- 1 The settlement agreement states that any gain or loss from the sale of Albion Road (A & C
- 2 properties), Merivale Road and Bank Street will be given back/charged to customers. The
- 3 Albion Road "A" property is one of the former Administrative Office Buildings and the Eastern
- 4 Operations centre. Albion Road "B" property is being retained as there is a transformer station
- 5 on that site. The Albion Road "C" property is vacant/surplus land and was used for yard storage.

6

- 7 The Albion Rd. Property "A" and Merivale properties have been sold to third parties. Albion Rd.
- 8 Property "A" closed on November 27, 2019 and the Merivale Property closed on September 30,
- 9 2019. Albion Rd. Property "C" (surplus land) is being sold to an affiliate as of December 31,
- 10 2019. An independent valuation was performed by Altus Group to determine the sale price of
- 11 Property "C". The net proceeds are accounted for in deferral accounts as per the OEB's 2015
- 12 Decision. Further detail on the deferral accounts and the values being recorded can be found in
- 13 UPDATED Exhibit 9-1-1: Current Deferral and Variance Accounts.

- 15 The Merivale Rd., Albion Rd. Property "A" and Property "C" have been removed from rate base
- 16 effective September 30, 2019, November 30, 2019 and December 31, 2019 respectively.
- 17 A summary of the properties and the net gain/(loss) is provided in Table 12 below. The updated
- 18 version of Table 12 below reflects final sale values after accounting for 2019 actuals.



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# Table 12 - AS ORIGINALLY SUBMITTED - Sale of Facilities

Anticipated Disposal Date	Merivale September 30, 2019	Albion (Property A) November 27, 2019	Albion (Property C) December 20, 2019
Proceeds	\$9,200,000	\$6,800,000	\$1,827,000
Less: NBV	\$(8,900,302)	\$(5,895,766)	\$ (4,271)
Sub-total	\$299,698	\$904,234	\$1,822,729
Less:			
Legal Costs	\$(16,859)	\$(58,924)	\$(50,000)
Environmental Costs	\$0	\$(650,946)	\$(11,935)
Other (e.g. Prof. Fees, Survey)	\$(82,876)	\$(129,410)	\$(0)
TOTAL OF ALL ASSOCIATED SELLING COSTS	\$(99,735)	\$(839,280)	\$(61,935)
Net Gain or (Loss)	\$199,963	\$64,953	\$1,760,794

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# 3 Table 12 – UPDATED FOR 2019 ACTUALS – Sale of Facilities

Disposal Date	Merivale September 30, 2019	Albion (Property A) November 27, 2019	Albion (Property C) December 20, 2019
Proceeds	\$9,200,000	\$6,800,000	\$1,827,000
Less: NBV	\$(8,710,396)	\$(5,838,460)	\$ (2,059)
Sub-total Sub-total	\$489,604	\$961,540	\$1,824,941
Less:			
Legal Costs	\$(29,993)	\$(69,317)	\$(5,657)
Environmental Costs	\$0	\$(664,171)	\$(11,935)
Other (e.g. Prof. Fees, Survey)	\$(84,604)	\$(209,793)	\$(48,755)
TOTAL OF ALL ASSOCIATED SELLING COSTS	\$(114,597)	\$(943,281)	\$(66,347)
Net Gain or (Loss)	\$375,007	\$18,259	\$1,758,595



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#### 1 4.4. Y-FACTOR TREATMENT

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As the in-service date of the New Buildings was uncertain, in its April 29, 2015 Application, Hydro Ottawa proposed to record the revenue requirement impact of the new facilities as a Y-Factor. When the New Buildings became in-service, the new facilities revenue requirement impact would be calculated, and tracked in a deferral account. In its Decision in the 2016-2020 Custom IR proceeding, the OEB approved Y-factor treatment based on the recovery of up to

7 \$66.0M for the new facilities (\$51.0M for the New Buildings and \$15.0M for the land.) When one

8 new facility was in-service, Hydro Ottawa would file an application with the OEB and propose a

9 rate rider to clear the associated revenue requirement.

The new facilities came into service on May 1, 2019. Using the OEB-approved amount for Y-factor treatment of \$66.0M, the annual revenue requirement associated with the new facilities is \$3,320,514 for 2019 and \$5,823,637 for 2020. After accounting for 2019 actuals, the annual revenue requirement associated with the new facilities has been updated to \$3,307,44 for 2019 and \$5,821,770 for 2020. On a monthly basis the revenue requirement is added to the Y-factor deferral account, no carrying charges apply to the Y-factor account. Hydro Ottawa is collecting the initial estimate of the Y-factor through a rate rider effective January 1, 2020. For further detail regarding the calculations, accounting and disposition of these Y-factor costs, please see UPDATED Exhibit 9-1-3: Group 2 Accounts. The total revenue requirement for the new facilities is \$5,019,369 for 2019 and \$8,758,841 for 2020, and has subsequently been updated to \$4,999,624 for 2019 and \$8,757,386 for 2020, after accounting for 2019 actuals. The difference between revenue requirement of the \$66.0M captured in the Y-factor Account and the full cost of the new facilities is being recorded in a separate Regulatory Account, to be collected from customers after a prudencey review.

# 26 5. PRUDENCY OF THE NEW FACILITIES PROJECT

At the early stage of the new facilities project, Hydro Ottawa established a number of processes and reviews to ensure that each decision associated with the project was prudent and



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- 1 reasonable in light of the given circumstances. Hydro Ottawa also established checks and
- 2 balances to control the project costs and ensure the project adhered to the schedule. Taken
- 3 together, these actions demonstrate that Hydro Ottawa exercised prudent management in
- 4 planning and execution of the new facilities project.

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To demonstrate the prudency of the new facilities, this section describes the following:

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- right sizing of building design and full utilization of space;
  - land usage and functionality;
    - prudent project planning and procurement processes;
  - execution stages of the new facilities project, including ongoing project cost review and control: and
    - external benchmarking review of similar projects proposed by LDCs.

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#### 15 5.1. SIZE OF BUILDING AND SPACE UTILIZATION

- 16 A modern, healthy workplace supports greater productivity, a more engaged workforce and
- 17 better results for customers. Hydro Ottawa as an employer has a responsibility to create
- 18 workplaces that support the well-being, wellness and productivity of its employees.

- 20 Given the need for new facilities, Hydro Ottawa completed an office standards review to
- 21 determine the new building space requirements. As the primary guiding workplace standard and
- 22 the basis for its assessment, Hydro Ottawa used the Federal Government Workplace 2.0 Fit Up
- 23 Standards ("Workplace 2.0 Standards"), industry research promoting a healthy workplace and
- 24 Hydro Ottawa Guiding Principles of collaboration, innovation, flexibility & adaptability, health &
- 25 wellness and sustainability. The Workplace 2.0 Standards have been used by the Federal
- 26 Government, regulated entities and various municipalities, including the City of Ottawa. Hydro
- 27 Ottawa also used industry research to support the function of common workspace areas and the
- 28 impact that these spaces can have on employees and productivity.



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Hydro Ottawa then tailored the Workplace 2.0 Standard incorporating industry trends to better align with its operational requirements. Hydro Ottawa modified (i.e. reduced) the standard office space sizes during the design development to increase space allocation consistency, minimize operational costs, and increase office arrangement flexibility for any potential future growth. The resulting Hydro Ottawa workplace standards maximize real estate utilization, reducing overall building areas footprint and long term operational carrying costs. This was done by way of smaller open office workstation environments, increased touch-down work areas for highly mobile or temporary staff, more and varied types of meeting spaces including break-out or collaboration areas for staff, including areas such as a cafeteria, which can transform into a multi-purpose area. Open office environments were designed to maximize direct daylight into work areas, improving staff health and wellness and efficiency. Hydro Ottawa's design of the new facilities promotes its Guiding Principles of Collaboration, Health & Wellness and Innovation that are also in line with office design industry standards. By doing this, the overall health and wellbeing of employees improves which increases innovation, creativity and productivity, benefiting all parties involved.

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17 Table 13 below summarizes the reduction in space standards by position coincident with the development of the new facilities.



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Table 13 – Hydro Ottawa Workplace Standards (Square Feet)

Position	Original Standard	New Standard	Change
Enclosed Offices			
CEO	300	300	0
Executives	265	200	(65)
Directors	225	125	(100)
Managers	150	107	(43)
Workstations			
Supervisors	80	36	(44)
Executive Assistant	64	48	(16)
Employees	64	36	(28)
Assigned Touchdown Stn.	64	15	(49)
Unassigned Touchdown Stn.	16	15	(1)
Touchdown Stn Trades	16	One 15 per 5 Empl.	(1)

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As completed, the new Administrative Office Building ("EC-1") building has 127,132 Sq. Ft. of space and houses 419 staff at June 30, 2019. This is approximately 303 gross square feet per employee. Hydro Ottawa notes that this is well below the International Facility Management Association ("IFMA") average of 396 gross Sq. Ft. per occupant as well as the IFMA average of 425 gross Sq. Ft. per occupant for utilities. In addition to being lower than IFMA standards, Hydro Ottawa's workplace standards are typically lower than or at the lower end of the Workplace 2.0 Standard range. A comparison of Hydro Ottawa workplace space standards with the Government of Canada Workplace 2.0 and the IFMA standards for Utilities is provided in Table 14 below.



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**Table 14 – Space Standard Comparison (Square Feet)** 

Position	Hydro Ottawa	Workplace 2.0	IFMA
Executives	200	200	332
Directors	125	150	228
Managers	107	108	158
Employees	36	48	86
Free Address	15	16	n/a

2

1

In assessing comparable workplace space allocation, Hydro Ottawa reviewed the overall Sq.Ft./Employee space allotment for other LDCs in their new facilities projects. Hydro Ottawa's office and workstation space allocations are lower than the space allocations of other utilities who have (or are proposing to construct) a dedicated administration facility. This comparison is summarized in Table 15.

8

Table 15 – Space Standard Comparison, LDC Administration Buildings

	Hydro	PowerStream	Enersource	Energy +
	Ottawa	(Now Alectra)	(Now Alectra)	Southworks
Gross Sq.Ft./FTE	303	368	527	327

10

Although the main Administrative Office Building is fully utilized and "right-sized" for the current staff level, future staff growth can be accommodated within the current building footprint through re-arranging workstation configuration and making use of peripheral aisle space and common areas.

15

#### 5 5.2. LAND USAGE AND FUNCTIONALITY

The land parcels upon which the two projects are built were purchased in 2012 and 2013. In total Hydro Ottawa purchased approximately 41 acres for a total price of \$19.5M. The cost of land and acreage is summarized in Table 16 below.



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1

#### Table 16 - Land Cost

Location	Purchase Price	# Acres	\$/Acre
EC - Hunt Club Rd	\$12,694,255	21.08	\$602,194
SC - Dibblee Rd.	\$6,800,443	20.26	\$335,659
Total Land Cost	\$ 19,494,697	41.34	

2

In its 2015 Decision, the OEB made findings based on information that was provided at that time. Subsequent to the proceeding the site design layout and use has changed and there is no developable surplus land at either location, as further explained below. OEB findings at the time were as follows:

7

9

10

'The OEB finds that Hydro Ottawa has not demonstrated the prudence of the \$19 million cost for the 41 acres of land. The land was purchased in 2012 and 2013. The total cost of \$19 million includes 9 acres of excess land valued at \$4 million. The benefit to customers associated with the \$4 million cost of the excess land has also not been explained."

111213

14 15 "The OEB finds the evidence to be inconclusive, suggesting that the purchased land area included a contingency over and above what is required for the New Buildings, by indicating that the "actual land acquisition provides capacity to expand in future, if necessary."<sup>21</sup>

16 17

The 2015 OEB Decision to not approve a portion of the land purchased (\$4M representing approximately 9 acres of land) was based on information contained in a presentation dated November 17, 2014, which was provided by Hydro Ottawa in response to School Energy Coalition interrogatory #11, Attachment B. The rationale for the Decision was that the land was excess to the current needs of Hydro Ottawa and was required to be able to expand in the future if necessary. Subsequent to the presentation produced in response to the interrogatory, both sites have been fully developed to meet current needs and there is no "surplus" land at

 <sup>25 21</sup> Ontario Energy Board, Decision on Settlement Proposal and Procedural Order No. 11, EB-2015-0004 (November 23, 2015), pages 3-4.



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1 either location. The 41.34 acres purchased is all necessary and is providing value to current

2 Hydro Ottawa customers.

3

The East Campus land area is 21.08 acres and consists of three buildings, parking, material storage, protected natural lands and property set-backs in respect of local planning requirements. The site includes 1.95 acres which could be considered as non-operational. However, the 1.95 acres is used to store "surplus fill" encountered during construction which was not considered clean soils per Ministry of the Environment, Conservation and Parks ("MECP") Guidelines for external off-site disposal. Hydro Ottawa saved in excess of \$700K by keeping these soils on site, which is permitted by MECP guidelines. This area was shaped into a berm at the north east end of the property and there is no environmental risk as the soils were considered contaminated mostly due to the amount of debris (broken concrete, rubble, scrap

14

The East Campus also has a 2.52-acre Solar Field at the north-west section of the property.

This 414 MWh net metering facility supplies electricity to the on-site buildings helping to reduce the consumption from the grid thereby lowering OM&A costs associated with the monthly

18 electricity bill.

metal, etc.) preventing it being disposed off-site as clean fill.

19

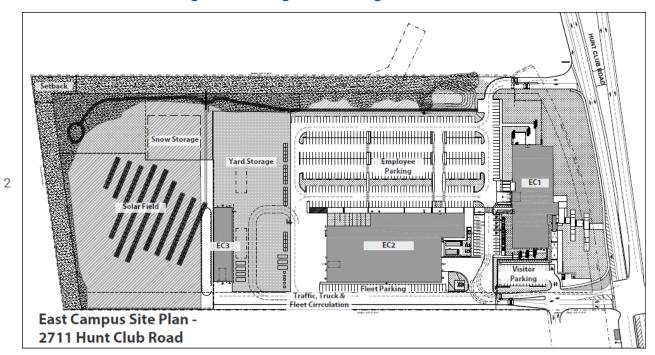
20 Figure 10 below shows East Campus land (21.08 acres) and the current buildings and uses of

21 this site.



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Figure 10 – Diagram Showing Use of EC Site



3

1

The South Campus land area is 20.26 acres and consists of one main building which houses office, garage and warehouse facilities. A condition pertaining to the South Campus site is that it is not serviced by municipal infrastructure (water and sewer) and required well water and treatment system and a septic system. The site has the main operational warehouse and equipment yard storage, and a stormwater management facility. There is a 0.76 acre non-operational portion of land at the extreme north-east end of the property. This portion has limited access and it is highly impractical to utilize this portion for future operations, or as it is "landlocked", to sever this portion of land from the main lands.

12

The South Campus also has a 4.2-acre Solar Field at the north-west section of the property.

This 424 MWh net metering facility supplies electricity to the on-site buildings helping to reduce

the consumption from the grid, thereby lowering OM&A costs associated with the monthly



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- 1 electricity bill. Further information on this solar facility can be found in Exhibit 2-4-3: Distribution
- 2 System Plan Section 8.5.1- General Plant.

4 Figure 11 is a site plan of the South Campus land and facilities.

Figure 44 Disagram Ch

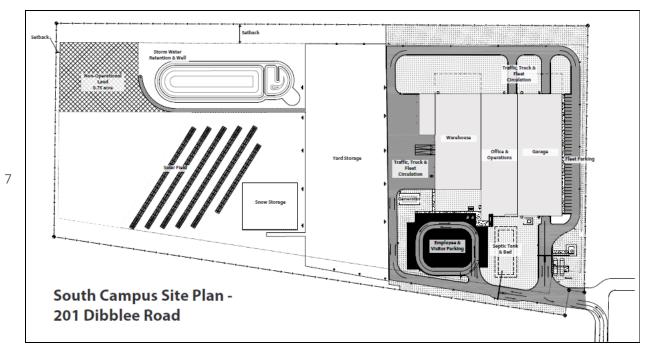


Figure 11 - Diagram Showing Use of SC Site

8

3

5

6

## 5.3. PRUDENCY DURING THE PLANNING STAGE

As part of its prudent management strategy, at the early stage of the project, Hydro Ottawa formed a Project Management Team to oversee all day-to-day aspects of the facilities renewal program. This team was comprised of Hydro Ottawa staff, an independent project management firm, verTerra Corp., and an advocate architect/interior designer, HOK Canada, to manage the life-cycle of the project.



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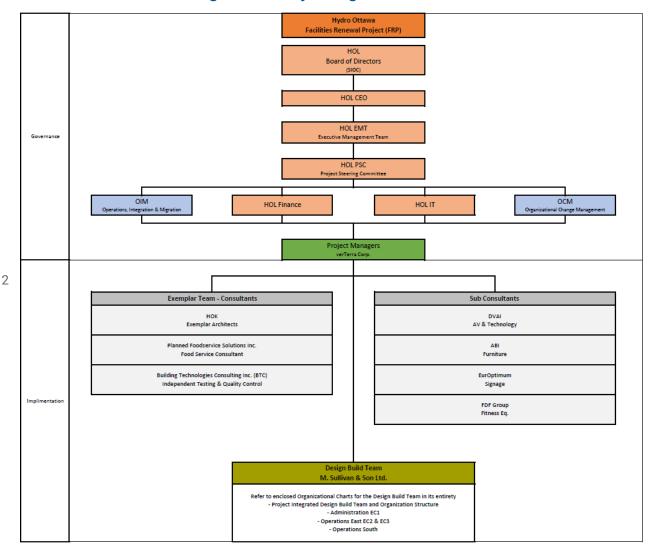
Hydro Ottawa also created various project teams tasked with distinct responsibilities. Project teams were structured to assist Hydro Ottawa with prudent and reasonable decision-making prior and during the planning stage of the new facilities project. The planning stage involved planning and procurement process to select a successful candidate to carry out the execution stage of the project. Hydro Ottawa also retained an independent, third-party Fairness Commissioner who was tasked to oversee and monitor the fairness and transparency of Hydro Ottawa's procurement process. The organization chart in Figure 12 below outlines the various roles and positions that comprised the management structure for the new facilities project. This

9 structure was in place for the planning and execution phases of the project.



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Figure 12 – Project Organization Chart



3

- 4 Effective project management and governance is critical to the success of a project. From the
- 5 outset, Hydro Ottawa established a structure and a team of experts to help ensure the
- 6 successful completion of the project and to ensure that prudent decisions were made
- 7 throughout the project life-cycle.



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#### 1 5.3.1. Project Teams

- 2 In the early stage of the new facilities project, prior to initiating a public tender process, Hydro
- 3 Ottawa formed a project Design Team to provide preliminary design and technical scope
- 4 definitions that outline and convey Hydro Ottawa's requirements. The Design Team also
- 5 participated during the tendering process as a technical adviser to Hydro Ottawa. The Design
- 6 Team was comprised of the following firms:

7

- verTerra Corp. Project Manager and Procurement Advisor
- HOK Architects Corporation Advocate Architect
- R.V. Anderson Civil Engineering
- Cunliffe & Associates Structural Engineering
- Morrison Hershfield Mechanical and Electrical Engineering
- HOK Canada Landscape Architecture, Interior Layouts, Signage and Wayfinding

14

- 15 Hydro Ottawa also formed an Evaluation Team to review, evaluate and select a successful 16 proponent to build the new facilities project. The Evaluation Team consisted of Hydro Ottawa 17 Executive Management members and other staff, the Project Manager, the Advocate Architect
- 18 and Fairness Commissioner.

- 20 Hydro Ottawa engaged an independent procurement advisor to develop the procurement
- 21 strategy for the new facilities project, this advisor also had broader scope responsibilities and
- 22 served as Project Manager. Hydro Ottawa's requirement was to ensure its procurement strategy
- 23 adhered to the industry best practices for publicly tendered construction projects and was
- 24 consistent with the Canadian Construction Association and the Canadian Design Build Institute
- 25 standards for procurement. Additionally, Hydro Ottawa requested that its design build
- 26 procurement structure be based on similar scale design build procurement models successfully
- 27 implemented by the City of Ottawa. The procurement strategy was reviewed and approved by
- 28 the Executive Team and Hydro Ottawa's Board of Directors.



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The Project Manager was verTerra Corp. ("verTerra"), an Ottawa based Project Management and Real Estate Advisory Firm, that brought Design Build, Procurement and Operational Migration expertise to the project. verTerra served as the Owner's Representative to help protect the best interests of Hydro Ottawa during the entire project cycle. Prime areas of responsibility included managing and controlling project scope, budget and schedule. Given that the day-to-day construction of the facilities project was managed by a Design Builder (Sullivan & Son), verTerra assisted with the development of Hydro Ottawa's procurement documentation for the intended Design Build contract. verTerra was part of the Hydro Ottawa Project Team. The Project Team was comprised of Hydro Ottawa staff, verTerra and HOK Canada (HOL's advocate architect and interior designer). This arrangement helped to reduce project risk and maximize project success.

12

#### 13 **5.3.2.** Request for Qualifications & Request for Proposals

A two stage procurement process is standard, where the RFQ provides the technical and qualitative requirements for market respondents to structure their teams and base their responses. An RFQ also provides critical insight into the commercial structure of the opportunity and sets out the expectations for the second RFP stage. The RFQ process also thoroughly assesses the capabilities and strengths of the proposed Design Build teams with the qualifications and requirements of Hydro Ottawa's specific project needs.

20

Hydro Ottawa retained verTerra to help develop a procurement strategy that would adhere to the industry best practices and standards. verTerra confirmed Hydro Ottawa's desire to select a design build contractor for the new facilities project using a two-stage procurement. The first stage was an RFQ, the purpose of which was to invite interested parties to submit RFQ submissions indicating their interest and qualifications to perform and complete the new facilities project. Hydro Ottawa initiated the RFQ stage on August 26, 2015 by posting a nation-wide online public solicitation. The RFQ required interested proponents to submit their design build qualifications and expertise with respect to Hydro Ottawa's specific design criteria and to



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1 demonstrate and substantiate their design build expertise and capability to execute similar scale

2 and like projects in order to be qualified.

3

Hydro Ottawa received a total of ten RFQ submissions from firms both local and external to the Ottawa market. The RFQ submissions were then evaluated by an Evaluation Team with the assistance of the Design Team. The RFQ evaluation criteria had both Mandatory requirements (e.g. capacity to bond, insurance, financial letter of good standing, etc.) and Qualitative requirements (e.g. design-builder overview and expertise, project references, design-build methodology, etc.). Proponents had to first satisfy the Mandatory requirements to be deemed compliant, and if compliant, were then evaluated against the Qualitative criteria. At the conclusion of the evaluation process, which was witnessed and assessed by the Fairness Commissioner, Hydro Ottawa short-listed the four highest ranking proponents, which were then invited to proceed to the second stage of the procurement process, the Request for Proposals.

14

On May 26, 2016, Hydro Ottawa issued the RFP to the four pre-qualified proponents. The purpose of the RFP was to obtain a fixed tender price for the design build components and evaluate the various design-build proposals for the new facilities project. The RFP stage was a stringent procurement process, and was overseen by the Hydro Ottawa Project Team, Hydro Ottawa Executive Management Team, Supply Chain Management and the Fairness Commissioner. Similar to the RFQ, the RFP consisted of Mandatory requirements that Proponents had to meet in order to be evaluated and also Qualitative requirements. All four pre-qualified proponents submitted responses, met the Mandatory requirements and advanced to the Qualitative evaluations.

24

Each member of the Evaluation Team was required to independently review and score each proponent submission based on the RFP's stipulated criteria and point distribution. Then the Evaluation Team met and developed consensus scoring for each proponent. The consensus sessions were facilitated by Hydro Ottawa's Supply Chain unit and overseen by the Fairness



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1 Commissioner to ensure fairness and complete objectivity. At the conclusion, Hydro Ottawa 2 selected M. Sullivan and Son ("Sullivan") based in Arnprior Ontario, as the successful proponent 3 ("Design Builder") for the new facilities project. M. Sullivan and Son is a full service general 4 contractor and has been in business for over 100 years. Sullivan submitted the combined best

5 value proposal, having both the best design and the lowest cost.

6

Once the successful proponent was selected, Hydro Ottawa required the Design Builder, on Hydro Ottawa's behalf, to tender most of the work that was required as part of the project. This included civil, mechanical, electrical, landscaping, road/access improvement work, kitchen equipment, signage, etc. To ensure the Design Builder exercised prudent management, verTerra was tasked to oversee that the Design Builder had a minimum of three bidders for each discrete work package and that all sub-trade bidders were pre-qualified by the Design Builder to meet Hydro Ottawa's established safety and quality requirements.

14

Aspects of the project not managed by the Design Builder (e.g. furniture) were tendered on an industry best practice basis, i.e. a minimum of three qualified bidders had to submit their proposals, evaluation and selection by the Project Manager. The Hydro Ottawa Supply Chain unit competitively tendered the necessary technology equipment, which was then integrated into the construction work and managed by verTerra and Sullivan as the design and construction advanced.

21

Hydro Ottawa's procurement process was structured to provide competitiveness and a variety of options from the proponents to ensure the utility was able to make prudent and reasonable decisions. The submitted proposals were subject to a rigorous evaluation process with participation of diverse range of stakeholders tasked with various responsibilities.

26

#### 27 5.3.3. Fairness Commissioner and Report

28 The Fairness Commissioner was PPI Consulting Limited. An independent third party



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1 commissioned by Hydro Ottawa to oversee and monitor each stage of the RFQ/RFP process, to

2 ensure that the process was fair, transparent, and in compliance with stated requirements.

3

4 The Fairness Commissioner's responsibilities included the following, but were not limited to:

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- providing advice on fairness issues concerning the development of the request for
   proposal;
- monitoring and providing advice on potential or real barriers to proponent participation;
  - identifying key issues and potential risks in the procurement process;
  - identifying any situation which may compromise the integrity of the evaluation process (i.e. overseeing the evaluation team and procurement processes and assessing potential bias or undue influence);
- monitoring the evaluation of all submissions to oversee the fair treatment of all proponents;
  - monitoring the adherence of established government procurement practice in the planning, issue, evaluation, and
  - providing a Fairness Report at the conclusion of the evaluation process.

18

The Fairness Commissioner's report was provided to Hydro Ottawa on October 14, 2016, and concluded that "the procurement process for the Facilities Renewal Program Design Build up to the completion of the evaluation process was conducted in a fair, open and transparent

22 manner."

23

#### 24 5.4. PRUDENCY DURING THE EXECUTION STAGE

With the selection of Sullivan as the Design Builder, Hydro Ottawa proceeded to the execution stage, to build the new facilities. Hydro Ottawa created a robust project management and governance structure, which included various levels of project oversight, detailed reporting and cost control. Hydro Ottawa also continued to retain verTerra as a third-party project



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management expert to provide project support and cost-control management of the new facilities project. Hydro Ottawa's Board of Directors, Strategic Initiatives Oversight Committee of the Board and the Executive Team received regular reports from the Project Team relating to, among other things, project costs and schedule and issues. The project management and governance structure helped to allow Hydro Ottawa senior management to be informed at every step of the project and make prudent decisions as the new facilities project was being constructed.

8

#### 9 5.4.1. Effective Project Management and Governance

Hydro Ottawa structured a robust governance and reporting regime on the new facilities project which was overseen by Hydro Ottawa's Board of Directors and Executive Management Team.

12 The project was managed by the Project Steering Committee.

13

The Executive Management Team provided direct executive management oversight and control on all aspects of the project, including the design build contract, all procurements and all Hydro Ottawa managed scope of work. The Board of Directors provided strategic oversight and governance. The new facilities project was a standing reporting item to Hydro Ottawa's Board of Directors, SIOC, with updates on the project status including budget, schedule, safety, key risks and mitigations.

20

Hydro Ottawa created a Project Steering Committee which was co-chaired by the Chief Financial Officer ("CFO") and Chief Human Resource Officer ("CHRO"). In addition to the Co-Chairs, the Steering Committee included a cross section of Hydro Ottawa staff including managers from all operation divisions, technology, finance, communications and human resources. As the project evolved the Steering Committee created two distinct sub-committees: (i) the Operational Migration Committee ("OCM") chaired by the CFO which dealt with all the operational requirements, and (ii) the Change Management committee chaired by the CHRO which led staff engagement, communications and interior workplace matters. These two



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- 1 sub-committees were active across the entire duration of the new facilities project ensuring
- 2 compliance with the original specified requirements, and where necessary providing direction to
- 3 the Project Management Team.

4

- 5 verTerra Corp. assigned a full team of Project Management Professionals on the project under a
- 6 Project Director who had direct responsibility over the project and the Project Management and
- 7 Design Build teams. The Project Director directly reported to Hydro Ottawa's CEO, CFO and
- 8 CHRO and Board of Directors.

9

- 10 Hydro Ottawa held quarterly Executive Partnership Meetings with the Design Build Executive
- 11 Management Team, Hydro Ottawa's Project Manager, and Hydro Ottawa's CEO and CFO. The
- 12 purpose of these meetings was to ensure that Hydro Ottawa's Executive Team had oversight
- 13 and understanding of the project status, costs, emerging issues and risks. It also created an
- 14 open line of communication between Hydro Ottawa and the Design Builder.

15

#### 16 **5.4.2.** Project Reporting

- 17 The Design Builder was required to provide highly structured, effective, and regular reporting to
- 18 Hydro Ottawa, at both the senior management and project team levels, for the duration of the
- 19 project. Senior project leadership was required on the part of the Design Builder to lead and
- 20 control the reporting interfaces with Hydro Ottawa and to structure appropriate reporting formats
- 21 and presentations that provide at a minimum, project status and progress on:

2223

- project approvals
- design development
- construction progress (including photographic documentation)
- project finances
  - value engineering opportunities/innovations
- 28 schedule



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- risks and mitigation strategies
- quality control
- site safety

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5 The new facilities project was reported as follows:

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- Quarterly reports and presentations made to Hydro Ottawa's Board of Directors, including status, budget, schedule, key risks and opportunities, and a next quarter look ahead.
- Monthly Executive Status reports were provided by the Project Manager, inclusive of project status, work completed last period, budget and changes, schedule, quality, key risks and opportunities, site photographs and next period look ahead.
- Monthly Design Build Reports were submitted by the Design Builder to the Project Manager, inclusive of overall status, sub-trade procurements, budget, schedule, quality, manpower and safety.
- Weekly site reports were provided by the Design Builder to the Project Manager and Hydro Ottawa Executives, including work performed, site photographs, quality and volumetric data, manpower and safety. It is noted that the project was completed without any lost time injuries.

20

#### 21 **5.4.3.** Project Cost Review and Change Order Control

Once the project management and governance structure was established, it was important to constantly monitor project costs and have a stringent process for approval of any deviations from the originally quoted prices. The project total budget was managed by the Project Manager and monthly forecasts were submitted to Hydro Ottawa's CFO, and circulated to the CEO and Board of Directors. The Design Build cost reports were submitted monthly to the Project Manager by the Design Builder, complete with change order and change request forecasts/estimates. Changes to the contract were formalized by the Design Builder with



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detailed fixed price quotations upon direction by the Project Manager. Hydro Ottawa established a robust, stringent process to ensure that any changes to price were prudent and warranted.

3

4 Prior to a change being submitted for approval changes were first reviewed for accuracy and 5 cost fairness by the Design Builders Design and Engineering teams. The Project Manager 6 would then review the quotation and if deemed fair, certify the recommendation and submit it 7 directly to Hydro Ottawa's CFO for final approval. The CFO and the Project Manager conducted 8 regular change review meetings to review / discuss all submitted changes, review the budget 9 forecast, and if deemed acceptable, the CFO would sign off and a change order would be 10 issued to the Design Builder. The approval process employed by Hydro Ottawa was designed in 11 accordance with and adhered to Project Management Institutes and Canadian Construction 12 Association standard practices.

13

#### 14 **5.4.4.** Payment Control

With respect to payment control, the Design Builder submitted monthly progress payment requests with a complete breakdown of expenditures for the period, including all relevant sub-trade, supply and change order invoices to Hydro Ottawa's Project Manager. All monthly progress payment submissions included a Statutory Declaration from the Design Builder certifying supply payments for the previous period had been made and also included a budget and schedule update. Hydro Ottawa's Project Manager reviewed for compliance with the contract and accuracy to work performed on site, and if acceptable, issued a written recommendation to Hydro Ottawa for payment. This process was compliant with the terms of the contract and adhered to PMI and industry best practices.

24

25 Billing and payment recommendation on all other contracts, outside of the Design Builder 26 contract responsibility, were managed by the Project Manager who acted as payment certifier, 27 verifying payment accuracy and fairness on all other related contracts.



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#### 1 5.4.5. Project Schedule Control

Another important aspect of the prudent management included project schedule control. The project schedule was managed by the Project Manager with a master critical path schedule set as the baseline, inclusive of all project scope of work. The Design Builder also developed a critical path schedule for the design and construction works, which was linked to the Master Project Schedule. The project schedule was reviewed every two weeks in a Project Team meeting and updated monthly. Short term look ahead schedules were provided every two weeks and verified by the Project Manager on site.

9

#### 10 5.5. EXTERNAL BENCHMARKING

#### 11 5.5.1. Benchmarking Other LDCs

- 12 Hydro Ottawa is aware that benchmarking can be a useful measure of project cost performance.
- 13 The associated comparative information on building size, cost and staff levels can be
- 14 informative, however it is not precise. There can be differences in the nature of the projects (e.g.
- 15 new build or refurbishment), location (e.g. urban or rural), land costs (e.g. serviced, un-serviced,
- 16 nominal value) and year built (e.g. inflation) that all have an influence on project cost and
- 17 unitized comparisons.

- 19 Attempts have been made in previous OEB rate-regulated utility Cost of Service proceedings to
- 20 present and compare both administrative office and operations building costs. For example,
- 21 Table 17 summarizes administrative office and operations comparison information in pages 8
- 22 and 9 of the OEB Staff Submission dated March 29, 2019 from the EB-2018-0028 Energy+
- 23 proceeding (with the exception of the last column which has been added to reflect final project
- 24 information for Hydro Ottawa new facilities).



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#### **Table 17 – Head Office Cost Comparison**

	Power Stream	Waterloo North	Enersource	InnPower	Milton Hydro	PUC Distribution	Energy+	Hydro Ottawa
	EB-2008- 0244	EB-2010- 0144	EB-2012- 0033	EB-2014- 0086	EB-2015- 0004	EB-2012- 0162	EB-2019-01 80	EB-2019- 0261
Year In Service	2008	2011	2012	2015	2015	2012	2022	2019
Function	Admin.	Admin /Ops	Admin.	Admin/ Ops.	Admin/ Ops.	Admin./Ops.	Admin.	Admin./ Ops.
Type of Project	New Build	Custom Build	Purch./ Refurb	Custom Build.	Purch./ Refurb.	New Build	Purch./ Refurb.	New Build
Capital Cost	\$27,700,000	\$26,682,000	\$18,000,000	\$10,896,704	\$12,524,798	\$23,000,000	\$8,100,000	\$99,543,840
Sq ft	92,000	105,000	79,000	36,172	91,872	110,382	21,892	293,873
FTEs	250	125	150	41	62	87	67	653
Sq.Ft./FTE	368	840	527	882	1,494	1,269	327	450
Cost/FTE	\$110,800	\$213,456	\$120,000	\$265,773	\$203,655	\$264,368	\$120,896	\$152,441
Cost/Sq.Ft.	\$301	\$254	\$228	\$301	\$136	\$208	\$370	\$339

2

- 3 These comparisons are not necessarily made on an "apples to apples" basis or with full
- 4 information (e.g. being able to isolate land costs and similar building functions). For example,
- 5 Operations, Warehouse and Storage construction typically costs less than Administrative Office
- 6 space costs, yet the total square footage in the above table is aggregated. Land costs vary
- 7 across comparator LDCs and some are at a nominal value (e.g. Energy +). If land costs are
- 8 removed from Hydro Ottawa, the Cost/Sq.Ft is \$272 which compares favourably to other LDCs
- 9 as shown in Table 18 below.



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#### Table 18 - Head Office Cost Comparison, Excluding Hydro Ottawa Land

	Power Stream	Waterloo North	Enersource	InnPower	Milton Hydro	PUC Distribution	Energy+	Hydro Ottawa
	EB-2008- 0244	EB-2010- 0144	EB-2012- 0033	EB-2014- 0086	EB-2015- 0004	EB-2012- 0162	EB-2019-01 80	EB-2019- 0261
Year In Service	2008	2011	2012	2015	2015	2012	2022	2019- Excl. Land
Function	Admin.	Admin /Ops	Admin.	Admin/ Ops.	Admin/ Ops.	Admin./Ops.	Admin.	Admin./ Ops.
Type of Project	New Build	Custom Build	Purch./ Refurb	Custom Build.	Purch./ Refurb.	New Build	Purch./ Refurb.	New Build.
Capital Cost	\$27,700,000	\$26,682,000	\$18,000,000	\$10,896,704	\$12,524,798	\$23,000,000	\$8,100,000	\$80,049,143
Sq ft	92,000	105,000	79,000	36,172	91,872	110,382	21,892	293,873
FTEs	250	125	150	41	62	87	67	653
Sq.Ft./FTE	368	840	527	882	1,494	1,269	327	450
Cost/FTE	\$110,800	\$213,456	\$120,000	\$265,773	\$203,655	\$264,368	\$120,896	\$122,587
Cost/Sq.Ft.	\$301	\$254	\$228	\$301	\$136	\$208	\$370	\$272

2

- 3 In order to help benchmark facilities on a comparable basis, information from Table 19 below
- 4 identifies facilities that are strictly Administration and then capital costs are escalated to 2019
- 5 dollars. These results are then compared with Hydro Ottawa's Administrative Office Building.
- 6 This comparison, which reflects escalation for PowerStream and Enersource capital cost is
- 7 presented in Table 19 below.



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#### Table 19 – Head Office Admin. Building Costs, PowerStream & Enersource Escalated

	Energy+	PowerStream	Enersource	Hydro Ottawa
	(Southworks)			
OEB Docket	EB-2018-0028	EB-2008-0244	EB-2012-0033	EB-2019-0261
Functions	Admin.	Admin	Admin.	Admin. (EC-1)
In-Service Year	2022	2008	2012	2019
Total Cost	\$8,100,000	\$37,588,900	\$21,114,000	\$52,770,894
Total Sq. Ft.	21,892	92,000	79,000	127,132
FTEs	67	250	150	419
Sq.Ft./FTE	327	368	527	303
Cost/FTE	\$120,896	\$150,356	\$140,760	\$125,945
Cost/Sq.Ft.	\$370	\$409	\$267	\$415

3 Costs for PowerStream and Enersource were escalated/normalized using the Statistics Canada

4 Building Construction Price Index. Cost escalation results from this Statistics Canada

information are summarized in Table 20.

2

6

8

7 Table 20 – Statistics Canada Building Construction Price Index

	Q1 2008	Q1 2012	Q2 2019	Q2'2019/Q1'2008	Q2'2019/Q1'2012
Toronto	83.0	90.4	108.3	30.5%	19.8%
Ottawa/Gatineau	81.0	93.7	109.9	35.7%	17.3%

The 2008 cost of the PowerStream Admin. Building (\$27,700,000) was escalated by 35.7% and the 2012 cost of the Enersource Admin. Building (\$18,000,000) was escalated by 17.3%. The Building Construction Price Index for Ottawa-Gatineau was used to enable a closer comparison to the vintage of a building had it been constructed in the Ottawa area. It is noted that non-residential construction cost escalation in the Ottawa-Gatineau area has been higher than in Toronto over the 2008 to 2019 period (35.7% compared to 30.5%) but lower in the 2012 to 2019 period. The most direct comparison to Hydro Ottawa's building is the PowerStream



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building as it is similar in nature in that it is a new build, primarily administration and does not include operations, garage and warehousing facilities. The PowerStream escalated cost of \$409 sq./ft. is close to the Hydro Ottawa cost of \$415 sq./ft.. Further differences between the PowerStream and Hydro Ottawa cost per sq./ft. would be the price of land but Hydro Ottawa does not have the information needed to remove the land costs from the comparator LDCs. Hydro Ottawa recognizes that while attempting to normalize data through escalation could be helpful in some cases, it does not necessarily result in a meaningful comparisons as there are other factors that create unit cost differences the nature of the project (new build vs. refurbishment, the cost of land and the mix of space (e.g. office / warehouse / garage / operations / storage).

11

With respect to other unitized measures that are not impacted by escalation, it is noted that the
Hydro Ottawa Administrative Office Building, when compared to the other administrative office
buildings in Table 19 above, has the lowest number of Sq. Ft,/FTE (303 Sq.Ft/FTE), reflecting
efficient use of space. Hydro Ottawa also has the lowest Cost/FTE when compared to
PowerStream and Enersource (\$125,945/FTE). The Energy+ Southworks Cost/FTE, while lower
than Hydro Ottawa's, is not directly comparable with Hydro Ottawa Administrative Office
Building as the nature of the Energy+ project is a refurbishment/renovation and the building was
purchased for \$1.<sup>22</sup>

- 21 Removing the cost of Hydro Ottawa land from Table 19, results in a Cost of \$372 per Sq. Ft. as
- 22 shown in Table 21 below.

<sup>&</sup>lt;sup>23</sup> <sup>22</sup> Update to Evidence, EB-2018-0028 (December 13, 2018), page 10.



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# Table 21 – Head Office Admin Building Costs, PowerStream & Enersource Escalated – Excluding Hydro Ottawa EC Land

	Energy+ (Southworks)	PowerStream	Enersource	Hydro Ottawa
OEB Docket	EB-2018-0028	EB-2008-0244	EB-2012-0033	EB-2019-0261
Functions	Admin.	Admin	Admin.	Admin. (EC-1)
In-Service Year	2022	2008	2012	2019
Total Cost	\$8,100,000	\$37,588,900	\$21,114,000	\$47,311,660
Total Sq. Ft.	21,892	92,000	79,000	127,132
FTEs	67	250	150	419
Sq.Ft./FTE	327	368	527	303
Cost/FTE	\$120,896	\$150,356	\$140,760	\$112,916
Cost/Sq.Ft.	\$370	\$409	\$267	\$372

3

- 4 Table 22 below compares the East Campus Administration & Operations buildings (EC-2 &
- 5 EC-3) to other Administration & Operations buildings identified in Table 18 above. In order to
- 6 compare on a current cost basis, costs have been escalated using the Statistics Canada
- 7 Building Construction Price Index for the relevant In-Service year as per Table 23.<sup>23</sup>

 $<sup>8^{-23}</sup>$  Update to Evidence, EB-2018-0028 (December 13, 2018), page 10.



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# Table 22 – Comparison of Administration & Operations Buildings (Escalated \$) to

#### East Campus (EC-2 & EC-3)

	East Campus (EC-2/EC-3) - Operations, Office, Garage, Warehouse							
	Waterloo North Hydro Inc.	InnPower	Milton Hydro Distribution Inc.	PUC Distribution Inc.	Hydro Ottawa EC-2 & EC-3 Scenario 1: Incl. Land	Hydro Ottawa EC-2 & EC-3 Scenario 2: Excl. Land		
Functions	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops		
In-service Year	2011	2015	2015	2012	2019	2019		
Total Cost	\$32,578,722	\$12,487,623	\$14,353,419	\$26,979,000	\$19,442,411	\$12,207,392		
Total Sq. Ft.	105,000	36,172	91,872	110,382	67,833	67,833		
FTEs	125	41	61.5	87	140	140		
Sq. Ft./FTE	840	882	1,494	1,269	485	485		
Cost/FTE	\$260,630	\$304,576	\$233,389	\$310,103	\$138,874	\$87,196		
Cost/Sq. Ft.	\$310	\$345	\$156	\$244	\$287	\$180		

3

1

2

4 It is noted that when costs are escalated, Hydro Ottawa's EC-2/EC-3 facilities have the lowest

5 Cost/FTE (\$138,874) and is in the midrange of Cost/Sq.Ft. (\$287). The EC-2/EC-3 facility has

6 the lowest Sq.Ft./FTE result (485) which is significantly lower than all other comparative results

7 - this result is not impacted by escalation. As land prices vary across the Province, Scenario 2

8 removes the cost of land from the Hydro Ottawa Total Cost to provide a clear picture of

9 construction costs, resulting in a Cost/Sq. Ft of \$180. Hydro Ottawa does not have the

10 information needed to remove land costs from the comparator LDCs.

11

12 In order to compare on a current cost basis, costs have been escalated using the Statistics

13 Canada Building Construction Price Index for the relevant In-Service year as per Table 23

14 below.<sup>24</sup>

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<sup>&</sup>lt;sup>15</sup> <sup>24</sup> Update to Evidence, EB-2018-0028 (December 13, 2018), page 10.



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#### Table 23 – Statistics Canada Building Construction Price Index

	Q1 2011	Q1 2012	Q1 2015	Q2 2019	Q2'2019 / Q1'2011	Q2'2019 / Q1'2012	Q2'2019 / Q1'2015
Toronto	87.5	90.4	93.7	108.3	23.8%	19.8%	15.6%
Ottawa/Gatineau	90	93.7	95.9	109.9	22.1%	17.3%	14.6%

2

1

3 Table 24 below compares the South Campus Administration & Operations building to other

4 Administration & Operations buildings identified in Table 18 above.

5

6 It is noted on Table 24 below, that when costs are escalated, Hydro Ottawa's SC-1 facility costs
7 as measured by Cost/FTE and Cost/Sq. Ft. are in the middle of the comparator LDCs. The
8 number of Sq. Ft/FTE is also in the middle of the range. Hydro Ottawa acknowledges that there
9 are a variety of configurations to the mix of Administration and Operations space and also
10 differences in cost between a refurbished facility (e.g. Milton Hydro) and a new build. Also,
11 differences in land values and size will have an impact on comparator costs. As such, a
12 Scenario 2 has been provided which removes the land cost from the SC-1 building in order to

13 provide an indication of direct construction costs.



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# Table 24 – Comparison of Administration & Operations Buildings (Escalated \$) to South Campus (SC-1)

	South Campus (SC) - Operations, Office, Garage, Warehouse								
	Waterloo North Hydro Inc.	InnPower	Milton Hydro Distribution Inc.	PUC Distribution Inc.	Hydro Ottawa SC-1 Scenario 1: Incl. Land	Hydro Ottawa SC-1 Scenario 2: Excl. Land			
Functions	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops	Admin & Ops			
In-service Year	2011	2015	2015	2012	2019	2019			
Total Cost	\$32,578,722	\$12,487,623	\$14,353,419	\$26,979,000	\$27,330,534	\$20,530,091			
Total Sq. Ft.	105,000	36,172	91,872	110,382	98,908	98,908			
FTEs	125	41	61.5	87	94	94			
Sq. Ft./FTE	840	882	1,494	1,269	1,052	1,052			
Cost/FTE	\$260,630	\$304,576	\$233,389	\$310,103	\$290,750	\$218,405			
Cost/Sq. Ft.	\$310	\$345	\$156	\$244	\$276	\$208			

3



# PPI CONSULTING LIMITED FAIRNESS COMMISSIONER REPORT C O N F I D E N T I A L

Project:	Hydro Ottawa Request for Proposal - Facilities Renewal Program Design Build
Report Stage:	Final Report
Date of submission:	October 14, 2016
Fairness Commissioner:	Rick Wilson
David Ayer	David Ayer, Manager, Supply Chain
Submitted by:	PPI Consulting Limited

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#### 1 INTRODUCTION

PPI Consulting Limited (PPI) was engaged by Hydro Ottawa as Fairness Commissioners to observe the procurement process for the Hydro Ottawa Request for Proposal - Facilities Renewal Program Design Build. The competitive process was open to pre-qualified proponents.

PPI's engagement commenced in January 2016. The primary PPI Fairness Commissioner assigned to the project was Rick Wilson. PPI confirms that Rick Wilson and other fairness participants are independent third parties with respect to this initiative and has no conflict of interest.

This fairness report covers the period from engagement to the completion of the evaluation process.

#### 2 SCOPE OF WORK

PPI was engaged during the drafting stage of the Request for Proposal - Facilities Renewal Program

Design Build. The Fairness Commissioner was responsible for advising the Hydro Ottawa project team on
the procurement process, to mitigate risk and protect the integrity of the procurement process.

Responsibilities included, but were not limited to, providing advice on:

- Fairness issues concerning the development of the RFP;
- Monitoring and providing advice on potential or real barriers to proponent participation;
- Identifying key issues and potential risks in the procurement process;
- Identifying any situation which may compromise the integrity of the evaluation process (i.e.
  overseeing the evaluation team and procurement processes and assessing potential bias or undue
  influence);
- Monitoring the evaluation of all submissions to oversee the fair treatment of all proponents;
- Monitoring the adherence of established government procurement practice in the planning, issue, evaluation, and
- Providing a Fairness Report at the conclusion of the evaluation process.

#### 3 PPI METHODOLOGY

#### 3.1 Our Approach and Methodology

In Canada, a *duty of fairness* generally exists independent of statutory law and has become a construct of both common law, and forceful public policy directed squarely at invoking public trust.

In terms of public policy, the principles of fairness, openness, transparency and accountability have been articulated and embodied in legislation, policy statements, and administrative directives (for all levels of government as well as publicly funded authorities and institutions) and set out the over-riding integrity framework for public procurement.

In this context, the *duty of fairness* in procurement can be expressed as:

- **Procedural fairness,** e.g. how decisions are made (the standards, criteria and steps to be followed before, during and after decisions are made); the transparency of the process (a prerequisite in system integrity); and the related enforcement of reserve rights (i.e. privilege clauses);
- Design and Performance Fairness, e.g. providing clarity of requirements to competing proponents that avoids (a) incomplete descriptions, or vagueness that may favour incumbents,
   (b) product bias in specifications and selection criteria, and (c) conflicting requirements or ambiguous statements that may confuse design and performance conditions;
- **Substantive fairness**, e.g. the fairness of the decision itself relative to criteria or obligations set by law (including case law), or how the actual provisions are set out in a formal contract setting; and
- **Relational fairness**, e.g. achieving a balance between the rights and interests of all parties, how people are treated during the decision making process (often the centre of a complaint).

The independent review of integrity issues and adherence to best practices in public sector procurement is a contemporary development that is designed to ensure fairness in the management of procurement initiatives, where fairness is defined as openness, competitiveness, and transparency.

In providing fairness consultancy services, PPI's approach and methodology includes a number of common elements, i.e.:

- reviewing the procurement methodology to be employed in the context of:
  - o objectivity and diligence respecting evaluation criteria;
  - o the proper use of assessment tools;
- monitoring decisions made, i.e. that decisions are made objectively, free from personal favouritism and political influence;
- assuring compliance with the assessment and selection process (ensuring that the evaluation teams follow the requirements for fair and equitable treatment of all proponents and follow the process that was detailed in the RFx);
- monitoring communications to proponents, including notification of changes in requirements;
- monitoring the confidentiality of proposals and evaluations (i.e. recognizing that the
  documentation arising from these initiatives, or received by the public sector in the development

and conduct of its engagement of private sector interests in procurement initiatives, may have claims of privilege attached to them);

- monitoring the security of information (i.e. providing advice on the disclosure of any information while preserving the commitment to transparency and openness of the process);
- assessing and making recommendations on any situation that may present a real or perceived conflict of interest, within the project management or evaluation team, or relevant to any supplier's proposal or representation;
- monitoring the process for any potential conflict of interest that may arise throughout the RFP assessment, selection or contracting process;
- process monitoring, including:
  - the planning and conduct of proceedings;
  - facilitation, mediation or arbitration of contentious matters arising throughout the process;
  - o assuring adequate debriefing of unsuccessful proponents.

In our approach, the Fairness Commissioner activities may vary depending on the complexity of the project and could include:

- review of and attention to the planned conduct of proceedings;
- facilitation, mediation or arbitration of contentious matters that may arise throughout the process;
- recommendations on matters that require review of a specific policy or procedure;
- assessment of and recommendations on any situation that may present a real or perceived conflict of interest, within the project management or evaluation team, or relevant to any proponent proposal or representation;
- maintaining focus on objectives and outcomes;
- reporting on compliance and the overall integrity of the process;
- a review of the procurement methodology to be employed, including compliance with administrative policies and practices; transparency, inclusion, openness and fairness in the definition of requirements; the development and application of evaluation criteria applied to written proposals, oral presentations and demonstrations; scoring; and open communications with proponents.
- providing guidance on maintaining the confidentiality of all proposal and evaluation records and documents;
- assess and make recommendations on any situation that may present a real or perceived conflict of interest, within the project management or evaluation team, or relevant to any respondent's proposal or representation;
- monitor the process for any potential conflict of interest that may arise throughout the RFP assessment, selection or contracting process;
- make recommendations on any action or decision of the evaluation team;
- make recommendations on any policy or procedure that should be reviewed by the Project Authority; and

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 provide reports at prescribed milestones attesting to the fairness of the process or identifying any fairness deficiencies.

#### 3.2 In Summary

When applying our methodology, PPI assesses the process, documentation and activities that are monitored based on a number of fairness principles specific to each stage in the procurement process.

These principles are documented against each phase of the fairness engagement in our fairness reports.

#### 4 FAIRNESS COMMISSIONER DELIVERABLES

#### 4.1 Review of Process and Activities Prior to RFP Posting

#### 4.1.1 Activity Monitored

The following documents were provided to PPI for review prior to posting:

- Draft and Final Request for Proposal documentation
- Evaluation Plan (scoring criteria, scoring grids and process)

Our review of documents and monitoring of activities in this phase considered the fairness principles below:

- Documents should be clearly written
- Language should be consistent, with consistent and appropriate use of defined terms
- Mandatory submission requirements should be clear and consistent with the scope of the procurement
- The bid open period should be reasonable and provide sufficient time for proponents to respond
- Sufficient information should be provided to allow a proponent to price the deliverables. If an incumbent is in place, access to relevant historic data should be provided
- Evaluation process should be clearly stated, i.e. steps in the evaluation, minimum thresholds etc.
- Evaluation criteria should contain clear direction as to the information that is required and the scoring method contains no hidden criteria
- The submission requirements should contain no bias for or against any one proponent
- All potential proponents should be provided with the same opportunity and the same information
  - All information and relevant project material necessary for a full understanding of the opportunity should be made available to all potential proponents at the same time
- All meetings with potential proponents should be attended by the Fairness Commissioner

#### 4.1.2 Pre-Posting RFP Phase Attestation of Fairness

PPI reviewed all of the information provided and observed all relevant activities in this stage of the procurement process. Our assessment of these activities is as follows:

COMMENT/DEFICIENCY	PRE-POSTING RFP PROCESS ASSESSMENT
No deficiencies were observed during this phase of the process	It is our professional opinion that the Pre Posting process and the activities that we observed during this phase of the process were carried out in a fair, open and transparent manner

#### 4.2 Review of Process and Activities during Bid Open Period

#### 4.2.1 Activity Monitored

The following documents were monitored by PPI:

Addenda which included proponent questions and answers

PPI participated in the following activities:

Commercially Confidential Meetings (CCMs) with the exception of June 28, 2016

PPI reviewed the documents to assess their fairness. Our review considered the fairness principles listed in the table below:

- The opportunity and all proponent communications should be posted on an open bidding system
  accessible to all potential proponents at the same time, or if a limited procurement process, should
  be provided to all invited proponents at the same time
- Sufficient time should be given to proponents to prepare and submit a proposal. As a courtesy to
  the proponent community, consideration should be given to external influences such as March
  break and Christmas vacation periods when calculating the response time
- All potential proponents should have the opportunity to submit questions according to a prescribed communications protocol
- Clarification questions should be addressed in a timely manner and should be published to all
  potential proponents as an amendment or addendum
- All amendments or addenda to the RFP should be distributed to all potential proponents at the same time
- Information should be provided in a timely manner such that potential proponents have sufficient time to prepare their proposals. If not, an extension time applicable to the new information should be provided
- The identity of potential proponents should be removed from any Addenda/Amendments
- No new mandatory requirements result from the Addenda/Amendment phase.

#### 4.2.2 Bid Open Period Phase Attestation of Fairness

PPI reviewed all of the information provided and observed all relevant activities in this stage of the procurement process. Our assessment of these activities is as follows:

COMMENT/DEFICIENCY	BID OPEN PERIOD PROCESS ASSESSMENT
No deficiencies were observed during this phase	It is our professional opinion that the process and
of the process.	the activities that were observed during this
	phase of the process were carried out in a fair,
	open and transparent procurement process.

#### 4.3 Review of Process and Activities during Bid Evaluation Process

#### 4.3.1 Activity Monitored

The following documents were provided to PPI for review:

- Evaluation Plan
- Scoring workbooks
- Evaluator Instructions/Process Guidelines for evaluation

PPI participated in the following activities:

- Evaluation Kick-off / Evaluator training session
- · Consensus scoring of proposals
- Financial evaluation
- Proponent presentations

Our review of documents and monitoring of activities in this phase considered the fairness principles below:

- Evaluation plan should be consistent with the published procurement documents
- Evaluation team members should be chosen and confirmed prior to the receipt of proposals
- Evaluation training should be provided to all evaluators and observers. This should include informing evaluators of the following as a minimum:
  - identity of the proposals received and requesting evaluators to declare any conflict of interest
  - o confidentiality protocols
  - o document control
  - o conduct for interaction with proponents (e.g. with an incumbent bidder)

- clarification process
- o overview of scoring workbooks and method for individual assessment
- explanation of hidden criteria
- overview of consensus scoring process
- explanation of fairness and the need for objectivity, consistency and equitable treatment of all proposals
- guidance with respect to only assessing the information that is in the proposal not info from previous experience etc.
- The scoring criteria and assessment tools should be established prior to the receipt of proposals and should be consistent with the RFP, i.e. contain no hidden scoring criteria
- The submissions should be logged and recorded upon receipt, clearly identifying those that were submitted on time
- The mandatory submission requirements were complied with
- The process for establishing one score from a team of evaluators should be established prior to the receipt of proposals (consensus, averaging, etc.)
- The same team of evaluators should evaluate all proposals (or parts thereof)
- The scoring assessment should be applied consistently and equitably by the evaluation team with no evidence of bias
- A secure location for the evaluation exercise should be established for the period of the evaluation
- Proposal documents should be physically secured within a secure location.

#### 4.3.2 Bid Evaluation Phase Attestation of Fairness

PPI reviewed all of the information provided and observed all relevant activities in this stage of the procurement process. Our assessment of these activities is as follows:

COMMENT/DEFICIENCY	BID OPEN PERIOD PROCESS ASSESSMENT
No deficiencies were observed during this phase	It is our professional opinion that the activities
of the process	that we observed during this phase of the
	process were carried out in a fair, open and
	transparent manner

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#### 5 Observations

Following the initial architectural Compliance Advisory Team review, Hydro Ottawa deemed that one bid was materially non-compliant with the requirements of the exemplary design to such a degree that it was unacceptable to Hydro Ottawa. Following further review and confirmation from legal counsel that the bid was materially deficient with respect to the requirements of Hydro Ottawa as set out in the exemplary design, the bid was removed from further evaluation. PPI's observation is that the bid was removed from the evaluation process for reasons of material non-compliance to the exemplary design and was not subjected to the evaluation process as set out in the RFP.

#### 6 ATTESTATION OF FAIRNESS

It is our professional opinion that the procurement process for the Facilities Renewal Program Design Build up to and including the completion of the evaluation process was conducted in a fair, open and transparent manner.

Katalin		
V	October 4, 2016	
Rick Wilson	Dated	



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#### 1 UPDATED ASSETS - PROPERTY PLANT & EQUIPMENT CONTINUITY SCHEDULE

2

#### 3 1. INTRODUCTION

- 4 This Schedule provides information as required under section 2.2.1.2 of the Chapter 2 Filing
- 5 Requirements for Electricity Distribution Rate Applications, as updated on July 12, 2018 and
- 6 addended on July 15, 2019 ("Filing Requirements"). In addition, the amounts for construction
- 7 work-in-progress ("CWIP") have also been provided. In accordance with the Filing
- 8 Requirements, appended to this Schedule are the following:

9

- Attachment 2-2-1(A): OEB Appendix 2-BA 2016 Fixed Asset Continuity Schedule
- Attachment 2-2-1(B): OEB Appendix 2-BA 2017 Fixed Asset Continuity Schedule
- Attachment 2-2-1(C): OEB Appendix 2-BA 2018 Fixed Asset Continuity Schedule
- UPDATED Attachment 2-2-1(D): OEB Appendix 2-BA 2019 Fixed Asset Continuity
   Schedule
- UPDATED Attachment 2-2-1(E): OEB Appendix 2-BA 2020 Fixed Asset Continuity

  Schedule
- UPDATED Attachment 2-2-1(F): OEB Appendix 2-BA 2021 Fixed Asset Continuity

  Schedule
- UPDATED Attachment 2-2-1(G): OEB Appendix 2-BA 2022 Fixed Asset Continuity

  Schedule
- UPDATED Attachment 2-2-1(H): OEB Appendix 2-BA 2023 Fixed Asset Continuity

  Schedule
- UPDATED Attachment 2-2-1(I): OEB Appendix 2-BA 2024 Fixed Asset Continuity

  Schedule
- UPDATED Attachment 2-2-1(J): OEB Appendix 2-BA 2025 Fixed Asset Continuity

  Schedule



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#### 1 2. GROSS ASSETS BY FUNCTION

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- 2 Tables 1 and 2 below provide Hydro Ottawa's Gross Assets balance by function for the
- 3 Historical Years 2016-2018, Bridge Years 2019 and 2020, and Test Years 2021-2025. After
- 4 accounting for 2019 actuals, Tables 1 and 2 have been updated for the Historical Years
- 5 2016-2019, Bridge Year 2020, and Test Years 2021-2025.

# Table 1 – AS ORIGINALLY SUBMITTED – 2016-2020 Gross Assets Breakdown by

8 **Function (\$'000s)** 

	Н	istorical Year	Bridge Years		
Gross Assets	2016	2017	2018	2019	2020
Transmission Plant	\$86,743	\$86,787	\$87,116	\$111,468	\$114,617
Distribution Plant	\$677,307	\$748,804	\$835,567	\$902,780	\$962,291
General Plant	\$158,074	\$177,694	\$189,652	\$275,660	\$294,021
Gross Fixed Assets Before CWIP and Accumulated Depreciation <sup>1</sup>	\$922,124	\$1,013,285	\$1,112,335	\$1,289,908	\$1,370,929
Accumulated Depreciation	\$(111,437)	\$(148,273)	\$(193,957)	\$(234,522)	\$(284,777)
CWIP	\$41,389	\$63,853	\$129,242	\$37,227	\$80,744
TOTAL INCLUDING CWIP <sup>2</sup>	\$852,076	\$928,862	\$1,047,620	\$1,092,613	\$1,166,896

## Table 1 – UPDATED FOR 2019 ACTUALS – 2016-2020 Gross Assets Breakdown by

#### 11 **Function (\$'000s)**

		Bridge Year			
Gross Assets	2016	2017	2018	2019	2020
Transmission Plant	\$86,743	\$86,787	\$87,116	\$115,600	\$118,748
Distribution Plant	\$677,307	\$748,804	\$835,567	\$908,399	\$970,352
General Plant	\$158,074	\$177,694	\$189,652	\$270,467	\$288,212
Gross Fixed Assets Before CWIP and Accumulated Depreciation <sup>3</sup>	\$922,124	\$1,013,285	\$1,112,335	\$1,294,466	\$1,377,314
Accumulated Depreciation	\$(111,437)	\$(148,273)	\$(193,957)	\$(227,434)	\$(277,670)
CWIP	\$41,389	\$63,853	\$129,242	\$30,588	\$71,970
TOTAL INCLUDING CWIP⁴	\$852,076	\$928,862	\$1,047,620	\$1,097,620	\$1,171,612

<sup>12 &</sup>lt;sup>1</sup> Variances may exist due to rounding.

2021 Hydro Ottawa Limited Electricity Distribution Rate Application

<sup>13 &</sup>lt;sup>2</sup> Variances may exist due to rounding.

<sup>&</sup>lt;sup>14</sup> <sup>3</sup> Variances may exist due to rounding.

<sup>15 4</sup> Variances may exist due to rounding.



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## Table 2 – AS ORIGINALLY SUBMITTED – 2021-2025 Gross Assets Breakdown by Function (\$'000s)

	Test Years					
Gross Assets	2021	2022	2023	2024	2025	
Transmission Plant	\$122,864	\$148,476	\$152,078	\$157,508	\$166,731	
Distribution Plant	\$1,025,910	\$1,102,457	\$1,166,737	\$1,233,617	\$1,315,811	
General Plant	\$369,087	\$383,907	\$391,361	\$399,599	\$428,514	
Gross Fixed Assets Before CWIP and Accumulated Depreciation⁵	\$1,517,861	\$1,634,840	\$1,710,176	\$1,790,724	\$1,911,056	
Accumulated Depreciation	\$(334,623)	\$(389,254)	\$(446,435)	\$(505,659)	\$(568,753)	
CWIP	\$51,388	\$29,536	\$40,457	\$54,289	\$27,763	
TOTAL INCLUDING CWIP6	\$1,234,626	\$1,275,123	\$1,304,198	\$1,339,356	\$1,370,066	

Table 2 – UPDATED FOR 2019 ACTUALS – 2021-2025 Gross Assets Breakdown by Function (\$'000s)

	Test Years				
Gross Assets	2021	2022	2023	2024	2025
Transmission Plant	\$126,996	\$152,608	\$156,210	\$161,639	\$170,862
Distribution Plant	\$1,035,800	\$1,114,852	\$1,179,131	\$1,246,012	\$1,328,205
General Plant	\$356,689	\$372,915	\$380,370	\$388,607	\$417,523
Gross Fixed Assets Before CWIP and Accumulated Depreciation <sup>7</sup>	\$1,519,485	\$1,640,374	\$1,715,712	\$1,796,259	\$1,916,592
Accumulated Depreciation	\$(327,398)	\$(381,867)	\$(438,922)	\$(498,020)	\$(560,987)
CWIP	\$45,054	\$21,918	\$32,839	\$46,671	\$20,144
TOTAL INCLUDING CWIP8	\$1,237,141	\$1,280,426	\$1,309,628	\$1,344,909	\$1,375,747

7 For detailed Fixed Asset Continuity Schedules for the years 2016-2025, please see

8 Attachments 2-2-1:(A) through (J). These Schedules have been updated for the years

9 2019-2025 to account for 2019 actuals, and can be found in UPDATED Attachments 2-2-1:(D)

10 through (J), respectively.

11 <sup>5</sup> Variances may exist due to rounding.

<sup>12 &</sup>lt;sup>6</sup> Variances may exist due to rounding.

<sup>13 &</sup>lt;sup>7</sup> Variances may exist due to rounding.

<sup>14 8</sup> Variances may exist due to rounding.



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#### 1 3. GROSS ASSETS BY MAJOR PLANT ACCOUNT

- 2 In accordance with section 2.2.1.2 of the Filing Requirements, Table 3 provides Gross Assets
- 3 balance by major plant account for each functionalized plant item, for Historical Years
- 4 2016-2018 and for Bridge Years 2019 and 2020. Table 3 has been updated to account for 2019
- 5 actuals and includes Historical Years 2016-2019 and Bridge Year 2020.



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#### Table 3 – AS ORIGINALLY SUBMITTED – 2016-2020 Gross Assets Breakdown by Major

2 Plant Account

#### 3 Organized by Uniform System of Account (\$'000s)

USofA	Description	Н	listorical Years	Bridge Years		
USOTA	Description	2016	2017	2018	2019	2020
1815	Transformer Station Equipment >50 kV	\$86,743	\$86,786	\$87,116	\$111,468	\$114,617
Subtotal 1	Transmission Plant	\$86,743	\$86,786	\$87,116	\$111,468	\$114,617
1612	Land Rights	\$2,283	\$2,294	\$2,288	\$2,288	\$2,297
1805	Land	\$4,645	\$4,649	\$4,652	\$4,653	\$4,654
1808	Buildings	\$27,727	\$28,802	\$29,663	\$30,189	\$30,897
1820	Distribution Station Equipment <50 kV	\$90,031	\$105,595	\$116,484	\$136,392	\$142,155
1830	Poles, Towers & Fixtures	\$107,430	\$117,400	\$128,239	\$135,443	\$144,524
1835	Overhead Conductors & Devices	\$99,986	\$108,617	\$121,174	\$130,158	\$146,838
1840	Underground Conduit	\$123,465	\$144,674	\$183,207	\$209,553	\$232,720
1845	Underground Conductors & Devices	\$121,891	\$143,156	\$158,562	\$174,458	\$198,932
1850	Line Transformers	\$70,722	\$79,264	\$87,689	\$92,878	\$100,712
1855	Services (Overhead & Underground)	\$53,864	\$61,034	\$67,353	\$69,941	\$74,510
1860	Meters	\$38,426	\$40,578	\$42,379	\$47,112	\$51,769
1970	Load Management Controls Customer Premises	\$134	\$134	\$134	\$0	\$147
1975	Load Management Controls Utility Premises	\$18	\$18	\$0	\$0	\$90
1980	System Supervisor Equipment	\$6,817	\$7,718	\$11,472	\$13,759	\$14,773
2440	Deferred Revenue	\$(70,132)	\$(95,130)	\$(117,729)	\$(144,044)	\$(182,727)
Subtotal I	Distribution Plant	\$677,307	\$748,803	\$835,567	\$902,780	\$962,291
1609	Capital Contributions Paid	\$20,089	\$20,776	\$22,976	\$35,051	\$35,961
1611	Computer Software	\$51,958	\$64,972	\$66,629	\$67,874	\$80,905
1905	Land	\$20,356	\$20,560	\$20,560	\$19,942	\$19,942
1908	Buildings & Fixtures	\$32,327	\$32,433	\$35,197	\$94,603	\$95,284
1915	Office Furniture and Equipment	\$1,330	\$1,407	\$1,616	\$4,778	\$4,879
1920	Computer Equipment - Hardware	\$7,346	\$6,804	\$8,600	\$13,652	\$15,255



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USofA	Description (Cont.d.)	Histo	rical Years (Co	ont'd)	Bridge Yea	Bridge Years (Cont'd)				
(Cont'd)	Description (Cont'd)	2016	2017	2018	2019	2020				
1930	Transportation Equipment	\$13,566	\$17,351	\$17,504	\$18,464	\$18,617				
1935	Stores Equipment	\$6	\$0	\$0	\$562	\$562				
1940	Tools, Shop & Garage Equipment	\$4,064	\$3,543	\$4,196	\$4,681	\$5,131				
1945	Measurement & Testing Equipment	\$229	\$215	\$215	\$252	\$252				
1950	Power Operated Equipment	\$3,252	\$1,064	\$914	\$1,098	\$1,369				
1955	Communications Equipment	\$3,302	\$8,318	\$10,990	\$14,447	\$15,462				
1960	Miscellaneous Equipment	\$249	\$250	\$255	\$256	\$402				
Subtotal (	General Plant	\$158,074	\$177,693	\$189,652	\$275,660	\$294,021				
Accumula	ted Depreciation	\$(111,437)	\$(148,273)	\$(193,957)	\$(234,522)	\$(284,777)				
	GROSS FIXED ASSETS BEFORE CWIP	\$810,687	\$865,009	\$918,378	\$1,055,386	\$1,086,152				
2055	Construction Work-in-Progress	\$41,389	\$63,853	\$129,242	\$37,227	\$80,744				
	TOTAL INCLUDING CWIP	\$852,076	\$928,862	\$1,047,620	\$1,092,613	\$1,166,896				



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## Table 3 – UPDATED FOR 2019 ACTUALS – 2016-2020 Gross Assets Breakdown by Major

2 Plant Account

## 3 Organized by Uniform System of Account (\$'000s)

USofA	Description		Historica	al Years		Bridge Year
		2016	2017	2018	2019	2020
1815	Transformer Station Equipment >50 kV	\$86,743	\$86,786	\$87,116	\$115,600	\$118,748
Subtotal T	ransmission Plant	\$86,743	\$86,786	\$87,116	\$115,600	\$118,748
1612	Land Rights	\$2,283	\$2,294	\$2,288	\$2,525	\$2,533
1805	Land	\$4,645	\$4,649	\$4,652	\$4,660	\$4,661
1808	Buildings	\$27,727	\$28,802	\$29,663	\$29,687	\$30,395
1820	Distribution Station Equipment <50 kV	\$90,031	\$105,595	\$116,484	\$129,195	\$134,959
1830	Poles, Towers & Fixtures	\$107,430	\$117,400	\$128,239	\$137,470	\$146,551
1835	Overhead Conductors & Devices	\$99,986	\$108,617	\$121,174	\$128,553	\$145,233
1840	Underground Conduit	\$123,465	\$144,674	\$183,207	\$216,884	\$240,051
1845	Underground Conductors & Devices	\$121,891	\$143,156	\$158,562	\$175,231	\$199,704
1850	Line Transformers	\$70,722	\$79,264	\$87,689	\$94,891	\$102,726
1855	Services (Overhead & Underground)	\$53,864	\$61,034	\$67,353	\$71,087	\$75,656
1860	Meters	\$38,426	\$40,578	\$42,379	\$47,199	\$51,856
1970	Load Management Controls Customer Premises	\$134	\$134	\$134	\$0	\$0
1975	Load Management Controls Utility Premises	\$18	\$18	\$0	\$0	\$0
1980	System Supervisor Equipment	\$6,817	\$7,718	\$11,472	\$13,736	\$14,750
2440	Deferred Revenue	\$(70,132)	\$(95,130)	\$(117,729)	\$(142,719)	\$(178,723)
Subtotal D	Distribution Plant	\$677,307	\$748,803	\$835,567	\$908,399	\$970,352
1609	Capital Contributions Paid	\$20,089	\$20,776	\$22,976	\$34,685	\$35,595
1611	Computer Software	\$51,958	\$64,972	\$66,629	\$66,604	\$79,634
1905	Land	\$20,356	\$20,560 \$20,560		\$19,942	\$19,942
1908	Buildings & Fixtures	\$32,327	\$32,433	\$35,197	\$94,651	\$95,004
1915	Office Furniture and Equipment	\$1,330	\$1,407	\$1,616	\$4,345	\$4,445
1920	Computer Equipment - Hardware	\$7,346	\$6,804	\$8,600	\$10,046	\$11,506



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USofA	Description (Contid)	Histo	rical Years (Co	Bridge Years (Cont'd)				
(Cont'd)	Description (Cont'd)	2016	2017	2018	2019	2020		
1930	Transportation Equipment	\$13,566	\$17,351	\$17,504	\$18,839	\$18,992		
1935	Stores Equipment	\$6	\$0	\$0	\$561	\$561		
1940	Tools, Shop & Garage Equipment	\$4,064	\$3,543	\$4,196	\$3,998	\$4,447		
1945	Measurement & Testing Equipment	\$229	\$215	\$215	\$209	\$209		
1950	Power Operated Equipment	\$3,252	\$1,064	\$914	\$1,122	\$1,393		
1955	Communications Equipment	\$3,302	\$8,318	\$10,990	\$15,266	\$16,279		
1960	Miscellaneous Equipment	\$249	\$250	\$255	\$199	\$205		
Subtotal (	General Plant	\$158,074	\$177,693	\$189,652	\$270,467	\$288,212		
Accumula	ated Depreciation	\$(111,437)	\$(148,273)	\$(193,957)	\$(227,434)	\$(277,670)		
	GROSS FIXED ASSETS BEFORE CWIP	\$810,687	\$865,009	\$918,378	\$1,067,032	\$1,099,642		
2055	Construction Work-in-Progress	\$41,389	\$63,853	\$129,242	\$30,588	\$71,970		
	TOTAL INCLUDING CWIP	\$852,076	\$928,862	\$1,047,620	\$1,097,620	\$1,171,613		

- 2 In accordance with section 2.2.1.2 of the Filing Requirements, Table 4 below provides Gross
- 3 Assets balance by major plant account for each functionalized plant item for Test Years
- 4 2021-2025. The table has been updated to account for 2019 actuals.



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## Table 4 – AS ORIGINALLY SUBMITTED – 2021-2025 Gross Assets Breakdown by Major

## Plant Account

## 3 Organized by Uniform System of Account (\$'000s)

				Test Years					
USofA	Description	2021	2022	2023	2024	2025			
1815	Transformer Station Equipment >50 kV	\$122,864	\$148,476	\$152,078	\$157,508	\$166,731			
Subtota	Transmission Plant	\$122,864	\$148,476	\$152,078	\$157,508	\$166,731			
1612	Land Rights	\$2,310	\$2,323	\$2,335	\$2,348	\$2,360			
1805	Land	\$4,655	\$4,818	\$4,818	\$4,818	\$5,597			
1808	Buildings	\$31,622	\$39,988	\$40,522	\$41,453	\$42,869			
1820	Distribution Station Equipment <50 kV	\$155,798	\$165,707	\$169,737	\$181,635	\$208,287			
1830	Poles, Towers & Fixtures	\$152,926	\$161,774	\$171,336	\$179,209	\$186,899			
1835	Overhead Conductors & Devices	\$158,007	\$171,112	\$184,464	\$196,200	\$207,644			
1840	Underground Conduit	\$258,416	\$280,641	\$301,045	\$319,592	\$338,120			
1845	Underground Conductors & Devices	\$224,573	\$245,221	\$263,683	\$280,969	\$298,142			
1850	Line Transformers	\$108,857	\$116,780	\$124,383	\$131,512	\$138,655			
1855	Services (Overhead & Underground)	\$78,914	\$83,478	\$88,074	\$92,510	\$96,939			
1860	Meters	\$58,145	\$63,944	\$69,662	\$75,920	\$81,661			
1970	Load Management Controls Customer Premises	\$855	\$919	\$919	\$919	\$919			
1975	Load Management Controls Utility Premises	\$484	\$533	\$533	\$533	\$533			
1980	System Supervisor Equipment	\$16,350	\$18,052	\$19,044	\$20,139	\$21,672			
2440	Deferred Revenue	\$(226,002)	\$(252,833)	\$(273,818)	\$(294,138)	\$(314,486)			
Subtotal	Distribution Plant	\$1,025,910	\$1,102,457	\$1,166,737	\$1,233,619	\$1,315,811			
1609	Capital Contributions Paid	\$87,185	\$87,395	\$87,495	\$89,625	\$96,925			
1611	Computer Software	\$91,850	\$98,172	\$101,762	\$104,435	\$121,290			
1905	Land	\$19,942	\$19,942	\$19,942	\$19,942	\$19,942			
1908	Buildings & Fixtures	\$97,627	\$98,054	\$98,407	\$98,760	\$99,112			
1915	Office Furniture and Equipment	\$4,954	\$5,030	\$5,080	\$5,131	\$5,181			



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USofA	Description (Oscalal)		Tes	t Years (Con	t'd)		
(Cont'd)	Description (Cont'd)	2021	2022	2023	2024	2025	
1920	Computer Equipment - Hardware	\$16,837	\$19,455	\$20,616	\$21,504	\$23,077	
1930	Transportation Equipment	\$22,920	\$26,097	\$26,829	\$27,726	\$27,825	
1935	Stores Equipment	\$562	\$562	\$562	\$562	\$562	
1940	Tools, Shop & Garage Equipment	\$5,604	\$6,079	\$6,540	\$7,005	\$7,474	
1945	Measurement & Testing Equipment	\$252	\$252	\$252	\$252	\$252	
1950	Power Operated Equipment	\$1,482	\$1,482	\$1,597	\$1,597	\$2,055	
1955	Communications Equipment	\$18,972	\$20,443	\$21,318	\$22,099	\$23,833	
1960	Miscellaneous Equipment	\$900	\$944	\$961	\$961	\$986	
Subtota	General Plant	\$369,087	\$383,907	\$391,361	\$399,599	\$428,514	
Accumu	lated Depreciation	\$(334,623)	\$(389,254)	\$(446,435)	\$(505,659)	\$(568,753)	
GROSS FIXED ASSETS BEFORE CWIP		\$1,183,238	\$1,245,586	\$1,263,741	\$1,285,067	\$1,342,303	
2055	Construction Work-in-Progress	\$51,388	\$29,536	\$40,457	\$54,289	\$27,763	
TOTAL I	NCLUDING CWIP	\$1,234,626	\$1,275,123	\$1,304,198	\$1,339,356	\$1,370,066	



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## Table 4 – UPDATED FOR 2019 ACTUALS – 2021-2025 Gross Assets Breakdown by Major

## **Plant Account**

### Organized by Uniform System of Account (\$'000s)

				Test Years		
USofA	Description	2021	2022	2023	2024	2025
1815	Transformer Station Equipment >50 kV	\$126,966	\$152,608	\$156,210	\$161,639	\$170,862
Subtotal	Transmission Plant	\$126,966	\$152,608	\$156,210	\$161,639	\$170,862
1612	Land Rights	\$2,546	\$2,560	\$2,572	\$2,584	\$2,597
1805	Land	\$4,662	\$4,825	\$4,825	\$4,825	\$5,604
1808	Buildings	\$31,120	\$39,486	\$40,020	\$40,951	\$42,367
1820	Distribution Station Equipment <50 kV	\$148,602	\$158,511	\$162,541	\$174,439	\$201,091
1830	Poles, Towers & Fixtures	\$154,953	\$163,801	\$173,363	\$181,236	\$188,926
1835	Overhead Conductors & Devices	\$156,403	\$169,507	\$182,859	\$194,596	\$206,039
1840	Underground Conduit	\$265,747	\$287,972	\$308,375	\$326,922	\$345,451
1845	Underground Conductors & Devices	\$225,346	\$245,994	\$264,456	\$281,741	\$298,915
1850	Line Transformers	\$110,871	\$118,794	\$126,397	\$133,525	\$140,668
1855	Services (Overhead & Underground)	80,060	\$84,624	\$89,220	\$93,656	\$98,085
1860	Meters	\$58,081	\$63,967	\$69,685	\$75,943	\$81,684
1970	Load Management Controls Customer Premises	\$0	\$351	\$351	\$351	\$351
1975	Load Management Controls Utility Premises	\$0	\$203	\$203	\$203	\$203
1980	System Supervisor Equipment	\$16,327	\$18,028	\$19,021	\$20,116	\$21,649
2440	Deferred Revenue	\$(218,918)	\$(243,771)	\$(264,757)	\$(285,076)	\$(305,425)
Subtotal	Distribution Plant	\$1,035,800	\$1,114,852	\$1,179,131	\$1,246,012	\$1,328,205
1609	Capital Contributions Paid	\$86,819	\$87,029	\$87,129	\$89,259	\$96,559
1611	Computer Software	\$86,623	\$93,009	\$96,594	\$99,267	\$116,121
1905	Land	\$19,942	\$19,942	\$19,942	\$19,942	\$19,942
1908	Buildings & Fixtures	\$95,356	\$96,951	\$97,304	\$97,656	\$98,009
1915	Office Furniture and Equipment	\$4,521	\$4,597	\$4,647	\$4,697	\$4,748



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USofA	Description (Contlet)	Test Years (Cont'd)											
(Cont'd)	Description (Cont'd)	2021	2022	2023	2024	2025							
1920	Computer Equipment - Hardware	\$12,970	\$15,488	\$16,648	\$17,536	\$19,110							
1930	Transportation Equipment	\$23,295	\$26,472	\$27,204	\$28,101	\$28,200							
1935	Stores Equipment	\$561	\$561	\$561	\$561	\$561							
1940	Tools, Shop & Garage Equipment	\$4,921	\$5,395	\$5,857	\$6,322	\$6,791							
1945	5 Measurement & Testing Equipment		\$209	\$209	\$209	\$209							
1950	Power Operated Equipment	\$1,505	\$1,505	\$1,621	\$1,621	\$2,078							
1955	Communications Equipment	\$19,755	\$21,243	\$22,117	\$22,899	\$24,633							
1960	Miscellaneous Equipment	\$212	\$520	\$537	\$537	\$562							
Subtota	General Plant	\$356,689	\$372,915	\$380,370	\$388,607	\$417,523							
Accumu	lated Depreciation	\$(327,398)	\$(381,867)	\$(438,922)	\$(498,020)	\$(560,987)							
GROSS	FIXED ASSETS BEFORE CWIP	\$1,192,087	\$1,258,508	\$1,276,789	\$1,298,238	\$1,355,603							
2055	Construction Work-in-Progress	\$45,054	\$21,918	\$32,839	\$46,671	\$20,144							
TOTAL I	NCLUDING CWIP	\$1,237,141	\$1,280,426	\$1,309,627	\$1,344,909	\$1,375,747							

## 2 4. SIGNIFICANT IN-SERVICE ADDITIONS

- 3 4.1. HISTORICAL YEARS 2016-2018 AND BRIDGE YEARS 2019-2020
- 4 (UPDATED: HISTORICAL YEARS 2016-2019 AND BRIDGE YEAR 2020)
- 5 The major capital projects that were executed, or are set to be executed, during this period are
- 6 outlined below in Table 5, which has been updated to account for 2019 actuals. Background
- 7 information on these projects can be found in Attachment 2-4-3(E): Material Investments.



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# Table 5 – AS ORIGINALLY SUBMITTED – 2016-2020 Overview of Significant In-Service Additions (\$'000,000s)

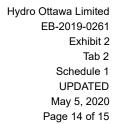
Description/Type	Project	Cost
Station growth driven by capacity	Merivale MTS Station Renewal	\$15.9
constraints	Richmond South Station Upgrade	\$13.4
Other distribution system	Residential, Commercial, System Expansion, and Infill & Upgrade Capital Programs	\$68.7
Richmond South Station Upgrade  Residential, Commercial, System Expansion, and Infill Upgrade Capital Programs  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear Replacement  System Voltage Conversion		\$13.6
	Pole Renewal	\$44.8
Other distribution system expansions/upgrades to provide basic levels of service and supply growing communities  Ongoing replacement of existing aging distribution system to minimize failure risk  Station protection and control renewal projects  Residential, Commercial, System Upgrade Capital Programs  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear  System Voltage Conversion  Woodroffe Station Switchgear Re  New Administrative Office and Optic Planning Sy  Other	Cable Replacement and Renewal	\$29.9
	Emergency Renewal	\$34.2
	Critical Renewal	\$11.7
	Fibre Optic Network	\$18.9
Station protection and control	Overbrook SO Station Switchgear Replacement	\$13.3
renewal projects	System Voltage Conversion	\$13.0
	Woodroffe Station Switchgear Replacement	\$11.1
	New Administrative Office and Operations Facilities <sup>9</sup>	\$79.9
Othor	Enterprise Resource Planning System Upgrade	\$11.3
Ottlei	Customer Care and Billing System Upgrades	\$8.1
	Fleet Replacement <sup>10</sup>	\$6.3

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<sup>4</sup> Land is excluded. For additional information on this project, please see Attachment 2-1-1(A): New Administrative

<sup>5</sup> Office and Operations Facilities.
6 Office and Operations Facilities.
10 For additional information, please see Attachment 2-4-3(F): Fleet Replacement Program.





# Table 5 – UPDATED FOR 2019 ACTUALS – 2016-2020 Overview of Significant In-Service Additions (\$'000,000s)

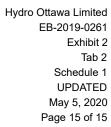
Richmond South Station Upgrade  ther distribution system (pansions/upgrades to provide asic levels of service and supply rowing communities)  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear Replacement  Cannot South Station Upgrade  Residential, Commercial, System Expansion, and Infill & Upgrade Capital Programs  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear Replacement		Cost
Station growth driven by capacity	Merivale MTS Station Renewal	\$16.0
constraints	Richmond South Station Upgrade	\$13.1
Richmond South Station Upgrade  Residential, Commercial, System Expansion, and Infill & Upgrade Capital Programs  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear Replacement	\$75.9	
basic levels of service and supply growing communities	Plant Relocation	\$15.5
	Pole Renewal	\$43.3
Ongoing replacement of existing	Cable Replacement and Renewal	\$31.1
minimize failure risk	Emergency Renewal	\$38.0
ging distribution system to inimize failure risk  Emergency Renewal  Critical Renewal	Critical Renewal	\$13.2
Richmond South Station Opgrade  Ather distribution system expansions/upgrades to provide asic levels of service and supply rowing communities  Plant Relocation  Pole Renewal  Cable Replacement and Renewal  Emergency Renewal  Critical Renewal  Critical Renewal  Fibre Optic Network  Overbrook SO Station Switchgear Replacement  System Voltage Conversion  Woodroffe Station Switchgear Replacement	Fibre Optic Network	\$18.7
Station protection and control	Overbrook SO Station Switchgear Replacement	\$13.3
renewal projects	System Voltage Conversion	\$11.9
	Woodroffe Station Switchgear Replacement	\$11.1
	New Administrative Office and Operations Facilities <sup>11</sup>	\$79.9
Othor	Enterprise Resource Planning System Upgrade	\$11.3
Ottlei	Customer Care and Billing System Upgrades	\$8.1
	Fleet Replacement <sup>12</sup>	\$6.7

3

- 4 For 2016-2020, Hydro Ottawa is projecting Capital Additions to exceed the overall envelope by
- 5 \$54.1M. After accounting for 2019 actual Capital Additions, Hydro Ottawa is projecting Capital
- 6 Additions to exceed the overall envelope by \$70.4M. Additional details, including a variance
- 7 analysis, are available in **UPDATED** Exhibit 2-4-1: Capital Expenditure Summary.

<sup>8 11</sup> Land is excluded. For additional information on this project, please see UPDATED Attachment 2-1-1(A): New

<sup>9</sup> Administrative Office and Operations Facilities.
10 12 For additional information, please see Attachment 2-4-3(F): Fleet Replacement Program.





### 1 4.2. TEST YEARS 2021-2025

- 2 The major capital projects planned for the 2021-2025 period are outlined below in Table 6.
- 3 Background information on these projects can be found in Attachment 2-4-3(E): Material
- 4 Investments.

5

## Table 6 – 2021-2025 Overview of Significant In-Service Additions (\$'000,000s)

Description/Type	Project	Cost
Station growth driven by	Cambrian MTS	\$82.4 <sup>13</sup>
capacity constraints	New East Station	\$30.714
Other distribution system expansion/upgrade to provide	Residential, Commercial, System Expansion, and Infill & Upgrade Capital Programs	\$67.6
basic levels of service and supply growing communities	Plant Relocation	\$11.0
	Pole Renewal	\$33.7
Ongoing replacement of	Cable Replacement and Renewal	\$40.7
existing aging distribution system to minimize failure risk	Emergency Renewal	\$22.4
	Critical Renewal	\$21.5
	Riverdale TS Station Switchgear Upgrade	\$14.2 <sup>15</sup>
	Fisher Station Rebuild	\$9.6
Station protection and control renewal projects	Bells Corners Rebuild	\$10.3
	Overbrook TO Station Switchgear Replacement	\$7.1 <sup>16</sup>
	Dagmar Station Rebuild	\$6.0
Other	Fleet Replacement <sup>17</sup>	\$16.6
Oulei	Enterprise Resource Planning System Upgrade	\$12.0

<sup>&</sup>lt;sup>8</sup> <sup>13</sup> Cost includes Connection Cost Recovery Agreement ("CCRA") payments to Hydro One Networks Inc. ("HONI").

<sup>&</sup>lt;sup>9 14</sup> Ibid.

<sup>10 &</sup>lt;sup>15</sup> Cost includes CCRA payments to HONI.

<sup>11 &</sup>lt;sup>16</sup> *Ibid*.

<sup>&</sup>lt;sup>12</sup> For additional information, please see Attachment 2-4-3(F): Fleet Replacement Program.

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## Appendix 2-BA Fixed Asset Continuity Schedule <sup>1</sup>

Accounting Standard MIFRS
Year 2016

				Cos	t							
CCA Class <sup>2</sup>	OEB Account <sup>3</sup>	Description <sup>3</sup>	Opening Balance	Additions <sup>4</sup>	Disposals <sup>6</sup>	Closing Balance		Opening Balance	Additions	Disposals <sup>6</sup>	Closing Balance	Net Book Value
	1609	Capital Contributions Paid	\$ 17,044,761	\$ 3,044,490		\$ 20,089,251	-\$	172,650	-\$ 451,192		-\$ 623,842	\$ 19,465,409
12	1611	Computer Software (Formally known as Account 1925)	\$ 49,841,304	\$ 2,116,356		\$ 51,957,660	-\$	12,718,283	-\$ 7,775,205		-\$ 20,493,488	\$ 31,464,172
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 1,809,831	\$ 472,925		\$ 2,282,756	-\$	98,349	-\$ 58,928		-\$ 157,277	\$ 2,125,479
N/A	1805	Land	\$ 4,626,006	\$ 18,883		\$ 4,644,889	\$	-	\$ -	\$ -	\$ -	\$ 4,644,889
47	1808	Buildings	\$ 27,181,307	\$ 548,125	-\$ 1,958	\$ 27,727,474	-\$	1,562,374	-\$ 807,905	\$ 681	-\$ 2,369,598	\$ 25,357,876
13	1810	Leasehold Improvements				\$ -					\$ -	\$ -
47	1815	Transformer Station Equipment >50 kV	\$ 86,332,769	\$ 410,684		\$ 86,743,453	-\$	5,916,078	-\$ 3,100,415		-\$ 9,016,493	\$ 77,726,960
47	1820	Distribution Station Equipment <50 kV	\$ 82,697,721	\$ 7,359,391	-\$ 26,429	\$ 90,030,683	-\$	7,645,290	-\$ 3,447,469	\$ 2,322	-\$ 11,090,437	\$ 78,940,246
47	1825	Storage Battery Equipment	, ,	, ,		\$ -		, ,	, ,		\$ -	\$ -
47		Poles, Towers & Fixtures	\$ 94,688,479	\$ 13,113,345	-\$ 371,394	\$ 107,430,430	-\$	4,351,747	-\$ 2,600,754	\$ 26,826	-\$ 6,925,675	\$ 100,504,755
47	1835	Overhead Conductors & Devices	\$ 86,852,500	. , ,	-\$ 396,075	\$ 99,985,646	-\$		-\$ 2,508,355	\$ 34,051		\$ 93,475,906
47	1840	Underground Conduit	\$ 104,216,636	\$ 19,247,873	\$ -	\$ 123,464,509	-\$		-\$ 3,522,363	\$ -	-\$ 8,765,914	\$ 114,698,595
47	1845	Underground Conductors & Devices	\$ 101,480,101	\$ 20,556,281	-\$ 145,434	\$ 121,890,948	-\$		-\$ 3.953.829	\$ 13,696	-\$ 10,317,212	\$ 111.573.736
47	1850	Line Transformers	\$ 63,029,800	\$ 8,007,899	-\$ 315,329	\$ 70,722,370	-\$		-\$ 2,268,951	\$ 33,434		\$ 64,636,302
47	1855	Services (Overhead & Underground)	\$ 48,210,872	\$ 5,653,381	\$ -	\$ 53,864,253	-\$		-\$ 1,446,998	\$ -	-\$ 4,003,116	\$ 49,861,137
47	1860	Meters	+ 10,210,012	+ -,,	_ ·	\$ -	Ť		+ 1,112,222	1	\$ -	\$ -
47	1860	Meters (Smart Meters)	\$ 36,737,909	\$ 1,977,455	-\$ 289,399	\$ 38,425,965	-\$	5,505,563	-\$ 3.126.447	\$ 67,569	-\$ 8,564,441	\$ 29,861,524
N/A	1905	Land	\$ 20,355,841	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7 200,000	\$ 20,355,841	Ť	-,,,,,,,,,	* *************************************	7 01,000	\$ -	\$ 20,355,841
47	1908	Buildings & Fixtures	\$ 32,045,065	\$ 281,924	\$ -	\$ 32,326,989	-\$	3,620,702	-\$ 1,834,915	\$ -	-\$ 5,455,617	\$ 26,871,372
13	1910	Leasehold Improvements	\$ -	\$ -	\$ -	\$ -	\$		\$ -	\$ -	\$ -	\$ -
8	1915	Office Furniture & Equipment (10 years)	\$ 1,257,807	\$ 72,286	\$ -	\$ 1,330,093	-\$	460,732	-\$ 224,732	\$ -	-\$ 685,464	\$ 644.629
8	1915	Office Furniture & Equipment (5 years)	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -
10	1920	Computer Equipment - Hardware	7	_ <del>T</del>	_ ·	\$ -	Ť			1	\$ -	\$ -
45	1920	Computer EquipHardware(Post Mar. 22/04)				\$ -					\$ -	\$ -
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 6,691,379	\$ 654,364		\$ 7,345,743	-\$	2,839,562	-\$ 1,431,505		-\$ 4,271,067	\$ 3,074,676
10	1930	Transportation Equipment	\$ 12,022,868	\$ 1,696,026	-\$ 153,184	\$ 13,565,710	-\$	2,273,672	-\$ 1,215,782	\$ 46,141	-\$ 3,443,313	\$ 10,122,397
8	1935	Stores Equipment	\$ 5,728	\$ -	\$ -	\$ 5,728	-\$		\$ -	\$ -	-\$ 5,728	
8	1940	Tools, Shop & Garage Equipment	\$ 3,690,030	\$ 373,472	\$ -	\$ 4,063,502	-\$		-\$ 574,962	\$ -	-\$ 1,893,240	
8	1945	Measurement & Testing Equipment	\$ 228,830	\$ -	\$ -	\$ 228,830	-\$		-\$ 27,262	\$ -	-\$ 88,472	
8		Power Operated Equipment	\$ 1,044,717	\$ 2,207,170	\$ -	\$ 3,251,887	-\$	145,469	-\$ 166,365	\$ -	-\$ 311,834	\$ 2,940,053

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8	1055	Communications Equipment	0	1 022 006	0	1 267 075	Φ.		ı.	2 201 761	-	160 451	•	264 702	•		Φ.	024 154	Φ.	2.467.607
	1955	Communications Equipment	\$	1,933,886	\$	1,367,875	Þ	-	\$	3,301,761	-5	\$ 469,451	-\$	364,703	Þ	-	-\$	834,154	<b>Þ</b>	2,467,607
8	1955	Communication Equipment (Smart Meters)	\$	-	\$	-	\$	-	\$	-	3	\$ -	\$	-	\$	-	\$	-	\$	-
8	1960	Miscellaneous Equipment	\$	240,794	\$	7,903	\$		\$	248,697	-5	\$ 71,332	-\$	36,676	\$	-	-\$	108,008	\$	140,689
	1970	Load Management Controls Customer																		
47	1370	Premises	\$	134,245	\$	-	\$	-	\$	134,245	-8	\$ 104,852	-\$	27,781	\$	-	-\$	132,633	\$	1,612
47	1975	Load Management Controls Utility Premises	\$	17,974	\$	-	\$	-	\$	17,974	-5	\$ 14,388	-\$	3,587	\$	-	-\$	17,975	-\$	1
47	1980	System Supervisor Equipment	\$	6,357,821	\$	459,021	\$	-	\$	6,816,842	-5	\$ 1,459,363	-\$	725,758	\$	-	-\$	2,185,121	\$	4,631,721
47	1985	Miscellaneous Fixed Assets	\$	-	\$	-	\$	-	\$	-	3	\$ -	\$	-	\$	-	\$	-	\$	-
47	1990	Other Tangible Property							\$	-							\$	-	\$	-
47	1995	Contributions & Grants							\$	-							\$	-	\$	-
47	2440	Deferred Revenue <sup>5</sup>	-\$	48,553,292	-\$:	21,578,316	\$	-	-\$	70,131,608	3	\$ 1,297,122	\$	1,621,618	\$	-	\$	2,918,740	-\$	67,212,868
									\$	-							\$	-	\$	-
		Sub-Total	\$ 8	842,223,689	\$	81,598,034	-\$ 1,	,699,202	\$ 9	922,122,521	-5	\$ 71,580,686	-\$	40,081,221	\$	224,720	-\$ 1	11,437,187	\$ 8	310,685,334
		Less Socialized Renewable Energy																		
		Generation Investments (input as negative)							\$	-							\$	-	\$	-
		Less Other Non Rate-Regulated Utility																		
		Assets (input as negative)							\$	-							\$	-	\$	-
	•	Total PP&E	\$ 8	342,223,689	\$	81,598,034	-\$ 1,	,699,202	\$ 9	922,122,521	-5	\$ 71,580,686	-\$	40,081,221	\$	224,720	-\$ 1	11,437,187	\$ 8	310,685,334
		Depreciation Expense adj. from gain or los	SS O	n the retirem	ent	of assets (	pool	of like as	set	s), if applica	ble	6								
		Total											-\$	40,081,221						

		Less: Fully Allocated Depreciation	
10	Transportation	Transportation	
8	Stores Equipment	Stores Equipment	
	•	Net Depreciation -\$ 40.0	81.221

- 1 Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

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## Appendix 2-BA Fixed Asset Continuity Schedule <sup>1</sup>

Accounting Standard Year

MIFRS **2017** 

				C	ost					Ac	cumulated [	Depr	eciation				
CCA Class <sup>2</sup>	OEB Account <sup>3</sup>	Description <sup>3</sup>	Opening Balance	Additions <sup>4</sup>	Disposals <sup>6</sup>	Clos	sing Balance		Opening Balance		Additions	Dis	posals <sup>6</sup>		Closing Balance		et Book Value
	1609	Capital Contributions Paid	\$ 20,089,251	\$ 686,500	\$ -	\$	20,775,751	-\$	623,842	-\$	451,404	\$	-	-\$	1,075,246	\$	19,700,505
12	1611	Computer Software (Formally known as Account 1925)	\$ 51,957,660	\$ 14,077,258	-\$ 1,063,022	\$	64,971,896	-\$	20,493,488	-\$	6,656,426	\$1	,063,022	-\$	26,086,892	\$ :	38,885,004
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,282,756	\$ 10,866	\$ -	\$	2,293,622	-\$	157,277	-\$	59,224	\$	-	-\$	216,501	\$	2,077,121
N/A	1805	Land	\$ 4,644,889	\$ 4,136	\$ -	\$	4,649,025	\$	-	\$	-	\$	-	\$	-	\$	4,649,025
47	1808	Buildings	\$ 27,727,474	\$ 1,074,355	\$ -	\$	28,801,829	-\$	2,369,598	-\$	798,585	\$	-	-\$	3,168,183	\$ :	25,633,646
13	1810	Leasehold Improvements	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	_	\$	_
47	1815	Transformer Station Equipment >50 kV	\$ 86,743,453	\$ 42,575	\$ -	\$	86,786,028	-\$	9,016,493	-\$	3,093,977	\$	-	-\$	12,110,470	\$	74,675,558
47	1820	Distribution Station Equipment <50 kV	\$ 90,030,683	\$ 15,638,328	-\$ 73,576	\$	105,595,435	-\$	11,090,437	-\$	3,455,058	\$	73,576	-\$	14,471,919	\$ 9	91,123,516
47	1825	Storage Battery Equipment	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	_	\$	_
47	1830	Poles, Towers & Fixtures	\$ 107,430,430	\$ 10,488,904	-\$ 519,293	\$	117,400,041	-\$	6,925,675	-\$	2,857,270	\$	42,406	-\$	9,740,539	\$ 10	07,659,502
47	1835	Overhead Conductors & Devices	\$ 99,985,646	\$ 8,952,322	-\$ 321,061	\$	108,616,907	-\$	6,509,740		2,754,959	\$	29,219	-\$	9,235,480	\$ 9	99,381,427
47	1840	Underground Conduit	\$ 123,464,509	\$ 21,209,894	\$ -	\$	144,674,403	-\$	8,765,914	-\$	4,018,835	\$	-	-\$	12,784,749	\$ 13	31,889,654
47	1845	Underground Conductors & Devices	\$ 121,890,948	\$ 21,522,450	-\$ 257,265	\$	143,156,133	-\$	10,317,212	-\$	4,518,705	\$	57,771	-\$	14,778,146	\$ 12	28,377,987
47	1850	Line Transformers	\$ 70,722,370	\$ 8,756,851	-\$ 214,846	\$	79,264,375	-\$	6,086,068	-\$	2,512,829	\$	29,506	-\$	8,569,391	\$	70,694,984
47	1855	Services (Overhead & Underground)	\$ 53,864,253	\$ 7,169,843	\$ -	\$	61,034,096	-\$	4,003,116	-\$	1,585,895	\$	-	-\$	5,589,011	\$ :	55,445,085
47	1860	Meters				\$	_							\$	_	\$	_
47	1860	Meters (Smart Meters)	\$ 38,425,965	\$ 2,319,101	-\$ 167,285	\$	40,577,781	-\$	8,564,441	-\$	4,217,004	-\$	75,539	-\$	12,856,984	\$ :	27,720,797
N/A	1905	Land	\$ 20,355,841	\$ 203,701	\$ -	\$	20,559,542	\$	-	\$	-	\$	-	\$	-	\$ :	20,559,542
47	1908	Buildings & Fixtures	\$ 32,326,989	\$ 106,364	\$ -	\$	32,433,353	-\$	5,455,617	-\$	1,788,731	\$	-	-\$	7,244,348	\$ :	25,189,005
13	1910	Leasehold Improvements	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 1,330,093	\$ 77,259	\$ -	\$	1,407,352	-\$	685,464	-\$	194,462	\$	-	-\$	879,926	\$	527,426
8	1915	Office Furniture & Equipment (5 years)	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
10	1920	Computer Equipment - Hardware				\$	-							\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)				\$	-							\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 7,345,743	\$ 1,645,665	-\$ 2,187,303	\$	6,804,105	-\$	4,271,067	-\$	1,380,126	\$2	,187,303	-\$	3,463,890	\$	3,340,215
10	1930	Transportation Equipment	\$ 13,565,710	\$ 3,799,293	-\$ 13,042	\$	17,351,961	-\$	3,443,313	-\$	1,654,303	\$	8,370	-\$	5,089,246	\$	12,262,715
8	1935	Stores Equipment	\$ 5,728	\$ -	-\$ 5,728	\$	=	-\$	5,728	\$	-	\$	5,728		_	\$	-
8	1940	Tools, Shop & Garage Equipment	\$ 4,063,502	\$ 319,444	-\$ 839,475		3,543,471	-\$	1,893,240	-\$	478,984	\$	839,475		1,532,749	\$	2,010,722
8	1945	Measurement & Testing Equipment	\$ 228,830	\$ 1,024	-\$ 14,413	\$	215,441	-\$	88,472	-\$	24,724	\$	14,413	-\$	98,783	\$	116,658
8	1950	Power Operated Equipment	\$ 3,251,887	-\$ 2,187,918	\$ -	\$	1,063,969	-\$		\$	70,641	\$	-	-\$	241,193	\$	822,776

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8 1955 Communications Equipment \$ 3,301,761 \$ 5,668,530 \$ 651,828 \$ 8,318,463 \$ \$ 834,154 \$ 734,781 \$ 357,402 \$ 1,211,533 \$ 7,106,930 \$ 1950 Miscellaneous Equipment \$ 248,697 \$ 12,813 \$ 11,390 \$ 250,120 \$ 108,008 \$ 36,041 \$ 11,390 \$ 132,659 \$ 117,461 \$ 1970 Load Management Controls Customer Premises \$ 134,245 \$ - \$ - \$ 134,245 \$ - \$ 134,245 \$ 1975 Load Management Controls Utility Premises \$ 17,974 \$ - \$ - \$ 17,7974 \$ 1980 System Supervisor Equipment \$ 6,816,842 \$ 1,084,733 \$ 183,550 \$ 7,718,025 \$ 17,7975 \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,974 \$ - \$ - \$ 17,975 \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,975 \$ - \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,975 \$ - \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,975 \$ - \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,975 \$ - \$ - \$ - \$ 17,975 \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 1980 Miscellaneous Fixed Assets \$ - \$ 17,975 \$ - \$ - \$ - \$ 17,975 \$ - \$ - \$ 134,246 \$ 1 1,390 \$ 132,659 \$ 117,461 \$ 11,3																					
8	8	1955	Communications Equipment	\$ 3	,301,761	\$ 5,668,	530	-\$ 651,	,828	\$	8,318,463	-9	834,15	4 -\$	734,781	\$	357,402	-\$	1,211,533	\$	7,106,930
1970	8	1955	Communication Equipment (Smart Meters)	\$	-	\$	-	\$	-	\$	-	9	-	\$	-	\$	-	\$	-	\$	-
1970   Premises   \$ 134,245   \$ - \$ - \$ 134,245   \$ - \$ - \$ 134,245   \$ - \$ 132,633   \$ 1,613   \$ - \$ 134,246   \$ 1   \$ 1   \$ 17,975   \$ -	8	1960	Miscellaneous Equipment	\$	248,697	\$ 12,	313	-\$ 11,	,390	\$	250,120	-9	108,00	8 -\$	36,041	\$	11,390	-\$	132,659	\$	117,461
Premises		1070	Load Management Controls Customer																		
47   1980   System Supervisor Equipment   \$ 6,816,842   \$ 1,084,733   \$ 183,550   \$ 7,718,025   \$ 2,185,121   \$ 722,352   \$ 183,550   \$ 2,723,923   \$ 4,994,102   \$ 4,99	-	1970		\$	134,245	\$	-	\$	-	\$	134,245	-9	132,63	3  -\$	1,613	\$	-	-\$	134,246	-\$	1
47   1985   Miscellaneous Fixed Assets   \$   \$   \$   \$   \$   \$   \$   \$   \$	47	1975	Load Management Controls Utility Premises	\$	17,974	\$	-	\$	-	\$	17,974	-9	17,97	5   \$	-	\$	-	-\$	17,975	-\$	1
47   1990   Other Tangible Property   \$   \$   \$   \$   \$   \$   \$   \$   \$	47	1980	System Supervisor Equipment	\$ 6	,816,842	\$ 1,084,	733	-\$ 183,	,550	\$	7,718,025	-9	2,185,12	1 -\$	722,352	\$	183,550	-\$	2,723,923	\$	4,994,102
47   1995   Contributions & Grants   \$ -	47	1985	Miscellaneous Fixed Assets							\$	-							\$	-	\$	-
47 2440 Deferred Revenue <sup>5</sup> -\$ 70,131,608 -\$ 24,998,607 -\$ 95,130,215	47	1990	Other Tangible Property							\$	-							\$	-	\$	-
Sub-Total   \$922,122,521   \$97,685,684   -\$6,523,077   \$1,013,285,128   \$111,437,187   -\$41,663,582   \$4,827,592   -\$148,273,177   \$865,011,951	47	1995	Contributions & Grants							\$	-							\$	-	\$	-
Less Socialized Renewable Energy Generation Investments (input as negative)  Less Other Non Rate-Regulated Utility Assets (input as negative)  Total PP&E \$ 922,122,521 \$ 97,685,684 -\$ 6,523,077 \$ 1,013,285,128 -\$ 111,437,187 -\$ 41,663,582 \$ 4,827,592 -\$ 148,273,177 \$ 865,011,951  Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6	47	2440	Deferred Revenue <sup>5</sup>	-\$ 70	,131,608	-\$ 24,998,	307			-\$	95,130,215	9	2,918,74	0 \$	2,262,065			\$	5,180,805	-\$	89,949,410
Less Socialized Renewable Energy Generation Investments (input as negative)  Less Other Non Rate-Regulated Utility Assets (input as negative)  Total PP&E \$ 922,122,521 \$ 97,685,684 -\$ 6,523,077 \$ 1,013,285,128 -\$ 111,437,187 -\$ 41,663,582 \$ 4,827,592 -\$ 148,273,177 \$ 865,011,951  Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6										\$	-							\$	-	\$	-
Generation Investments (input as negative)			Sub-Total	\$ 922	,122,521	\$ 97,685,	684	-\$ 6,523	,077	\$ 1.	,013,285,128	-\$	111,437,18	7 -\$	41,663,582	\$ 4	4,827,592	-\$ ·	148,273,177	\$ 8	65,011,951
Less Other Non Rate-Regulated Utility Assets (input as negative)  Total PP&E \$ 922,122,521 \$ 97,685,684 -\$ 6,523,077 \$ 1,013,285,128   -\$ 111,437,187 -\$ 41,663,582 \$ 4,827,592 -\$ 148,273,177 \$ 865,011,951  Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6			Less Socialized Renewable Energy																		
Assets (input as negative)   \$ -			Generation Investments (input as negative)							\$	-							\$	-	\$	-
Total PP&E \$ 922,122,521 \$ 97,685,684 -\$ 6,523,077 \$ 1,013,285,128 -\$ 111,437,187 -\$ 41,663,582 \$ 4,827,592 -\$ 148,273,177 \$ 865,011,951 Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6			Less Other Non Rate-Regulated Utility																		
Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6			Assets (input as negative)							\$	-							\$	-	\$	-
			Total PP&E	\$ 922	,122,521	\$ 97,685,	884	-\$ 6,523	,077	\$ 1	,013,285,128	-\$	111,437,18	7  -\$	41,663,582	\$ 4	4,827,592	-\$ ´	148,273,177	\$ 8	65,011,951
-\$ 41.663.582			Depreciation Expense adj. from gain or los	ss on th	ne retirem	ent of ass	ets (p	ool of li	ke as	sets	), if applicable	e6									
1			Total											-\$	41,663,582						

 Less: Fully Allocated Depreciation

 10
 Transportation
 Transportation

 8
 Stores Equipment
 Stores Equipment

 Net Depreciation
 -\$ 41,663,582

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 2
Schedule 1
Attachment C
ORIGINAL
Page 1 of 2

## Appendix 2-BA Fixed Asset Continuity Schedule <sup>1</sup>

Accounting Standard

MIFRS 2018

				C	ost					Ac	cumulated l	Depi	reciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Clo	sing Balance		Opening Balance	4	Additions	Dis	posals 6		Closing Balance	N	let Book Value
	1609	Capital Contributions Paid	\$ 20,775,751	\$ 2,199,818		\$	22,975,569	-\$	1,075,246	-\$	480,702			-\$	1,555,948	\$	21,419,621
12	1611	Computer Software (Formally known as Account 1925)	\$ 64,971,896	\$ 1,656,811	\$ -	\$	66,628,707	-\$	26,086,892	-\$	8,972,088	\$	-	-\$	35,058,980	\$	31,569,727
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,293,622	-\$ 5,223	\$ -	\$	2,288,399	-\$	216,501	-\$	59,148	\$	-	-\$	275,649	\$	2,012,750
N/A	1805	Land	\$ 4,649,025	\$ 3,509	\$ -	\$	4,652,534	\$	-	\$	-	\$	-	\$	-	\$	4,652,534
47	1808	Buildings	\$ 28,801,829	\$ 860,484	\$ -	\$	29,662,313	-\$	3,168,183	-\$	774,847	\$	-	-\$	3,943,030	\$	25,719,283
13	1810	Leasehold Improvements	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 86,786,028	\$ 327,621	\$ -	\$	87,113,649	-\$	12,110,470	-\$	3,057,779	\$	-	-\$	15,168,249	\$	71,945,400
47	1820	Distribution Station Equipment <50 kV	\$ 105,595,435	\$ 11,020,767	-\$ 129,498	\$	116,486,704	-\$	14,471,919	-\$	3,890,510	\$	80,461	-\$	18,281,968	\$	98,204,736
47	1825	Storage Battery Equipment	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	_	\$	
47	1830	Poles, Towers & Fixtures	\$ 117,400,041	\$ 11,013,471	-\$ 174,862	\$	128,238,650	-\$	9,740,539	-\$	3,079,814	\$	17,545	-\$	12,802,808	\$ 1	15,435,842
47	1835	Overhead Conductors & Devices	\$ 108,616,907	\$ 12,558,766	-\$ 2,109	\$	121,173,564	-\$	9,235,480	-\$	2,992,071	\$	1,601	-\$	12,225,950	\$ 1	08,947,614
47	1840	Underground Conduit	\$ 144,674,403	\$ 38,532,726	\$ -	\$	183,207,129	-\$	12,784,749	-\$	4,751,068	\$	-	-\$	17,535,817	\$ 1	65,671,312
47	1845	Underground Conductors & Devices	\$ 143,156,133	\$ 15,797,489	-\$ 391,873	\$	158,561,749	-\$	14,778,146	-\$	5,024,001	\$	84,153	-\$	19,717,994	\$ 1	38,843,755
47	1850	Line Transformers	\$ 79,264,375	\$ 8,450,827	-\$ 26,085	\$	87,689,117	-\$		-\$	2,766,069	\$	4,883	-\$	11,330,577		76,358,540
47	1855	Services (Overhead & Underground)	\$ 61,034,096	\$ 6,319,026	\$ -	\$	67,353,122	-\$			1,735,758	\$	-	-\$	7,324,769		60,028,353
47	1860	Meters	\$ -	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$	_	\$	-	Ė	,,	Ť		\$	-	\$	_
47	1860	Meters (Smart Meters)	\$ 40,577,781	\$ 2,940,398	-\$ 1,138,717	\$	42,379,462	-\$	12,856,984	-\$	4,591,778	\$	499,239	-\$	16,949,523	\$	25,429,939
N/A	1905	Land	\$ 20,559,542	, ,		\$	20,559,542	\$	-				,	\$	-	\$	20,559,542
47	1908	Buildings & Fixtures	\$ 32,433,353	\$ 2,763,337	\$ -	\$	35,196,690	-\$	7,244,348	-\$	1,752,402	\$	-	-\$	8,996,750		26,199,940
13	1910	Leasehold Improvements	\$ -	\$ -	\$ -	\$	· · · -	\$	-	\$		\$	-	\$	-	\$	
8	1915	Office Furniture & Equipment (10 years)	\$ 1,407,352	\$ 208,480	\$ -	\$	1,615,832	-\$	879,926	-\$	147,809	\$	_	-\$	1,027,735	\$	588,097
8	1915	Office Furniture & Equipment (5 years)	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -	*		\$	-	\$	-	Ė		Ť		\$	-	\$	_
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -			\$	-	\$	_					\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 6,804,105	\$ 2,030,340	-\$ 234,461	\$	8,599,984	-\$	3,463,890	-\$	1,397,366	\$	132,957	-\$	4,728,299	\$	3,871,685
10	1930	Transportation Equipment	\$ 17,351,961	\$ 165,604	-\$ 84,947	\$	17,432,618	-\$	5,089,246		1,482,542		48,720	-\$	6,523,068		10,909,550
8	1935	Stores Equipment	\$ -	\$ -	\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	-
8	1940	Tools, Shop & Garage Equipment	\$ 3,543,471	\$ 652,919	\$ -	\$	4,196,390	-\$	1,532,749	-\$	461,520	\$	-	-\$	1,994,269	\$	2,202,121
8	1945	Measurement & Testing Equipment	\$ 215,441	\$ -	\$ -	\$	215,441	-\$	98,783	-\$	24,106		-	-\$	122,889	\$	92,552
8	1950	Power Operated Equipment	\$ 1,063,969	-\$ 79,133	\$ -	\$	984,836	-\$	241,193	-\$			-	-\$	325,832	\$	659,004
8	1955	Communications Equipment	\$ 8,318,463	\$ 2,671,824	\$ -	\$	10,990,287	-\$	,	-	1,140,481	\$	-	-\$	2,352,014	\$	8,638,273
8	1955	Communication Equipment (Smart Meters)	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
8	1960	Miscellaneous Equipment	\$ 250,120	\$ 5,071	\$ -	\$	255,191	-\$	132,659	-\$	32,994	\$	-	-\$	165,653	\$	89,538

Hydro Ottawa Limited
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Exhibit 2
Tab 2
Schedule 1
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Page 2 of 2

•		Load Management Controls Customer													
47	1970	Premises	\$ 134,245	\$ -	\$ -	\$	134,245	-\$	134,246	\$ -	\$ -	-\$	134,246	-\$	1
47	1975	Load Management Controls Utility Premises	\$ 17,974	\$ -	-\$ 17,974	\$	-	-\$	17,975	\$ -	\$ 17,974	-\$	1	-\$	1
47	1980	System Supervisor Equipment	\$ 7,718,025	\$ 3,754,253	\$ -	\$	11,472,278	-\$	2,723,923	-\$ 825,702	\$ -	-\$	3,549,625	\$	7,922,653
47	1985	Miscellaneous Fixed Assets	\$ -			\$	-	\$	-			\$	-	\$	-
47	1990	Other Tangible Property	\$ -			\$	-	\$	-			\$	-	\$	-
47	1995	Contributions & Grants	\$ -			\$	-	\$	-			\$	-	\$	-
47	2440	Deferred Revenue5	-\$ 95,130,215	-\$ 22,598,352		-\$	117,728,567	\$	5,180,805	\$ 2,949,679		\$	8,130,484	-\$ 10	09,598,083
						\$	-					\$	-	\$	-
		Sub-Total	\$ 1,013,285,128	\$ 101,250,833	-\$ 2,200,526	\$	1,112,335,435	-\$	148,273,177	-\$ 46,575,515	\$ 887,533	-\$	193,961,159	\$ 91	18,374,276
		Less Socialized Renewable Energy Generation Investments (input as negative)				\$	-					\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)										•		6	
		Total PP&E	\$ 1,013,285,128	\$ 101 250 933	\$ 2 200 526	<b>e</b>	1 112 225 /25	•	148,273,177	-\$ 46,575,515	\$ 887.533	<b>e</b>	193,961,159	¢ 01	18.374.276
						_			140,273,177	-\$ 46,575,515	\$ 667,533	-φ	193,901,139	φ Đ	10,374,276
		Depreciation Expense adj. from gain or los	ss on the retiren	ieni oi assets (	poor of like as	sset	s), ii applicablei	0		A 40	-				
		Total								-\$ 46,575,515	]				

		Less: Fully Allocated Depreciation
10	Transportation	Transportation
8	Stores Equipment	Stores Equipment
	•	Net Depreciation -\$ 46.575.51

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

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## **UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1**

Accounting Standard

MIFRS

2020 Year

				С	ost					Ac	cumulated [	Depr	reciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Closing Balance			Opening Balance	A	Additions	Dis	posals 6		Closing Balance	Ne	t Book Value
	1609	Capital Contributions Paid	\$ 34,685,433	\$ 910,000	\$ -	\$ 35,595,433		-\$	2,183,096	-\$	790,975	\$	-	-\$	2,974,071	\$	32,621,362
12	1611	Computer Software (Formally known as Account 1925)	\$ 66,603,570	\$ 13,030,880	\$ -	\$ 79,634,450		-\$	39,260,350	-\$	6,468,113	\$	-	-\$	45,728,463	\$	33,905,987
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,524,895	\$ 8,306	\$ -	\$ 2,533,201		-\$	337,574	-\$	59,409	\$	-	-\$	396,983	\$	2,136,218
N/A	1805	Land	\$ 4,659,565	\$ 1,047	\$ -	\$ 4,660,612		\$	-			\$	-	\$	-	\$	4,660,612
47	1808	Buildings	\$ 29,686,977	\$ 707,754	\$ -	\$ 30,394,731		-\$	4,719,737	-\$	802,687	\$	-	-\$	5,522,424	\$	24,872,307
13	1810	Leasehold Improvements	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 115,599,760	\$ 3,148,680	\$ -	\$ 118,748,440		-\$	17,872,695	-\$	3,669,308	\$	-	-\$	21,542,003	\$	97,206,437
47	1820	Distribution Station Equipment <50 kV	\$ 129,195,408	\$ 5,860,007	-\$ 96,181	\$ 134,959,234		-\$	21,858,595	-\$	4,450,661	\$	55,028	-\$	26,254,228	\$	108,705,006
47	1825	Storage Battery Equipment	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 137,470,488	\$ 9,394,503	-\$ 313,703	\$ 146,551,288		-\$	16,106,354	-\$	3,480,842	\$	30,864	-\$	19,556,332	\$	126,994,956
47	1835	Overhead Conductors & Devices	\$ 128,553,082	\$ 16,910,513	-\$ 230,544	\$ 145,233,051		-\$	15,458,979	-\$	3,592,858	\$	26,635	-\$	19,025,202	\$	126,207,849
47	1840	Underground Conduit	\$ 216,883,550	\$ 23,166,955	\$ -	\$ 240,050,505		-\$	23,169,374	-\$	6,137,186	\$	-	-\$	29,306,560	\$	210,743,945
47	1845	Underground Conductors & Devices	\$ 175,230,833	\$ 24,832,592	-\$ 359,069	\$ 199,704,356		-\$	25,110,445	-\$	5,978,466	\$	64,812	-\$	31,024,099	\$	168,680,257
47	1850	Line Transformers	\$ 94,890,921	\$ 8,055,161	-\$ 220,567	\$ 102,725,515		-\$	13,957,006	-\$	3,187,549	\$	40,727	-\$	17,103,828	\$	85,621,687
47	1855	Services (Overhead & Underground)	\$ 71,087,401	\$ 4,568,833	\$ -	\$ 75,656,234	7	-\$	9,073,460	-\$	1,911,293	\$	-	-\$	10,984,753	\$	64,671,481
47	1860	Meters	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 47,198,912	\$ 5,077,444	-\$ 420,692	\$ 51,855,664		-\$	21,786,673	-\$	5,049,583	\$	156,744	-\$	26,679,512	\$	25,176,152
N/A	1905	Land	\$ 19,942,005		\$ -	\$ 19,942,005		-\$	2,707	-\$	4,047	\$	-	-\$	6,754	\$	19,935,251
47	1908	Buildings & Fixtures	\$ 94,650,962	\$ 352,679	\$ -	\$ 95,003,641		-\$	5,048,771	-\$	3,025,591	\$	-	-\$	8,074,362	\$	86,929,279
13	1910	Leasehold Improvements	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,344,722	\$ 100,766	\$ -	\$ 4,445,488		-\$	713,786	-\$	425,555	\$	-	-\$	1,139,341	\$	3,306,147
8	1915	Office Furniture & Equipment (5 years)	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 10,046,414	\$ 1,459,982	\$ -	\$ 11,506,396		-\$	3,432,714	-\$	1,762,186	\$	-	-\$	5,194,900	\$	6,311,496
10	1930	Transportation Equipment	\$ 18,838,678	\$ 180,773	-\$ 27,765	\$ 18,991,686		-\$	8,085,916	-\$	1,560,773	\$	22,058	-\$	9,624,631	\$	9,367,055
8	1935	Stores Equipment	\$ 560,703		\$ -	\$ 560,703		-\$	28,035	-\$	56,225	\$	-	-\$	84,260	\$	476,443
8	1940	Tools, Shop & Garage Equipment	\$ 3,997,781	\$ 449,596	\$ -	\$ 4,447,377	7	-\$	1,864,054	-\$	446,365	\$	-	-\$	2,310,419	\$	2,136,958
8	1945	Measurement & Testing Equipment	\$ 209,467		\$ -	\$ 209,467	1	-\$	140,362	-\$	23,512	\$	-	-\$	163,874	\$	45,593
8	1950	Power Operated Equipment	\$ 1,122,129	\$ 354,695	-\$ 83,875	\$ 1,392,949		-\$	415,103	-\$	89,524	\$	71,355	-\$	433,272	\$	959,677
8	1955	Communications Equipment	\$ 15,266,072	\$ 1,012,516	\$ -	\$ 16,278,588		-\$	3,801,116	-\$	1,560,031	\$	-	-\$	5,361,147	\$	10,917,441

Hydro Ottawa Limited EB-2019-0261 Exhibit 2 Tab 2 Schedule 1 Attachment D UPDATED May 5, 2020 Page 2 of 2

8	1955	Communication Equipment (Smart Meters)	\$ -		\$ -	\$	-		\$ -		\$ -	\$	-	\$	-
8	1960	Miscellaneous Equipment	\$ 198,958	\$ 6,099	\$ -	\$	205,057	-	\$ 134,735	-\$ 25,019	\$ -	-\$	159,754	\$	45,303
47	1970	Load Management Controls Customer Premises	\$ -	\$ -	\$ -	\$	-		\$ -	\$ -	\$ -	\$	-	\$	-
47	1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$	-		\$ -	\$ -	\$ -	\$	-	\$	-
47	1980	System Supervisor Equipment	\$ 13,736,173	\$ 1,013,957	\$ -	\$	14,750,130	-3	\$ 4,769,538	-\$ 1,235,550	\$ -	-\$	6,005,088	\$	8,745,042
47	1985	Miscellaneous Fixed Assets	\$ -		\$ -	\$	-		\$ -		\$ -	\$	-	\$	-
47	1990	Other Tangible Property	\$ -		\$ -	\$	-		\$ -		\$ -	\$	-	\$	-
47	1995	Contributions & Grants	\$ -		\$ -	\$	-		\$ -		\$ -	\$	-	\$	-
47	2440	Deferred Revenue5	-\$ 142,719,366	-\$ 36,003,198	\$ -	-\$	178,722,564		\$ 11,897,528	\$ 5,089,115	\$ -	\$	16,986,643	-\$	161,735,921
						\$	-					\$	-	\$	-
		Sub-Total	\$ 1,294,465,493	\$ 84,600,540	-\$ 1,752,397	\$	1,377,313,637	-	\$ 227,433,647	-\$ 50,704,193	\$ 468,224	-\$ 2	77,669,616	\$	1,099,644,020
		Less Socialized Renewable Energy Generation Investments (input as negative)				\$	-					\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)				\$	-					\$	-	\$	-
		Total PP&E	\$ 1,294,465,493	\$ 84,600,540	-\$ 1,752,397	\$	1,377,313,637	-	\$ 227,433,647	-\$ 50,704,193	\$ 468,224	-\$ 2	77,669,616	\$	1,099,644,020
		Depreciation Expense adj. from gain or los	ss on the retirem	ent of assets (	pool of like as	sset	s), if applicable	6							<u> </u>
		Total								-\$ 50,704,193					

Less: Fully Allocated Depreciation

ŀ	10	Transportation	Transportation	
Į	8	Stores Equipment	Stores Equipment	
			Net Depreciation	-\$ 50,704,193

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 2
Schedule 1
Attachment E
UPDATED
May 5, 2020
Page 1 of 2

## UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1

Accounting Standard

MIFRS

Year 2020

				С	ost					Ac	cumulated [	Depr	eciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Closing Balance	•		Opening Balance	A	Additions	Dis	posals 6		Closing Balance	Ne	t Book Value
	1609	Capital Contributions Paid	\$ 34,685,433	\$ 910,000	\$ -	\$ 35,595,433	3	-\$	2,183,096	-\$	790,975	\$	-	-\$	2,974,071	\$	32,621,362
12	1611	Computer Software (Formally known as Account 1925)	\$ 66,603,570	\$ 13,030,880	\$ -	\$ 79,634,450		-\$	39,260,350	-\$	6,468,113	\$	-	-\$	45,728,463	\$	33,905,987
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,524,895	\$ 8,306	\$ -	\$ 2,533,201	1	-\$	337,574	-\$	59,409	\$	-	-\$	396,983	\$	2,136,218
N/A	1805	Land	\$ 4,659,565	\$ 1,047	\$ -	\$ 4,660,612	2	\$	-			\$	-	\$	-	\$	4,660,612
47	1808	Buildings	\$ 29,686,977	\$ 707,754	\$ -	\$ 30,394,731	1	-\$	4,719,737	-\$	802,687	\$	-	-\$	5,522,424	\$	24,872,307
13	1810	Leasehold Improvements	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 115,599,760	\$ 3,148,680	\$ -	\$ 118,748,440	)	-\$	17,872,695	-\$	3,669,308	\$	-	-\$	21,542,003	\$	97,206,437
47	1820	Distribution Station Equipment <50 kV	\$ 129,195,408	\$ 5,860,007	-\$ 96,181	\$ 134,959,234	1	-\$	21,858,595	-\$	4,450,661	\$	55,028	-\$	26,254,228	\$	108,705,006
47	1825	Storage Battery Equipment	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 137,470,488	\$ 9,394,503	-\$ 313,703	\$ 146,551,288	3	-\$	16,106,354	-\$	3,480,842	\$	30,864	-\$	19,556,332	\$	126,994,956
47	1835	Overhead Conductors & Devices	\$ 128,553,082	\$ 16,910,513	-\$ 230,544	\$ 145,233,051	1	-\$	15,458,979	-\$	3,592,858	\$	26,635	-\$	19,025,202	\$	126,207,849
47	1840	Underground Conduit	\$ 216,883,550	\$ 23,166,955	\$ -	\$ 240,050,505	5	-\$	23,169,374	-\$	6,137,186	\$	-	-\$	29,306,560	\$	210,743,945
47	1845	Underground Conductors & Devices	\$ 175,230,833	\$ 24,832,592	-\$ 359,069	\$ 199,704,356	3	-\$	25,110,445	-\$	5,978,466	\$	64,812	-\$	31,024,099	\$	168,680,257
47	1850	Line Transformers	\$ 94,890,921	\$ 8,055,161	-\$ 220,567	\$ 102,725,515	5	-\$	13,957,006	-\$	3,187,549	\$	40,727	-\$	17,103,828	\$	85,621,687
47	1855	Services (Overhead & Underground)	\$ 71,087,401	\$ 4,568,833	\$ -	\$ 75,656,234	1	-\$	9,073,460	-\$	1,911,293	\$	-	-\$	10,984,753	\$	64,671,481
47	1860	Meters	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 47,198,912	\$ 5,077,444	-\$ 420,692	\$ 51,855,664	1	-\$	21,786,673	-\$	5,049,583	\$	156,744	-\$	26,679,512	\$	25,176,152
N/A	1905	Land	\$ 19,942,005		\$ -	\$ 19,942,005	5	-\$	2,707	-\$	4,047	\$	-	-\$	6,754	\$	19,935,251
47	1908	Buildings & Fixtures	\$ 94,650,962	\$ 352,679	\$ -	\$ 95,003,641	ı	-\$	5,048,771	-\$	3,025,591	\$	-	-\$	8,074,362	\$	86,929,279
13	1910	Leasehold Improvements	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,344,722	\$ 100,766	\$ -	\$ 4,445,488	3	-\$	713,786	-\$	425,555	\$	-	-\$	1,139,341	\$	3,306,147
8	1915	Office Furniture & Equipment (5 years)	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -		\$ -	\$ -		\$	-			\$	-	\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 10,046,414	\$ 1,459,982	\$ -	\$ 11,506,396	5	-\$	3,432,714	-\$	1,762,186	\$	-	-\$	5,194,900	\$	6,311,496
10	1930	Transportation Equipment	\$ 18,838,678	\$ 180,773	-\$ 27,765	\$ 18,991,686	3	-\$	8,085,916	-\$	1,560,773	\$	22,058	-\$	9,624,631	\$	9,367,055
8	1935	Stores Equipment	\$ 560,703		\$ -	\$ 560,703	3	-\$	28,035	-\$	56,225	\$	-	-\$	84,260	\$	476,443
8	1940	Tools, Shop & Garage Equipment	\$ 3,997,781	\$ 449,596	\$ -	\$ 4,447,377	7	-\$	1,864,054	-\$	446,365	\$	-	-\$	2,310,419	\$	2,136,958
8	1945	Measurement & Testing Equipment	\$ 209,467		\$ -	\$ 209,467	7	-\$	140,362	-\$	23,512	\$	-	-\$	163,874	\$	45,593
8	1950	Power Operated Equipment	\$ 1,122,129	\$ 354,695	-\$ 83,875	\$ 1,392,949	9	-\$	415,103	-\$	89,524	\$	71,355	-\$	433,272	\$	959,677
8	1955	Communications Equipment	\$ 15,266,072	\$ 1,012,516	\$ -	\$ 16,278,588	3	-\$	3,801,116	-\$	1,560,031	\$	-	-\$	5,361,147	\$	10,917,441

Hydro Ottawa Limited EB-2019-0261 Exhibit 2 Tab 2 Schedule 1 Attachment E UPDATED May 5, 2020 Page 2 of 2

												_			
8	1955	Communication Equipment (Smart Meters)	\$ -		\$ -	\$	-	\$	-		\$ -	\$	-	\$	-
8	1960	Miscellaneous Equipment	\$ 198,958	\$ 6,099	\$ -	\$	205,057	-\$	134,735	-\$ 25,019	\$ -	-\$	159,754	\$	45,303
47	1970	Load Management Controls Customer Premises	\$ -	\$ -	\$ -	\$	-	\$	_	\$ -	\$ -	\$	-	\$	-
47	1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-
47	1980	System Supervisor Equipment	\$ 13,736,173	\$ 1,013,957	\$ -	\$	14,750,130	-\$	4,769,538	-\$ 1,235,550	\$ -	-\$	6,005,088	\$	8,745,042
47	1985	Miscellaneous Fixed Assets	\$ -		\$ -	\$	-	\$	-		\$ -	\$	-	\$	-
47	1990	Other Tangible Property	\$ -		\$ -	\$	-	\$	-		\$ -	\$	-	\$	-
47	1995	Contributions & Grants	\$ -		\$ -	\$	-	\$	-		\$ -	\$	-	\$	-
47	2440	Deferred Revenue5	-\$ 142,719,366	-\$ 36,003,198	\$ -	-\$	178,722,564	\$	11,897,528	\$ 5,089,115	\$ -	\$	16,986,643	-\$	161,735,921
						\$	=					\$	-	\$	-
		Sub-Total	\$ 1,294,465,493	\$ 84,600,540	-\$ 1,752,397	\$	1,377,313,637	-\$	227,433,647	-\$ 50,704,193	\$ 468,224	-\$ 2	277,669,616	\$ 1	1,099,644,020
		Less Socialized Renewable Energy Generation Investments (input as negative)				\$	-					\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)				\$	-					\$	-	\$	-
		Total PP&E	\$ 1,294,465,493	\$ 84,600,540	-\$ 1,752,397	\$	1,377,313,637	-\$	227,433,647	-\$ 50,704,193	\$ 468,224	-\$ 2	277,669,616	\$ 1	1,099,644,020
		Depreciation Expense adj. from gain or los	ss on the retirem	ent of assets (	pool of like as	sset	s), if applicable	6							
		Total								-\$ 50,704,193					

Less: Fully Allocated Depreciation

10	Transportation	Transportation	
8	Stores Equipment	Stores Equipment	
		Net Depreciation	-\$ 50,704,193

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

Hydro Ottawa Limited EB-2019-0261 Exhibit 2 Tab 2 Schedule 1 Attachment F UPDATED May 5, 2020 Page 1 of 2

## **UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1**

**Accounting Standard** 

MIFRS 2021

Year

				Cos	st					Acc	umulated E	epreciation					
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Closi	ing Balance		Opening Balance	А	dditions	Disposals	6		Closing Balance	Net Book Value	i
	1609	Capital Contributions Paid	\$ 35,595,433	\$ 51,223,891	\$ -	\$	86,819,324	-\$	2,974,071	-\$	1,088,293	\$	-	-\$	4,062,364	\$ 82,756,9	<del>)</del> 60
12	1611	Computer Software (Formally known as Account 1925)	\$ 79,634,450	\$ 6,988,497	\$ -	\$	86,622,947	-\$	45,728,463	-\$	7,305,676	\$	-	-\$	53,034,139	\$ 33,588,8	308
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,533,201	\$ 13,268	\$ -	\$	2,546,469	-\$	396,983	-\$	59,497	\$	-	-\$	456,480	\$ 2,089,9	989
N/A	1805	Land	\$ 4,660,612	\$ 1,569	\$ -	\$	4,662,181	\$	-			\$	-	\$	-	\$ 4,662,1	181
47	1808	Buildings	\$ 30,394,731	\$ 724,819	\$ -	\$	31,119,550	-\$	5,522,424	-\$	818,992	\$	-	-\$	6,341,416	\$ 24,778,1	134
13	1810	Leasehold Improvements	\$ -		\$ -	\$	-	\$	-			\$	-	\$	-	\$	- 1
47	1815	Transformer Station Equipment >50 kV	\$ 118,748,440	\$ 8,247,498	\$ -	\$ 1	26,995,938	-\$	21,542,003	-\$	3,757,680	\$	-	-\$	25,299,683	\$ 101,696,2	255
47	1820	Distribution Station Equipment <50 kV	\$ 134,959,234	\$ 13,738,471	-\$ 96,181	\$ 1	48,601,524	-\$	26,254,228	-\$	4,462,581	\$ 55,	028	-\$	30,661,781	\$ 117,939,7	743
47	1825	Storage Battery Equipment	\$ -		\$ -	\$	-	\$	-			\$	-	\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 146,551,288	\$ 8,715,471	-\$ 313,703	\$ 1	54,953,056	-\$	19,556,332	-\$	3,673,027	\$ 30,	864	-\$	23,198,495	\$ 131,754,5	561
47	1835	Overhead Conductors & Devices	\$ 145,233,051	\$ 11,400,338	-\$ 230,544	\$ 1	56,402,845	-\$	19,025,202	-\$	3,938,401	\$ 26,	635	-\$	22,936,968	\$ 133,465,8	377
47	1840	Underground Conduit	\$ 240,050,505	\$ 25,696,125	\$ -	\$ 2	265,746,630	-\$	29,306,560	-\$	6,713,783	\$	-	-\$	36,020,343	\$ 229,726,2	287
47	1845	Underground Conductors & Devices	\$ 199,704,356	\$ 26,000,462	-\$ 359,069	\$ 2	25,345,749	-\$	31,024,099	-\$	6,661,033	\$ 64,	812	-\$	37,620,320	\$ 187,725,4	129
47	1850	Line Transformers	\$ 102,725,515	\$ 8,365,754	-\$ 220,567	\$ 1	10,870,702	-\$	17,103,828	-\$	3,405,578	\$ 40,	727	_	20,468,679	\$ 90,402,0	)23
47	1855	Services (Overhead & Underground)	\$ 75,656,234	\$ 4,404,116	\$ -	\$	80,060,350	-\$	10,984,753	-\$	2,006,006	\$	-	-\$	12,990,759	\$ 67,069,5	591
47	1860	Meters	\$ -		\$ -	\$	-	\$	-			\$	_	\$		\$	
47	1860	Meters (Smart Meters)	\$ 51,855,664	\$ 7,339,435	-\$ 1,113,668	\$	58,081,431	-\$	26,679,512	-\$	4,812,311	\$ 762,	440	-\$	30,729,383		)48
N/A	1905	Land	\$ 19,942,005		\$ -	\$	19,942,005	-\$	6,754	-\$	4,047	\$	_	-\$	10,801	\$ 19,931,2	204
47	1908	Buildings & Fixtures	\$ 95,003,641	\$ 352,679	\$ -	\$	95,356,320	-\$	8,074,362	-\$	3,116,870	\$	_	-\$	11,191,232	\$ 84,165,0	380
13	1910	Leasehold Improvements	\$ -		\$ -	\$	-	\$	-			\$	_	\$	-	\$ .	
8	1915	Office Furniture & Equipment (10 years)	\$ 4,445,488	\$ 75,574	\$ -	\$	4,521,062	-\$	1,139,341	-\$	416,853	\$	-	-\$	1,556,194	\$ 2,964,8	368
8	1915	Office Furniture & Equipment (5 years)	\$ -	·	\$ -	\$	-	\$	-			\$	-	\$	-	\$	
10	1920	Computer Equipment - Hardware	\$ -		\$ -	\$	-	\$	-			\$	-	\$	-	\$	
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -		\$ -	\$	_	\$	_			\$	_	\$	_	\$	
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 11,506,396	\$ 1,463,823	\$ -	\$	12,970,219	-\$	5,194,900	-\$	1,884,900	\$	_	-\$	7,079,800	\$ 5,890,4	119
10	1930	Transportation Equipment	\$ 18,991,686	\$ 6,124,426	-\$ 1,821,564	\$	23,294,547	-\$	9,624,631	-\$	1,220,734	\$ 1,578,	341	-\$	9,267,024	\$ 14,027,5	523
8	1935	Stores Equipment	\$ 560,703		\$ -	\$	560,703	-\$	84,260	-\$	56,224	\$	-	-\$	140,484	\$ 420,2	219
8	1940	Tools, Shop & Garage Equipment	\$ 4,447,377	\$ 473,651	\$ -	\$	4,921,028	-\$		-\$	440,309	\$	-	-\$	2,750,728	\$ 2,170,3	
8	1945	Measurement & Testing Equipment	\$ 209,467		\$ -	\$	209,467	-\$		-\$	23,447	\$	-	-\$	187,321	\$ 22,1	-
8		Power Operated Equipment	\$ 1,392,949	\$ 163,845	-\$ 51,487	\$	1,505,307	-\$	, -	-\$	99,140	<u> </u>	489	-\$	486,923	\$ 1,018,3	
8	1955	Communications Equipment	\$ 16,278,588	\$ 3,476,464	\$ -	<u> </u>	19,755,052	-\$	,		1,786,969	\$	-	-\$	7,148,116	<u> </u>	
8	1955	Communication Equipment (Smart Meters)	\$ -		\$ -	\$	-	\$	-,,		, , ,	\$	-	\$	-	\$	_
8		Miscellaneous Equipment	\$ 205,057	\$ 7,305	\$ -	\$	212,362	-\$		-\$	19,031	\$	-	-\$	178,785	\$ 33,5	577

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 2
Schedule 1
Attachment F
UPDATED
May 5, 2020
Page 2 of 2

47	1970	Load Management Controls Customer Premises	\$	_	\$ -	\$ -	s -		\$ -	\$ -	\$ _	s	_	\$	_
47	1975	Load Management Controls Utility Premises	\$	-	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$	-	\$	-
47	1980	System Supervisor Equipment	\$	14,750,130	\$ 1,576,567	\$ -	\$ 16,326,697		-\$ 6,005,088	-\$ 1,261,664	\$ -	-\$	7,266,752	\$	9,059,945
47	1985	Miscellaneous Fixed Assets	\$	-		\$ -	\$ -		\$ -		\$ -	\$	-	\$	-
47	1990	Other Tangible Property	\$	-		\$ -	\$ -		\$ -		\$ -	\$	-	\$	-
47	1995	Contributions & Grants	\$	-		\$ -	\$ -		\$ -		\$ -	\$	-	\$	-
47	2440	Deferred Revenue5	-\$	178,722,564	-\$ 40,195,489	\$ -	-\$ 218,918,053		\$ 16,986,643	\$ 6,700,322	\$ -	\$	23,686,965	-\$ 1	95,231,088
							\$ -					\$	-	\$	-
		Sub-Total	\$	1,377,313,637	\$ 146,378,559	-\$ 4,206,783	\$ 1,519,485,413	П	-\$ 277,669,616	-\$ 52,332,724	\$ 2,604,336	-\$	327,398,005	\$ 1,	192,087,408
		Less Socialized Renewable Energy Generation Investments (input as negative)					\$ -					\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)					\$ -					\$	-	\$	-
		Total PP&E	\$	1,377,313,637	\$ 146,378,559	-\$ 4,206,783	\$ 1,519,485,413		-\$ 277,669,616	-\$ 52,332,724	\$ 2,604,336	-\$	327,398,005	\$ 1,	192,087,408
		Depreciation Expense adj. from gain or los	ss o	n the retirement	of assets (poo	l of like asset	ts), if applicable6								
		Total								-\$ 52,332,724					

Less: Fully Allocated Depreciation

10	Transportation	Transportation	
8	Stores Equipment	Stores Equipment	
		Net Depreciation	-\$ 52 332 724

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
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- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

Hydro Ottawa Limited EB-2019-0261 Exhibit 2 Tab 2 Schedule 1 Attachment G UPDATED May 5, 2020 Page 1 of 2

# UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1

Accounting Standard

Year

MIFRS

				Cos	it					Ac	cumulated I	Depr	eciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Clo	osing Balance		Opening Balance		Additions	Dis	posals 6		Closing Balance	١	Net Book Value
	1609	Capital Contributions Paid	\$ 86,819,324	\$ 210,000		\$	87,029,324	-\$	4,062,364	-\$	1,946,433			-\$	6,008,797	\$	81,020,527
12	1611	Computer Software (Formally known as Account 1925)	\$ 86,622,947	\$ 6,380,278		\$	93,003,225	-\$	53,034,139	-\$	8,607,321			-\$	61,641,460	\$	31,361,765
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,546,469	\$ 13,040		\$	2,559,509	-\$	456,480	-\$	59,760			-\$	516,240	\$	2,043,269
N/A	1805	Land	\$ 4,662,181	\$ 162,462		\$	4,824,643	\$	-					\$	-	\$	4,824,643
47	1808	Buildings	\$ 31,119,550	\$ 8,365,966		\$	39,485,516	-\$	6,341,416	-\$	934,231			-\$	7,275,647	\$	32,209,869
13	1810	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 126,995,938	\$ 25,611,949		\$	152,607,887	-\$	25,299,683	-\$	4,359,904			-\$	29,659,587	\$ 1	122,948,300
47	1820	Distribution Station Equipment <50 kV	\$ 148,601,524	\$ 10,005,389	-\$ 96,181	\$	158,510,732	-\$	30,661,781	-\$	4,699,714	\$	55,028	-\$	35,306,467	\$ ^	123,204,265
47	1825	Storage Battery Equipment	\$ -			\$	-	\$	-					\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 154,953,056	\$ 9,161,771	-\$ 313,703	\$	163,801,124	-\$	23,198,495	-\$	3,870,235	\$	30,864	-\$	27,037,866	\$ ^	136,763,258
47	1835	Overhead Conductors & Devices	\$ 156,402,845	\$ 13,334,739	-\$ 230,544	\$	169,507,040	-\$	22,936,968	-\$	4,247,939	\$	26,635	-\$	27,158,272	\$ 1	142,348,768
47	1840	Underground Conduit	\$ 265,746,630	\$ 22,225,040		\$	287,971,670	-\$	36,020,343	-\$	7,282,382			-\$	43,302,725	\$ 2	244,668,945
47	1845	Underground Conductors & Devices	\$ 225,345,749	\$ 21,007,287	-\$ 359,069	\$	245,993,967	-\$	37,620,320	-\$	7,322,791	\$	64,812	-\$	44,878,299	\$ 2	201,115,668
47	1850	Line Transformers	\$ 110,870,702	\$ 8,143,668	-\$ 220,567	\$	118,793,803	-\$	20,468,679	-\$	3,638,351	\$	40,727	-\$	24,066,303	\$	94,727,500
47	1855	Services (Overhead & Underground)	\$ 80,060,350	\$ 4,563,872		\$	84,624,222	-\$	12,990,759	-\$	2,105,656			-\$	15,096,415	\$	69,527,807
47	1860	Meters	\$ -			\$	-	\$	-					\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 58,081,431	\$ 7,014,822	-\$ 1,129,168	\$	63,967,085	-\$	30,729,383	-\$	4,261,148	\$	776,310	-\$	34,214,221	\$	29,752,864
N/A	1905	Land	\$ 19,942,005			\$	19,942,005	-\$	10,801	-\$	4,047			-\$	14,848	\$	19,927,157
47	1908	Buildings & Fixtures	\$ 95,356,320	\$ 1,594,802		\$	96,951,122	-\$	11,191,232	-\$	3,185,739			-\$	14,376,971	\$	82,574,151
13	1910	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,521,062	\$ 75,574		\$	4,596,636	-\$	1,556,194	-\$	407,568			-\$	1,963,762	\$	2,632,874
8	1915	Office Furniture & Equipment (5 years)	\$ -			\$	-	\$	-					\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -			\$	-	\$	-					\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -			\$	-	\$	-					\$	-	\$	_
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 12,970,219	\$ 2,517,544		\$	15,487,763	-\$	7,079,800	-\$	2,172,161			-\$	9,251,961	\$	6,235,802
10	1930	Transportation Equipment	\$ 23,294,547	\$ 5,223,986	-\$ 2,047,008	\$	26,471,525	-\$	9,267,024	-\$	1,577,489	\$ 1	,834,846	-\$	9,009,667	\$	17,461,858
8	1935	Stores Equipment	\$ 560,703			\$	560,703	-\$	140,484	-\$	56,224			-\$	196,708	\$	363,995
8	1940	Tools, Shop & Garage Equipment	\$ 4,921,028	\$ 474,390		\$	5,395,418	-\$	2,750,728	-\$	441,144			-\$	3,191,872	\$	2,203,546
8	1945	Measurement & Testing Equipment	\$ 209,467			\$	209,467	-\$	187,321	-\$	16,697			-\$	204,018	\$	5,449

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8	1950	Power Operated Equipment	\$	1,505,307				\$	1,505,307	-\$	486,923	-\$	102,206		-\$	589,129	\$	916,178
8	1955	Communications Equipment	\$	19,755,052	\$	1,487,510		\$	21,242,562	-\$	7,148,116	-\$	2,060,745		-\$	9,208,861	\$	12,033,701
8	1955	Communication Equipment (Smart Meters)	\$	-	۳	1,407,010		\$	-	\$		Ψ	2,000,140		\$		\$	-
8	1960	Miscellaneous Equipment	\$	212,362	\$	307,972		\$	520,334	-\$	178,785	-\$	30,554		-\$	209,339	\$	310,995
47	1970	Load Management Controls Customer Premises	\$	-	\$	350,910		\$	350,910	\$	-	-\$	17,545		-\$	17,545	\$	333,365
47	1975	Load Management Controls Utility Premises	\$	-	\$	203,443		\$	203,443	\$	-	-\$	10,172		-\$	10,172	\$	193,271
47	1980	System Supervisor Equipment	\$	16,326,697	\$	1,701,727		\$	18,028,424	-\$	7,266,752	-\$	1,292,876		-\$	8,559,628	\$	9,468,796
47	1985	Miscellaneous Fixed Assets	\$	-				\$	-	\$	-				\$	-	\$	-
47	1990	Other Tangible Property	\$	-				\$	-	\$	-				\$	-	\$	-
47	1995	Contributions & Grants	\$	-				\$	-	\$	-				\$	-	\$	-
47	2440	Deferred Revenue5	-\$	218,918,053	-\$ 2	25,452,767	\$ 599,738	-\$	243,771,082	\$	23,686,965	\$	8,012,479	-\$ 599,738	\$	31,099,706	-\$ 2	212,671,376
								\$	-						\$	-	\$	-
		Sub-Total	\$	1,519,485,413	\$ 1	24,685,374	-\$ 3,796,502	\$	1,640,374,285	-\$	327,398,005	-\$	56,698,553	\$ 2,229,484	-\$ 3	381,867,074	\$ 1	,258,507,211
		Less Socialized Renewable Energy Generation Investments (input as negative)						\$	-						\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)						\$	-						\$	-	\$	-
		Total PP&E	\$	1,519,485,413	\$ 1	24,685,374	-\$ 3,796,502	\$	1,640,374,285	-\$	327,398,005	-\$	56,698,553	\$ 2,229,484	-\$ 3	381,867,074	\$ 1	,258,507,211
		Depreciation Expense adj. from gain or los	SS OI	the retirement	of a	ssets (poo	of like asse	ts),	f applicable6									
		Total										-\$	56,698,553					

Less: Fully Allocated Depreciation

10		Transportation	Transportation	
8		Stores Equipment	Stores Equipment	
	•		Net Depreciation	-\$ 56,698,553

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

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## **UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1**

Accounting Standard

MIFRS 2023 Year

				Cos	t					Ac	cumulated l	Depr	eciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Clo	osing Balance		Opening Balance	,	Additions	Dis	posals 6		Closing Balance	١	let Book Value
	1609	Capital Contributions Paid	\$ 87,029,324	\$ 100,000		\$	87,129,324	-\$	6,008,797	-\$	1,950,895			-\$	7,959,692	\$	79,169,632
12	1611	Computer Software (Formally known as Account 1925)	\$ 93,003,225	\$ 3,590,513		\$	96,593,738	-\$	61,641,460	-\$	9,194,054			-\$	70,835,514	\$	25,758,224
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,559,509	\$ 12,296		\$	2,571,805	-\$	516,240	-\$	60,014			-\$	576,254	\$	1,995,551
N/A	1805	Land	\$ 4,824,643			\$	4,824,643	\$	-					\$	-	\$	4,824,643
47	1808	Buildings	\$ 39,485,516	\$ 534,656		\$	40,020,172	-\$	7,275,647	-\$	994,934			-\$	8,270,581	\$	31,749,591
13	1810	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 152,607,887	\$ 3,602,046		\$	156,209,933	-\$	29,659,587	-\$	4,672,709			-\$	34,332,296	\$ -	21,877,637
47	1820	Distribution Station Equipment <50 kV	\$ 158,510,732	\$ 4,126,157	-\$ 96,181	\$	162,540,708	-\$	35,306,467	-\$	4,863,301	\$	55,028	-\$	40,114,740	\$ '	22,425,968
47	1825	Storage Battery Equipment	\$ -			\$	-	\$	-					\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 163,801,124	\$ 9,876,018	-\$ 313,703	\$	173,363,439	-\$	27,037,866	-\$	4,081,762	\$	30,864	-\$	31,088,764	\$ '	42,274,675
47	1835	Overhead Conductors & Devices	\$ 169,507,040	\$ 13,582,445	-\$ 230,544	\$	182,858,941	-\$	27,158,272	-\$	4,586,713	\$	26,635	-\$	31,718,350	\$ '	51,140,591
47	1840	Underground Conduit	\$ 287,971,670	\$ 20,403,122		\$	308,374,792	-\$	43,302,725	-\$	7,783,016			-\$	51,085,741	\$ 2	257,289,051
47	1845	Underground Conductors & Devices	\$ 245,993,967	\$ 18,820,790	-\$ 359,069	\$	264,455,688	-\$	44,878,299	-\$	7,871,614	\$	64,812	-\$	52,685,101	\$ 2	211,770,587
47	1850	Line Transformers	\$ 118,793,803	\$ 7,823,557	-\$ 220,567	\$	126,396,793	-\$	24,066,303	-\$	3,854,763	\$	40,727	-\$	27,880,339	\$	98,516,454
47	1855	Services (Overhead & Underground)	\$ 84,624,222	\$ 4,595,931		\$	89,220,153	-\$	15,096,415	-\$	2,207,425			-\$	17,303,840	\$	71,916,313
47	1860	Meters	\$ -			\$	-	\$	-					\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 63,967,085	\$ 6,673,267	-\$ 955,308	\$	69,685,044	-\$	34,214,221	-\$	3,930,943	\$	688,888	-\$	37,456,276	\$	32,228,768
N/A	1905	Land	\$ 19,942,005			\$	19,942,005	-\$	14,848	-\$	4,047			-\$	18,895	\$	19,923,110
47	1908	Buildings & Fixtures	\$ 96,951,122	\$ 352,679		\$	97,303,801	-\$	14,376,971	-\$	3,197,517			-\$	17,574,488	\$	79,729,313
13	1910	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,596,636	\$ 50,383		\$	4,647,019	-\$	1,963,762	-\$	400,102			-\$	2,363,864	\$	2,283,155
8	1915	Office Furniture & Equipment (5 years)	\$ -			\$	-	\$	-					\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -			\$	-	\$	-					\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -			\$	-	\$	-					\$	-	\$	_
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 15,487,763	\$ 1,160,674		\$	16,648,437	-\$	9,251,961	-\$	2,042,539			-\$	11,294,500	\$	5,353,937
10	1930	Transportation Equipment	\$ 26,471,525	\$ 2,233,064	-\$ 1,501,028	\$	27,203,561	-\$	9,009,667	-\$	1,991,963	\$ 1	,413,150	-\$	9,588,480	\$	17,615,081
8	1935	Stores Equipment	\$ 560,703			\$	560,703	-\$	196,708	-\$	56,224			-\$	252,932	\$	307,771
8	1940	Tools, Shop & Garage Equipment	\$ 5,395,418	\$ 461,809		\$	5,857,227	-\$	3,191,872	-\$	442,658			-\$	3,634,530	\$	2,222,697
8	1945	Measurement & Testing Equipment	\$ 209,467			\$	209,467	-\$	204,018	-\$	5,066			-\$	209,084	\$	383
8	1950	Power Operated Equipment	\$ 1,505,307	\$ 115,377		\$	1,620,684	-\$	589,129	-\$	82,798			-\$	671,927	\$	948,757

Hydro Ottawa Limited
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Exhibit 2
Tab 2
Schedule 1
Attachment H
UPDATED
May 5, 2020
Page 2 of 2

					_					_		_			_		_	
8	1955	Communications Equipment	\$	21,242,562	\$	874,903		\$	22,117,465	-\$	9,208,861	-\$	2,173,813		-\$	11,382,674	\$	10,734,791
8	1955	Communication Equipment (Smart Meters)	\$	-				\$	-	\$	-				\$	-	\$	-
8	1960	Miscellaneous Equipment	\$	520,334	\$	16,787		\$	537,121	-\$	209,339	-\$	43,258		-\$	252,597	\$	284,524
47	1970	Load Management Controls Customer Premises	\$	350,910				\$	350,910	-\$	17,545	-\$	35,091		-\$	52,636	\$	298,274
47	1975	Load Management Controls Utility Premises	\$	203,443				\$	203,443	-\$	10,172	-\$	20,344		-\$	30,516	\$	172,927
47	1980	System Supervisor Equipment	\$	18,028,424	\$	992,743		\$	19,021,167	-\$	8,559,628	-\$	1,274,267		-\$	9,833,895	\$	9,187,272
47	1985	Miscellaneous Fixed Assets	\$	-				\$	-	\$	-				\$	-	\$	-
47	1990	Other Tangible Property	\$	-				\$	-	\$	-				\$	-	\$	-
47	1995	Contributions & Grants	\$	-				\$	-	\$	-				\$	-	\$	-
47	2440	Deferred Revenue5	-\$	243,771,082	-\$ 2	21,345,516	\$ 360,000	-\$	264,756,598	\$	31,099,706	\$	8,806,490	-\$ 360,000	\$	39,546,196	-\$ 2	225,210,402
								\$	-						\$	-	\$	-
		Sub-Total	\$	1,640,374,285	\$ 7	78,653,701	-\$ 3,316,400	\$	1,715,711,586	-\$	381,867,074	-\$	59,015,340	\$ 1,960,104	-\$ 4	438,922,310	\$ 1	,276,789,276
		Less Socialized Renewable Energy Generation Investments (input as negative)						\$	-						\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)						\$	-						\$	-	\$	-
		Total PP&E	\$	1,640,374,285	\$ 7	78,653,701	-\$ 3,316,400	\$	1,715,711,586	-\$	381,867,074	-\$	59,015,340	\$ 1,960,104	-\$ 4	438,922,310	\$ 1	,276,789,276
		Depreciation Expense adj. from gain or lo	ss o	n the retirement	of a	assets (poo	l of like asset	ts),	if applicable6									
		Total										-\$	59,015,340	1				

Less: Fully Allocated Depreciation

10	Transportation	Transportation	
8	Stores Equipment	Stores Equipment	
		Net Depreciation	-\$ 59,015,340

- 1 Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

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## **UPDATED - Appendix 2-BA Fixed Asset Continuity Schedule 1**

Accounting Standard Year

MIFRS

				Cos	t					Ac	cumulated [	Depr	eciation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Clo	osing Balance		Opening Balance	,	Additions	Dis	posals 6		Closing Balance	١	Net Book Value
	1609	Capital Contributions Paid	\$ 87,129,324	\$ 2,130,000		\$	89,259,324	-\$	7,959,692	-\$	1,958,654			-\$	9,918,346	\$	79,340,978
12	1611	Computer Software (Formally known as Account 1925)	\$ 96,593,738	\$ 2,672,828		\$	99,266,566	-\$	70,835,514	-\$	9,617,635			-\$	80,453,149	\$	18,813,417
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,571,805	\$ 12,370		\$	2,584,175	-\$	576,254	-\$	60,424			-\$	636,678	\$	1,947,497
N/A	1805	Land	\$ 4,824,643			\$	4,824,643	\$	-					\$	-	\$	4,824,643
47	1808	Buildings	\$ 40,020,172	\$ 930,941		\$	40,951,113	-\$	8,270,581	-\$	1,019,266			-\$	9,289,847	\$	31,661,266
13	1810	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 156,209,933	\$ 5,429,195		\$	161,639,128	-\$	34,332,296	-\$	4,810,909			-\$	39,143,205	\$ ^	122,495,923
47	1820	Distribution Station Equipment <50 kV	\$ 162,540,708	\$ 11,994,416	-\$ 96,181	\$	174,438,943	-9	40,114,740	-\$	5,000,717	\$	55,028	-\$	45,060,429	\$ '	129,378,514
47	1825	Storage Battery Equipment	\$ -			\$	-	9	; -					\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 173,363,439	\$ 8,186,322	-\$ 313,703	\$	181,236,058	-\$	31,088,764	-\$	4,291,482	\$	30,864	-\$	35,349,382	\$ ^	145,886,676
47	1835	Overhead Conductors & Devices	\$ 182,858,941	\$ 11,967,313	-\$ 230,544	\$	194,595,710	-9	31,718,350	-\$	4,917,860	\$	26,635	-\$	36,609,575	\$ ^	157,986,135
47	1840	Underground Conduit	\$ 308,374,792	\$ 18,547,382		\$	326,922,174	-9	51,085,741	-\$	8,246,543			-\$	59,332,284	\$ 2	267,589,890
47	1845	Underground Conductors & Devices	\$ 264,455,688	\$ 17,644,613	-\$ 359,069	\$	281,741,232	-9	52,685,101	-\$	8,377,879	\$	64,812	-\$	60,998,168	\$ 2	220,743,064
47	1850	Line Transformers	\$ 126,396,793	\$ 7,349,154	-\$ 220,567	\$	133,525,380	-9	27,880,339	-\$	4,055,629	\$	40,727	-\$	31,895,241	\$ ^	101,630,139
47	1855	Services (Overhead & Underground)	\$ 89,220,153	\$ 4,435,769		\$	93,655,922	-\$	17,303,840	-\$	2,312,462			-\$	19,616,302	\$	74,039,620
47	1860	Meters	\$ -			\$	-	9	-					\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 69,685,044	\$ 7,261,510	-\$ 1,003,515	\$	75,943,039	-9	37,456,276	-\$	3,798,330	\$	737,520	-\$	40,517,086	\$	35,425,953
N/A	1905	Land	\$ 19,942,005			\$	19,942,005	-\$	18,895	-\$	4,047			-\$	22,942	\$	19,919,063
47	1908	Buildings & Fixtures	\$ 97,303,801	\$ 352,679		\$	97,656,480	-9	17,574,488	-\$	3,216,137			-\$	20,790,625	\$	76,865,855
13	1910	Leasehold Improvements	\$ -			\$	-	9	3 -					\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,647,019	\$ 50,383		\$	4,697,402	-9	2,363,864	-\$	394,788			-\$	2,758,652	\$	1,938,750
8	1915	Office Furniture & Equipment (5 years)	\$ -			\$	-	9	3 -					\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -			\$	-	9	-					\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -			\$	-	9	S -					\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 16,648,437	\$ 887,744		\$	17,536,181	-\$	11,294,500	-\$	1,973,655			-\$	13,268,155	\$	4,268,026
10	1930	Transportation Equipment	\$ 27,203,561	\$ 1,844,412	-\$ 946,992	\$	28,100,981	-9	9,588,480	-\$	2,033,557	\$	901,989	-\$	10,720,048	\$	17,380,933
8	1935	Stores Equipment	\$ 560,703			\$	560,703	-9	252,932	-\$	56,225			-\$	309,157	\$	251,546
8	1940	Tools, Shop & Garage Equipment	\$ 5,857,227	\$ 464,863		\$	6,322,090	-9	3,634,530	-\$	452,760			-\$	4,087,290	\$	2,234,800
8	1945	Measurement & Testing Equipment	\$ 209,467			\$	209,467	-9		-\$	130			-\$	209,214	\$	253
8	1950	Power Operated Equipment	\$ 1,620,684			\$	1,620,684	-9	671,927	-\$	87,380			-\$	759,307	\$	861,377

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8	1955	Communications Equipment	\$	22,117,465	\$ 781,255		\$	22,898,720	-\$	11,382,674	-\$	2,136,078		-\$	13,518,752	\$	9,379,968
8	1955	Communication Equipment (Smart Meters)	\$	-			\$	-	\$	-				\$	-	\$	-
8	1960	Miscellaneous Equipment	\$	537,121			\$	537,121	-\$	252,597	-\$	41,268		-\$	293,865	\$	243,256
47	1970	Load Management Controls Customer Premises	\$	350,910			\$	350,910	-\$	52,636	-\$	35,091		-\$	87,727	\$	263,183
47	1975	Load Management Controls Utility Premises	\$	203,443			\$	203,443	-\$	30,516	-\$	20,344		-\$	50,860	\$	152,583
47	1980	System Supervisor Equipment	\$	19,021,167	\$ 1,094,855		\$	20,116,022	-\$	9,833,895	-\$	1,082,628		-\$	10,916,523	\$	9,199,499
47	1985	Miscellaneous Fixed Assets	\$	-			\$	-	\$	-				\$	-	\$	-
47	1990	Other Tangible Property	\$	-			\$	-	\$	-				\$	-	\$	-
47	1995	Contributions & Grants	\$	-			\$	-	\$	-				\$	-	\$	-
47	2440	Deferred Revenue5	-\$	264,756,598	-\$ 20,689,619	\$ 370,000	-\$	285,076,217	\$	39,546,196	\$	9,416,952	-\$ 370,000	\$	48,593,148	-\$ 2	236,483,069
							\$	-						\$	-	\$	-
		Sub-Total	\$	1,715,711,586	\$ 83,348,385	-\$ 2,800,571	\$ 1	,796,259,400	-\$	438,922,310	-\$	60,584,926	\$ 1,487,575	-\$ 4	498,019,661	\$ 1	,298,239,739
		Less Socialized Renewable Energy Generation Investments (input as negative)					\$	-						\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)					\$	-						\$	-	\$	-
		Total PP&E	\$	1,715,711,586	\$ 83,348,385	-\$ 2,800,571	\$ 1	,796,259,400	-\$	438,922,310	-\$	60,584,926	\$ 1,487,575	-\$ 4	498,019,661	\$ 1	,298,239,739
		Depreciation Expense adj. from gain or los	ss on	the retirement	of assets (poo	ol of like asset	ts), i	f applicable6									
		Total										60,584,926					

Less: Fully Allocated Depreciation

Transportation

Stores Equipment

Stores Equipment

Stores Equipment

Net Depreciation -\$ 60,584,926

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

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## **UPDATED - Appendix 2-BA** Fixed Asset Continuity Schedule 1

Accounting Standard MIFRS

Year 2025

				Cos	st					Accu	ımulated [	Deprec	iation				
CCA Class 2	OEB Account 3	Description 3	Opening Balance	Additions 4	Disposals 6	Closing Bal	ance		Opening Balance	Ad	ditions	Dispo	sals 6		Closing Balance	N	let Book Value
	1609	Capital Contributions Paid	\$ 89,259,324	\$ 7,300,000		\$ 96,559	,324	-\$	9,918,346	-\$ 2	2,013,783			-\$	11,932,129	\$	84,627,195
12	1611	Computer Software (Formally known as Account 1925)	\$ 99,266,566	\$ 16,854,811		\$ 116,121	,377	-\$	80,453,149	-\$ 11	1,048,698			-\$	91,501,847	\$	24,619,530
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 2,584,175	\$ 12,376		\$ 2,596	,551	-\$	636,678	-\$	60,507			-\$	697,185	\$	1,899,366
N/A	1805	Land	\$ 4,824,643	\$ 779,683		\$ 5,604	,326	\$	-					\$	-	\$	5,604,326
47	1808	Buildings	\$ 40,951,113	\$ 1,416,046		\$ 42,367	,159	-\$	9,289,847	-\$ 1	,046,267			-\$	10,336,114	\$	32,031,045
13	1810	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
47	1815	Transformer Station Equipment >50 kV	\$ 161,639,128	\$ 9,223,210		\$ 170,862	,338	-\$	39,143,205	-\$ 5	5,003,121			-\$	44,146,326	\$ 1	126,716,012
47	1820	Distribution Station Equipment <50 kV	\$ 174,438,943	\$ 26,747,897	-\$ 96,181	\$ 201,090	,659	-\$	45,060,429	-\$ 5	5,417,445	\$ 5	5,028	-\$	50,422,846	\$ 1	150,667,813
47	1825	Storage Battery Equipment	\$ -			\$	-	\$	-					\$	-	\$	-
47	1830	Poles, Towers & Fixtures	\$ 181,236,058	\$ 8,003,940	-\$ 313,703	\$ 188,926	,295	-\$	35,349,382	-\$ 4	1,462,353	\$ 3	0,864	-\$	39,780,871	\$ 1	149,145,424
47	1835	Overhead Conductors & Devices	\$ 194,595,710	\$ 11,674,276	-\$ 230,544	\$ 206,039	,442	-\$	36,609,575	-\$ 5	5,217,477	\$ 2	6,635	-\$	41,800,417	\$ 1	164,239,025
47	1840	Underground Conduit	\$ 326,922,174	\$ 18,528,470		\$ 345,450	,644	-\$	59,332,284	-\$ 8	3,650,400			-\$	67,982,684	\$ 2	277,467,960
47	1845	Underground Conductors & Devices	\$ 281,741,232	\$ 17,532,469	-\$ 359,069	\$ 298,914	,632	-\$	60,998,168	-\$ 8	3,839,416	\$ 6	4,812	-\$	69,772,772	\$ 2	229,141,860
47	1850	Line Transformers	\$ 133,525,380	\$ 7,363,590	-\$ 220,567	\$ 140,668	,403	-\$	31,895,241	-\$ 4	,226,186	\$ 4	0,727	-\$	36,080,700	\$ 1	104,587,703
47	1855	Services (Overhead & Underground)	\$ 93,655,922	\$ 4,429,274		\$ 98,085	,196	-\$	19,616,302	-\$ 2	2,357,841			-\$	21,974,143	\$	76,111,053
47	1860	Meters	\$ -			\$	-	\$	-					\$	-	\$	-
47	1860	Meters (Smart Meters)	\$ 75,943,039	\$ 6,783,965	-\$ 1,042,534	\$ 81,684	,470	-\$	40,517,086	-\$ 3	3,974,133	\$ 77	4,834	-\$	43,716,385	\$	37,968,085
N/A	1905	Land	\$ 19,942,005			\$ 19,942	,005	-\$	22,942	-\$	4,047			-\$	26,989	\$	19,915,016
47	1908	Buildings & Fixtures	\$ 97,656,480	\$ 352,679		\$ 98,009	,159	-\$	20,790,625	-\$ 3	3,204,028			-\$	23,994,653	\$	74,014,506
13	1910	Leasehold Improvements	\$ -			\$	-	\$	-					\$	-	\$	-
8	1915	Office Furniture & Equipment (10 years)	\$ 4,697,402	\$ 50,383		\$ 4,747	,785	-\$	2,758,652	-\$	392,323			-\$	3,150,975	\$	1,596,810
8	1915	Office Furniture & Equipment (5 years)	\$ -			\$	-	\$	-					\$	-	\$	-
10	1920	Computer Equipment - Hardware	\$ -			\$	-	\$	-					\$	-	\$	-
45	1920	Computer EquipHardware(Post Mar. 22/04)	\$ -			\$	-	\$	-					\$	-	\$	-
50	1920	Computer EquipHardware(Post Mar. 19/07)	\$ 17,536,181	\$ 1,573,599		\$ 19,109	,780	-\$	13,268,155	-\$ 1	1,958,576			-\$	15,226,731	\$	3,883,049
10	1930	Transportation Equipment	\$ 28,100,981	\$ 467,753	-\$ 368,933	\$ 28,199	,801	-\$	10,720,048	-\$ 2	2,158,407	\$ 34	6,202	-\$	12,532,253	\$	15,667,548
8	1935	Stores Equipment	\$ 560,703			\$ 560	,703	-\$	309,157	-\$	56,224			-\$	365,381	\$	195,322
8	1940	Tools, Shop & Garage Equipment	\$ 6,322,090	\$ 468,679		\$ 6,790	,769	-\$	4,087,290	-\$	461,217			-\$	4,548,507	\$	2,242,262
8	1945	Measurement & Testing Equipment	\$ 209,467			\$ 209	,467	-\$	209,214	-\$	103			-\$	209,317	\$	150
8	1950	Power Operated Equipment	\$ 1,620,684	\$ 461,909	-\$ 4,356	\$ 2,078	,237	-\$	759,307	-\$	89,388	\$	3,904	-\$	844,791	\$	1,233,446

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8	1955	Communications Equipment	\$	22,898,720	\$	1,733,822		\$	24,632,542	-\$	13,518,752	-\$	1,885,121		-\$	15,403,873	\$	9,228,669
8	1955	Communication Equipment (Smart Meters)	s	-	Ť	., ,,		\$	- 1,132,012	\$	-	1	.,,		\$		s	-
8	1960	Miscellaneous Equipment	\$	537,121	\$	24,987		\$	562,108	-\$	293,865	-\$	41,830		-\$	335,695	\$	226,413
47	1970	Load Management Controls Customer Premises	\$	350,910	Ť	2 1,001		\$	350,910	-\$	87,727	-\$	35,091		-\$	122,818	\$	228,092
47	1975	Load Management Controls Utility Premises	\$	203,443				\$	203,443	-\$	50,860	-\$	20,344		-\$	71,204	\$	132,239
47	1980	System Supervisor Equipment	\$	20,116,022	\$	1,533,324		\$	21,649,346	-\$	10,916,523	-\$	1,081,462		-\$	11,997,985	\$	9,651,361
47	1985	Miscellaneous Fixed Assets	\$	-				\$	-	\$	-				\$	-	\$	-
47	1990	Other Tangible Property	\$	-				\$	-	\$	-				\$	-	\$	-
47	1995	Contributions & Grants	\$	-				\$	-	\$	-				\$	-	\$	-
47	2440	Deferred Revenue5	-\$	285,076,217	-\$	20,758,380	\$ 410,000	-\$	305,424,597	\$	48,593,148	\$	9,805,553	-\$ 410,000	\$	57,988,701	-\$ 2	247,435,896
								\$	-						\$	-	\$	-
		Sub-Total	\$	1,796,259,400	\$	122,558,762	-\$ 2,225,887	\$	1,916,592,275	-\$	498,019,661	-\$	63,900,235	\$ 933,006	-\$	560,986,890	\$ 1	,355,605,385
		Less Socialized Renewable Energy Generation Investments (input as negative)						\$	-						\$	-	\$	-
		Less Other Non Rate-Regulated Utility Assets (input as negative)						\$	-						\$	-	\$	-
		Total PP&E	\$	1,796,259,400	\$	122,558,762	-\$ 2,225,887	\$	1,916,592,275	-\$	498,019,661	-\$	63,900,235	\$ 933,006	-\$	560,986,890	\$ 1	,355,605,385
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6									•							
		Total						-\$	63,900,235	1								

Less: Fully Allocated Depreciation

10	Transportation	Transportation	
8	Stores Equipment	Stores Equipment	
		Net Depreciation -\$ 63,90	00,235

- Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum, the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.
- The "CCA Class" for fixed assets should generally agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).
- 3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the OEB.
- 4 The additions in column (E) must not include construction work in progress (CWIP).
- 5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.
- The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.



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### **UPDATED** WORKING CAPITAL REQUIREMENT

2

#### 3 **1.** INTRODUCTION

4 This Schedule provides a summary of the Working Capital Requirement for the Bridge Year

5 2020 and the Test Years 2021-2025.

6

7 Table 1 summarizes the 2016-2020 approved working capital allowance ("WCA"), as per the

8 Approved Settlement Agreement governing Hydro Ottawa's 2016-2020 rate term.<sup>1</sup>

9

10

### Table 1 – OEB-Approved Working Capital Allowance 2016-2020 (\$'000s)

	2016	2017	2018	2019	2020
Power Supply Expenses	\$894,825	\$911,714	\$947,559	\$928,734	\$945,199
OM&A Expenses	\$83,106	\$84,693	\$86,311	\$87,959 <sup>2</sup>	\$89,639 <sup>3</sup>
Total Expenses for Working Capital <sup>4</sup>	\$977,391	\$966,407	\$1,033,869	\$1,016,693	\$1,034,838
Working Capital %	7.89%	7.89%	7.92%	7.55%	7.52%
TOTAL WCA	\$77,166	\$78,617	\$81,882	\$76,760	\$77,820

11

12 Table 2 below provides the Historical and Bridge Year WCA amounts for 2016-2020.

<sup>13</sup> ¹ Ontario Energy Board, *Decision and Order*, EB-2015-0004 (December 22, 2015), Schedule A, page 15.

<sup>&</sup>lt;sup>14</sup> Figure does not reflect mid-term operations, maintenance and administration ("OM&A") adjustment.

<sup>&</sup>lt;sup>15</sup> Figure does not reflect mid-term OM&A adjustment.

<sup>16 &</sup>lt;sup>4</sup> Totals may not sum due to rounding.



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## Table 2 – AS ORIGINALLY SUBMITTED – Working Capital Allowance 2016-2020 (\$'000s)

		Historical	Bridge		
	2016	2017	2018	2019	2020
Power Supply Expenses	\$965,239	\$875,802	\$852,917	\$928,734	\$945,199
OM&A Expenses	\$82,621	\$82,245	\$86,863	\$87,545	\$91,990
Total Expenses for Working Capital	\$1,047,860	\$958,047	\$939,780	\$1,016,279	\$1,037,189
Working Capital %	7.89%	7.89%	7.92%	7.50%	7.50%
TOTAL WCA	\$82,676	\$75,590	\$74,431	\$76,221	\$77,789

2

## 3 Table 2 – UPDATED FOR 2019 ACTUALS – Working Capital Allowance 2016-2020 (\$'000s)

		Historical						
	2016	2017	2018	2019	2020			
Power Supply Expenses	\$965,239	\$875,802	\$852,917	\$892,224	\$945,199			
OM&A Expenses	\$82,621	\$82,245	\$86,863	\$83,113	\$91,990			
Total Expenses for Working Capital	\$1,047,860	\$958,047	\$939,780	\$975,337	\$1,037,189			
Working Capital %	7.89%	7.89%	7.92%	7.55%	7.52%			
TOTAL WCA	\$82,676	\$75,590	\$74,431	\$73,638	\$77,997			

<sup>5</sup> Table 3 below provides a summary of Hydro Ottawa's proposed WCA for 2021-2025.



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## 1 Table 3 – AS ORIGINALLY SUBMITTED – Proposed Working Capital Allowance 2021-2025

2 **(\$'000s)** 

	2021	2022	2023	2024	2025
Power Supply Expenses	\$1,025,613	\$1,097,187	\$1,167,387	\$1,264,188	\$1,310,655
OM&A Expenses	\$93,923	\$96,280	\$98,697	\$101,174	\$103,714
Total Expenses for Working Capital <sup>5</sup>	\$1,119,535	\$1,193,467	\$1,266,084	\$1,365,362	\$1,414,39
Working Capital %	7.50%	7.50%	7.50%	7.50%	7.50%
TOTAL WCA	\$83,865	\$89,510	\$94,956	\$102,402	\$106,078

3

# 4Table 3 – UPDATED FOR 2019 ACTUALS – Proposed Working Capital Allowance 2021-2025 (\$'000s)

	2021	2022	2023	2024	2025
Power Supply Expenses	\$1,037,684	\$1,109,199	\$1,180,417	\$1,277,162	\$1,323,611
OM&A Expenses	\$93,923	\$96,280	\$98,697	\$101,174	\$103,714
Total Expenses for Working Capital <sup>6</sup>	\$1,131,607	\$1,205,479	\$1,279,114	\$1,378,336	\$1,427,324
Working Capital %	7.50%	7.50%	7.50%	7.50%	7.50%
TOTAL WCA	\$84,870	\$90,411	\$95,934	\$103,375	\$107,049

6

### 7 2. WORKING CAPITAL PERCENTAGE

- 8 As part of Hydro Ottawa's 2016-2020 rate application, the OEB approved a yearly WCA
- 9 percentage. The utility's approved 2016-2020 WCA percentages are shown in Table 1 above.

- 11 UPDATED Exhibit 2-1-1: Rate Base Overview incorporates the OEB's default WCA percentage
- 12 of 7.5%, as outlined in the updated version of Table 3 above, for 2021-2025 working capital
- 13 requirement included in Hydro Ottawa's 2021-2025 rate base.

<sup>14 5</sup> Totals may not sum due to rounding.

<sup>15 &</sup>lt;sup>6</sup> Totals may not sum due to rounding.



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### 1 3. OPERATIONS, MAINTENANCE AND ADMINISTRATION

- 2 For more details on the OM&A expenses used in Table 1 above, please see **UPDATED** Exhibit
- 3 4-1-1: Operations, Maintenance and Administration Summary.

### 5 4. CALCULATION OF POWER SUPPLY EXPENSE

- 6 The billing determinants underpinning the estimated Power Supply Expense use the forecasted
- 7 monthly purchased kWh and peak kW produced by the load forecast described in UPDATED
- 8 Exhibit 3-1-1: Load Forecast. The forecast calculation for commodity expense is detailed in
- 9 Appendix 2-Z, in the following attachments:
- 10

- UPDATED Attachment 2-3-1(A): OEB Appendix 2-Z 2021 Commodity Expense
- **UPDATED** Attachment 2-3-1(B): OEB Appendix 2-Z 2022 Commodity Expense
- UPDATED Attachment 2-3-1(C): OEB Appendix 2-Z 2023 Commodity Expense
- UPDATED Attachment 2-3-1(D): OEB Appendix 2-Z 2024 Commodity Expense
- UPDATED Attachment 2-3-1(E): OEB Appendix 2-Z 2025 Commodity Expense
- 16
- 17 UPDATED Attachment 2-3-1(F): 2021-2025 Cost of Power provides the complete Power Supply
- 18 Expenses for the 2021-2025 period, as described within this Schedule. There are slight no
- 19 variances in the annual commodity expense in **UPDATED** Attachments (A) through (E) and
- 20 UPDATED Attachment (F) due to rounding differences. Table 4, as updated below, outlines the
- 21 estimate of annual cost of power expenditures for 2021-2025.



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## Table 4 – AS ORIGINALLY SUBMITTED – Summary of Estimated Annual Cost of Power Expenses (\$'000s)

	2021	2022	2023	2024	2025
Commodity	\$903,076	\$972,245	\$1,040,983	\$1,135,265	\$1,179,158
Wholesale Market	\$28,423	\$28,514	\$28,628	\$28,823	\$28,881
Transmission Network	\$55,056	\$56,367	\$57,032	\$58,347	\$59,772
Transmission Connection	\$36,335	\$37,308	\$37,962	\$38,943	\$40,007
Smart Meter Entity Charge	\$2,304	\$2,328	\$2,351	\$2,372	\$2,393
Low Voltage	\$419	\$426	\$432	\$439	\$446
TOTAL <sup>7</sup>	\$1,025,613	\$1,097,187	\$1,167,387	\$1,264,188	\$1,310,655

## Table 4 – AS REVISED – Summary of Estimated Annual Cost of Power Expenses (\$'000s)

	2021	2022	2023	2024	2025
Commodity	\$903,076	\$972,245	\$1,040,983	\$1,135,265	\$1,179,158
Wholesale Market	\$28,423	\$28,514	\$28,628	\$28,823	\$28,881
Transmission Network	\$54,430	\$55,706	\$57,032	\$58,347	\$59,772
Transmission Connection	\$36,017	\$36,971	\$37,962	\$38,943	\$40,007
Smart Meter Entity Charge	\$2,304	\$2,328	\$2,351	\$2,372	\$2,393
Low Voltage	\$419	\$426	\$432	\$439	\$446
TOTAL <sup>8</sup>	\$1,024,670	\$1,096,190	\$1,167,387	\$1,264,188	\$1,310,655

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 $<sup>^{7}\,</sup>$   $^{7}$  Totals may not sum due to rounding.  $^{8}\,$  Totals may not sum due to rounding.



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## Table 4 - UPDATED FOR 2019 ACTUALS - Summary of Estimated Annual Cost of Power Expenses (\$'000s)

	2021	2022	2023	2024	2025
Commodity	\$921,604	\$990,892	\$1,059,793	\$1,154,128	\$1,198,186
Wholesale Market	\$28,414	\$28,504	\$28,617	\$28,810	\$28,868
Transmission Network	\$51,439	\$52,652	\$53,903	\$55,164	\$56,492
Transmission Connection	\$33,504	\$34,398	\$35,321	\$36,249	\$37,226
Smart Meter Entity Charge	\$2,304	\$2,328	\$2,351	\$2,372	\$2,393
Low Voltage	\$419	\$426	\$432	\$439	\$446
TOTAL <sup>9</sup>	\$1,037,684	\$1,109,199	\$1,180,417	\$1,277,162	\$1,323,611

4 Figure 1 below, as originally submitted, illustrates Hydro Ottawa's annual cost of power expense

5 from 2015-2025. Annual amounts from 2015-2018 are Historical, 2019-2020 are Bridge Years,

and 2021-2025 have been forecasted as described in the subsections of this Schedule. The

decrease in annual power supply expenditures from 2016-2019 can be attributed to the impacts

from the Ontario Fair Hydro Plan Act, 2017 ("Fair Hydro Plan").

The updated version of Figure 1 below illustrates Hydro Ottawa's annual cost of power expense

from 2015-2025. Annual amounts from 2015-2019 are Historical, 2020 is Bridge Year, and

2021-2025 have been forecasted as described in the subsections of this Schedule. The

decrease in annual power supply expenditures from 2016-2019 can be attributed to the impacts

14 from the Fair Hydro Plan.

<sup>&</sup>lt;sup>15</sup> Totals may not sum due to rounding.



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### 1 Figure 1 – AS ORIGINALLY SUBMITTED – Cost of Power Expense 2015-2025 (\$'000,000s)

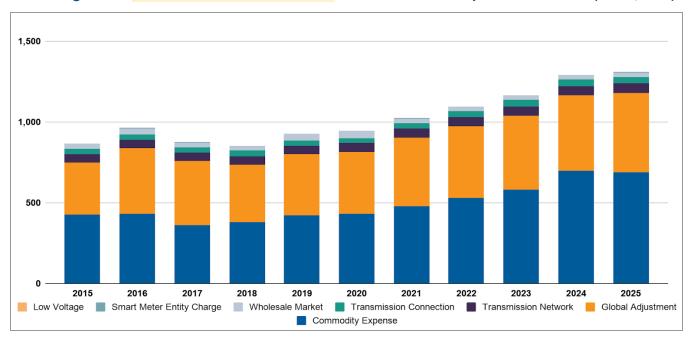
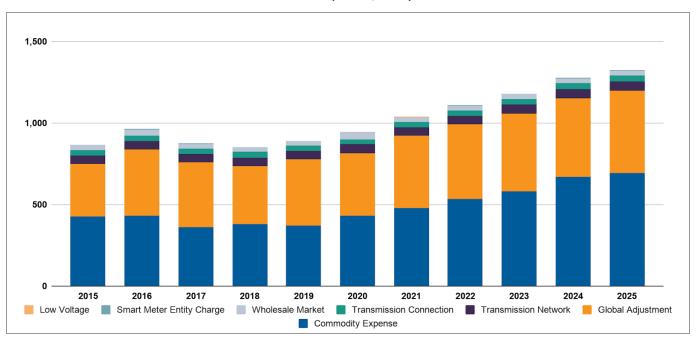


Figure 1 – UPDATED FOR 2019 ACTUALS – Cost of Power Expense 2015-2025

(\$'000,000s)





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#### 1 4.1. COMMODITY EXPENSE AND GLOBAL ADJUSTMENT

2 As per the OEB's Chapter 2 Filing Requirements for Electricity Distribution Rate Applications, as

3 updated on July 12, 2018 and addended on July 15, 2019, Hydro Ottawa has completed

4 Appendix 2-Z: Commodity Expense for 2021-2025.

5

Effective November 1, 2019, the provisions of the Fair Hydro Plan under which the OEB had been setting Regulated Price Plan ("RPP") prices was repealed. The OEB has since set RPP prices which more closely reflect the actual cost of supply. Hydro Ottawa has followed the direction OEB staff provided to Kingston Hydro Corporation in the follow-up questions for its 2020 Custom Incentive Rate-Setting ("Custom IR") Annual Update (EB-2019-0048). On November 1, 2019, OEB staff updated Appendix 2-Z to accommodate the changes to the supply cost calculation. These changes consist of the following: the amount for the Global Adjustment Modifier has been removed from the calculation; the non-RPP Actual kWh have not been split between customers eligible for the Global Adjustment modifier and non-eligible customers; and the adjustment to address bias towards unfavourable variance has only been applied to RPP

1617

price forecast.

As originally submitted, Hydro Ottawa has used 2018 Actual kWh and split each class by RPP and non-RPP and Class A and Class B customers to determine the percentage shares for the calculation of weighted average forecasted commodity expense. In accounting for 2019 actuals, the utility has subsequently updated its calculations to incorporate 2019 Actual kWh. The kWh for Class A customers who opted-in July 2019 have been annualized and the number of customers kept consistent. The RPP Supply Cost Summary from the OEB's most recent Regulated Price Plan Report has been used to determine the 2020 forecast commodity price. For 2021-2025, Hydro Ottawa has used residential and commercial factors derived from

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<sup>&</sup>lt;sup>26</sup> Ontario Energy Board, *Regulated Price Plan: Price Report November 1, 2019 to October 31, 2020* (October 22, 2019), page 1.

<sup>&</sup>lt;sup>28</sup> <sup>11</sup> Kingston Hydro Corporation, *Responses to OEB Staff follow-up Questions*, EB-2019-0048 (November 1, 2019),

page 4.

30 page 4.

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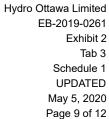
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- 1 Ontario's 2017 Long Term-Energy Plan<sup>13</sup> ("LTEP") to estimate the RPP, Global Adjustment, and
- 2 Hourly Ontario Energy Price ("HOEP"), as described below.

#### 4 4.1.1. Estimated RPP Price

- 5 The commodity price for RPP customers was calculated by using the OEB's Regulated Price
- 6 Plan Report. The RPP rate of \$128.03/MWh was multiplied by a yearly residential factor derived
- 7 from the LTEP to arrive at a yearly RPP commodity rate for 2021-2025. Table 5 provides the
- 8 estimated RPP price for 2020-2025.

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#### **Table 5 – Estimated RPP Price (kWh)**

2020	2021	2022	2023	2024	2025
\$0.12803	\$0.13203	\$0.14203	\$0.15204	\$0.16404	\$0.17104

11

#### 12 4.1.2. Estimated Global Adjustment

- 13 The most recent Global Adjustment rate of \$106.94/MWh from the Regulated Price Plan Report
- 14 was multiplied by a commercial factor derived from the LTEP to arrive at a yearly Global
- 15 Adjustment rate for 2021-2025. Please see Table 6 below for the yearly rates.

16 17

#### Table 6 – Estimated Global Adjustment (kWh)

2020	2021	2022	2023	2024	2025
\$0.10694	\$0.10949	\$0.11458	\$0.12094	\$0.12222	\$0.12986

18

#### 19 4.1.3. Estimated HOEP

- 20 For 2021-2025, the estimated HOEP rate has been calculated by taking the estimated annual
- 21 Average Supply Cost for RPP customers and subtracting the annual estimated Global
- 22 Adjustment and adjustment to address bias towards unfavourable variance. Table 7 identifies
- 23 the estimated HOEP prices for 2021-2025.

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<sup>&</sup>lt;sup>24</sup> <sup>13</sup> Ministry of Energy, *Ontario's Long-Term Energy Plan 2017: Delivering Fairness and Choice* (2017), pages 28-30.



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#### **Table 7 – Estimated HOEP (kWh)**

2020	2021	2022	2023	2024	2025
\$0.02009	\$0.02154	\$0.02645	\$0.03009	\$0.04082	\$0.04018

### 3 4.1.4. Estimated Weighted Average Commodity Price

As originally submitted, Hydro Ottawa calculated the weighted average commodity price from the percentage shares of RPP and non-RPP derived from the allocation of the non-loss-adjusted 2018 Actual kWh for 2021-2025. In accounting for 2019 actuals, the utility has subsequently updated its calculations to incorporate 2019 Actual kWh. The annual forecasted loss-adjusted kWh purchases by class were multiplied by the annual weighted average forecasted commodity price. Table 8 shows the estimated weighted average commodity price for 2021-2025.

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#### Table 8 – Estimated Weighted Average Commodity Price (kWh)

2020	2021	2022	2023	2024	2025
\$0.1235	\$0.13160	\$0.1416	\$0.1516	\$0.1636	\$0.1706

#### 14 4.2. WHOLESALE EXPENSE

15 The Wholesale Market Charge is calculated by multiplying the total kWh purchased by the 2019 16 approved rate of \$0.0039/kWh for all years.

#### 18 4.3. TRANSMISSION EXPENSE

The forecasted kW monthly coincident peak is multiplied by historic percentages for each transmission charge to establish the kWs for those charges. These calculations have been updated to incorporate 2019 Actual percentages. Table 9 below outlines the yearly rates calculated for Hydro One Networks Inc. ("HONI") Retail Transmission Service Rates ("RTSRs") and Uniform Transmission Rates ("UTRs").



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#### Table 9 – Retail Transmission Service & Uniform Transmission Rates (\$/kW)

	2020	2021	2022	2023	2024	2025
RTSR - Network Service	\$3.3980	\$3.3980	\$3.4507	\$3.5042	\$3.5585	\$3.6137
RTSR - Line Connection Rate	\$0.8045	\$0.8045	\$0.8170	\$0.8297	\$0.8426	\$0.8557
RTSR - Transformation Connection Service Rate	\$2.0194	\$2.0194	\$2.0507	\$2.0825	\$2.1148	\$2.1476
UTRs - Network	\$3.92	\$3.92	\$4.00	\$4.08	\$4.16	\$4.24
UTRs - Line Connection	\$0.97	\$0.97	\$0.99	\$1.01	\$1.03	\$1.05
UTRs - Transformation Connection	\$2.33	\$2.33	\$2.38	\$2.43	\$2.48	\$2.53

2

1

#### 3 **4.3.1**. **HONI Transmission Rates**

- 4 For 2021, the kWs have been multiplied by the 2020 OEB-approved HONI RTSRs. 14 Hydro
- 5 Ottawa has increased the transmission rates for 2022-2025 based on the inflationary method as
- 6 described in the proceeding before the OEB involving HONI's most recent Custom IR
- 7 Distribution Rate Application. 15 RTSR rates for 2021 and 2022 have been revised in UPDATED
- 8 Attachment 2-3-1(F): Cost of Power 2021-2025.

9

#### **Uniform Transmission Rates** 10 **4.3.2.**

- 11 For 2021, the kWs have been multiplied by the 2020 Interim UTRs. 16 Hydro Ottawa has
- 12 increased the transmission rates for 2022-2025 based on the 2020 OEB-approved inflationary
- 13 factor.

14

#### LOW VOLTAGE CHARGES

- 16 To estimate the expense for 2021, historical kW values for Low Voltage and Common Sub
- 17 Transmission Line ("Common ST Lines") have been multiplied by the 2020 OEB-approved

<sup>18</sup> Ontario Energy Board, *Decision and Order*, EB-2019-0043 (December 17, 2019), Schedule A, page 8.

<sup>&</sup>lt;sup>19</sup> Hydro One Networks Inc., 2018-2022 Custom Incentive Rate-setting Distribution Rate Application, EB-2017-0049

<sup>20 (</sup>March 31, 2017), Exhibit A-3-2, page 3.
21 <sup>16</sup> Ontario Energy Board, *Decision and Order*, EB-2019-0296 (December 19, 2019), Schedule A.



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- 1 HONI rates.<sup>17</sup> Hydro Ottawa has used the historical kW amounts for 2022-2025 and has
- 2 adjusted the annual rates by the inflationary method as described in HONI's most recent
- 3 Custom IR Distribution Rate Application. The yearly rates calculated are outlined in Table 10.

4 5

#### Table 10 – Low Voltage Charges (\$/kWh)

	2020	2021	2022	2023	2024	2025
Connection to Common ST Lines	\$1.4854	\$1.4854	\$1.5084	\$1.5318	\$1.5555	\$1.5797
Connection to low-voltage delivery*	\$3.8047	\$3.8047	\$3.8637	\$3.9236	\$3.9844	\$4.0461

<sup>6 \*</sup>High Voltage Distribution Station

7

#### 8 4.5. SMART METERING ENTITY CHARGE

- 9 On March 1, 2018, the OEB approved a Smart Metering Entity charge of \$0.57 per Residential
- 10 and General Service <50 kW customer for the period January 1, 2018 to December 31, 2022.18
- 11 This rate has been used for 2021-2025, without adjustment for inflation. As per the OEB
- 12 decision, Hydro Ottawa has used the most recent OEB Yearbook count for Residential and
- 13 General Service <50 kW customers to calculate the annual expense. The revenue has been
- 14 derived based on the monthly load forecast.

15

#### 16 4.6. LOW VOLTAGE SWITCHGEAR CREDIT

- 17 Power Supply Expenses were adjusted to reflect the Low Voltage Switchgear credit which
- 18 Hydro Ottawa receives as a result of owning the low voltage switchgear at certain stations.

<sup>19 17</sup> Ontario Energy Board, *Decision and Order*, EB-2019-0043 (December 17, 2019), Schedule A, page 8.

<sup>&</sup>lt;sup>20</sup> <sup>18</sup> Ontario Energy Board, *Decision and Order*, EB-2017-0290 (March 1, 2018), page 5.

#### UPDATED - 2021 Commodity Expense

1:	Allocation of Commodity				201	Historical Act	uais				
						non-RPP		RPP	Proportions	(by Class)	
							Total		non-RPP	RPP	
	Customer Class Name	Last Actual k	h's Class A I	Wh Class B kWh		•	•		%	%	
	Residential	2,263,21	,648	2,263,214,648	8 42,764,06		42,764,069	2,220,450,579	1.89%	98.11%	
	General Service < 50 kW	724,76	,279	724,761,279	9 111,717,61		111,717,613	613,043,666	15.41%	84.59%	
	General Service 50 to 1,499 kW	2,881,55	,111 270,037	598 2,611,516,513	3 2,264,281,81		2,264,281,812	347,234,701	78.58%	12.05%	
	General Service 1,500-4999 kW	723,01	,994 523,851	645 199,166,349	9 198,751,26	l e	198,751,269	415,080	100.00%	0.06%	
	Large Use	602,08	.783 602,082				-	0	100.00%	0.00%	
	Unmetered Scattered Load	14,54		14,549,690			-	14,549,690	0.00%	100.00%	
	Sentinel Lighting	4	,813	47,813			-	47,813	0.00%	100.00%	
	Street Lighting	26,73	,515	26,730,515	26,730,51		26,730,515	0			
				-							
	TOTAL	7 235 95	833 1 305 073	026 5 839 986 807	2 644 245 27	0	2 644 245 278	3 105 7/1 520			
	TOTAL %	<b>7,235,95</b>	833 1,395,972 00%	5,839,986,807 100.009				3,195,741,529 54.72%	45.28%	54.72%	100.00
	2021 Forecasted Commodity Pr	ices			45.28		]	54.72%			
	%	10			45.28	0.00%		54.72%		54.72% odifier: May 1, 201	
2a:	2021 Forecasted Commodity Pr	ices	00%	100.009	% 45.28	0.00%	]	54.72%			
2a:	2021 Forecasted Commodity Pr	ices  I(\$/MWh)  Table 1: Average RPP Si Load-Weighted Price for RP	oply Cost Summ	100.009	% 45.28	6 0.00%	]	54.72% Table 1: RPP			
2a:	2021 Forecasted Commodity Pr GA Modifier Forecasted Commodity Prices	ices I(\$/MWh) Table 1: Average RPP Si	oply Cost Summ	100.009	96 45.28 not	RPP \$21.54	]	54.72% Table 1: RPP			
2a:	2021 Forecasted Commodity Pr GA Modifier Forecasted Commodity Prices HOEP (\$IMWh)	ices  I(\$/MWh)  Table 1: Average RPP Si Load-Weighted Price for RP	oply Cost Summ	100.009	nor \$21.5 \$109.4	RPP \$21.54 \$109.49	Source:	54.72%  Table 1: RPP  RPP			
2a:	2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (\$MWh) Global Adjustment (\$MWh) Adjustments (\$MWh) TOTAL (\$MWh)	ices  I(\$/MWh)  Table 1: Average RPP Si Load-Weighted Price for RP	oo%	100.009	not	RPP \$21.54 \$109.49	Source:	54.72%  Table 1: RPP  RPP  \$1.00 \$132.03			
	2021 Forecasted Commodity Pri GA Modifier  Forecasted Commodity Prices  HOEP (S/MWh)  Global Adjustment (S/MWh)  Adjustments (S/MWh)  TOTAL (S/MWh)  S/KWh	ICES  I(S/MWh)  Table 1: Average RPP Si ILoad-Weighted Price for RP Impact of the Global Adjustin  Average Supply Cost for I	oo% ook Summers on the Consumers on the Consumers on the Consumers on the Consumers of the	100.009	noi	RPP \$21.54 \$109.49 \$131.03 \$0.13103	Source:	54.72%  Table 1: RPP  RPP  \$1.00 \$132.03 \$0.13203			100.00
2a:	2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (\$MWh) Global Adjustment (\$MWh) Adjustments (\$MWh) TOTAL (\$MWh)	Ices  I(s/MWh)  Table 1: Average RPP Si ILoad-Weighted Price for RP Impact of the Global Adjustn Average Supply Cost for I non-RPP (GA mod/non-G	oo% ook Summers on the Consumers on the Consumers on the Consumers on the Consumers of the	100.009	noi	RPP  -RPP  \$21.54 \$109.49 \$131.03 \$.0.13103 6.0.00%	Source:	54.72%  Table 1: RPP  RPP  \$1.00 \$132.03			

Step 3: Commodity Expense (volumes for the bridge and test year are loss adjusted)

Class A				2020			2021					
Customer	Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
General Service 50 to 1,499 kW	4035	4705	274,888,999	562,912	0.02154	42.12	\$29,631,241	272,979,363	558,698	0.02154	42.12	\$29,412,613
General Service 1,500-4999 kW	4010	4705	525,469,818	1,074,232	0.02154	42.12	\$56,565,808	511,522,721	1,050,314	0.02154	42.12	\$55,257,939
Large Use			592,478,734	1,075,011	0.02154	42.12	\$58,042,305	577,220,889	1,052,901	0.02154	42.12	\$56,782,346
•			1,392,837,551	2,712,155			\$144,239,354	1,361,722,973	2,661,913			\$141,452,898

Class B						2020				2021	
Customer		Revenue	Expense								
Class Name	UoM	USA#	USA#	Volume	rate (\$/kWh):		Amount	Volume	rate (\$/kWh):		Amount
Residential	kWh	4006	4705	2,329,947,204	0.1235		\$287,748,480	2,329,086,271	\$0.1316		\$306,456,786
General Service < 50 kW	kWh	4010	4705	731,267,394	0.1235		\$90,311,523	723,526,640	\$0.1316		\$95,200,273
General Service 50 to 1,499 kW	kWh	4035	4705	2,658,434,108	0.1235		\$328,316,612	2,639,966,134	\$0.1316		\$347,361,774
General Service 1,500-4999 kW	kWh	4010	4705	199,781,573	0.1235		\$24,673,024	194,478,941	\$0.1316		\$25,589,173
Large Use	kWh	4025	4705	0	0.1235		\$0	0	\$0.1316		\$0
Unmetered Scattered Load	kWh	4025	4705	14,578,551	0.1235		\$1,800,451	14,061,748	\$0.1316		\$1,850,218
Sentinel Lighting	kWh	4025	4705	48,575	0.1235		\$5,999	48,589	\$0.1316		\$6,393
Street Lighting	kWh	4025	4705	24,870,144	0.1235		\$3,071,463	22,854,217	\$0.1316		\$3,007,115
Drycore	kWh	4025	4705	5,159,232	0.1235		\$637,165	5,160,730	\$0.1316		\$679,039
TOTAL				5,964,086,781			\$736,564,717	5,929,183,270			\$780,150,771

Total						2020			2021		
Customer		Revenue	Expense								
Class Name	UoM	USA#	USA#	Volume	avg rate (\$/kWh):		Amount	Volume	avg rate (\$/kWh):		
Residential	kWh	4006	4705	2,329,947,204	0.12350		\$287,748,480	2,329,086,271	0.1316		
General Service < 50 kW	kWh	4010	4705	731,267,394	0.12350		\$90,311,523	723,526,640	0.1316		
General Service 50 to 1,499 kW	kWh	4035	4705	2,933,323,107	0.12203		\$357,947,853	2,912,945,497	0.1293		
General Service 1,500-4999 kW	kWh	4010	4705	725,251,391	0.11201		\$81,238,832	706,001,662	0.1145		
Large Use	kWh	4025	4705	592,478,734	0.09797		\$58,042,305	577,220,889	0.0984		
Unmetered Scattered Load	kWh	4025	4705	14,578,551	0.12350		\$1,800,451	14,061,748	0.1316		
Sentinel Lighting	kWh	4025	4705	48,575	0.12350		\$5,999	48,589	0.1316		
Street Lighting	kWh	4025	4705	24,870,144	0.12350		\$3,071,463	22,854,217	0.1316		
Drycore	kWh	4025	4705	5,159,232	0.12350		\$637,165	5,160,730	0.1316		
TOTAL				7,356,924,332			\$880,804,071	7,290,906,243			:

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020
\*\* Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

#### UPDATED - 2022 Commodity Expense

Step 1:	Allocation of Commodity					2019 H	istorical Actu	uals				
							non-RPP		RPP	Proportions	(by Class)	
								Total		non-RPP	RPP	
	Customer Class Name	Last Actual kWh's	Class A kWh	Class B kWh		•		•		%	%	
	Residential	2,263,214,648	8	2,263,214,648		12,764,069		42,764,069	2,220,450,579	1.89%	98.11%	
	General Service < 50 kW	724,761,279		724,761,279	1	11,717,613		111,717,613	613,043,666	15.41%	84.59%	
	General Service 50 to 1,499 kW	2.881,554,111	270.037.598	2,611,516,513	2.2	64.281.812		2,264,281,812	347,234,701	78.58%	12.05%	
	General Service 1,500-4999 kW	723,017,994	523,851,645	199,166,349	1	98,751,269		198,751,269	415,080	100.00%	0.06%	
	Large Use	602,082,783	602,082,783					-	0	100.00%	0.00%	
	Unmetered Scattered Load	14,549,690		14,549,690				-	14,549,690	0.00%	100.00%	
	Sentinel Lighting	47,813		47,813				-	47,813	0.00%	100.00%	
	Street Lighting	26,730,515	i	26,730,515		26,730,515			0			
				-					0			
	TOTAL	7,235,958,833	1,395,972,026	-,,,	2,6	14,245,278	0	2,617,514,763	3,195,741,529			
	%	100.00%		100.00%		45.28%	0.00%	]	54.72%	45.28%	54.72%	100.00%
Step 2: Step 2a:	2021 Forecasted Commodity Pr	(\$/MWh)		]		non-Ri	PP	Source:	Table 1: RPP	Prices and GA Mo	odifier: May 1, 201	9 to October 31, 20
Step 2b:	Forecasted Commodity Prices	Table 1: Average RPP Supply	Cost Summary*	*		non-R	PP	]	RPP			
	HOEP (\$/MWh)	Load-Weighted Price for RPP Con	sumers			\$26.45	\$26.45					
	Global Adjustment (\$/MWh)	Impact of the Global Adjustment				\$114.58	\$114.58					
	Adjustments (\$/MWh)								\$1.00			
	TOTAL (\$/MWh)	Average Supply Cost for RPP (	Consumers			\$141.03	\$141.03		\$142.03			
	\$/kWh					\$0.14103	\$0.14103		\$0.14203			
	Percentage shares (%)	non-RPP (GA mod/non-GA mo	d), RPP			45.28%	0.00%		54.72%			
	WEIGHTED AVERAGE PRICE (\$/kWh)	(Sum of I43, J43 and L43)		\$ 0.1416		\$0.0639	\$0,0000		\$0,0777			

#### Commodity Expense

olumes for the bridge and test year are loss adjusted)

Class A			2021					2022				
Customer	Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
General Service 50 to 1,499 kW	4035	4705	272,979,363	558,698	0.02154	42.12	\$29,412,613	273,505,808	558,888	0.02645	42.12	\$30,774,871
General Service 1,500-4999 kW	4010	4705	511,522,721	1,050,314	0.02154	42.12	\$55,257,939	511,059,825	1,049,527	0.02645	42.12	\$57,724,122
Large Use			577,220,889	1,052,901	0.02154	42.12	\$56,782,346	575,810,734	1,050,767	0.02645	42.12	\$59,489,315
			1,361,722,973	2,661,913			\$141,452,898	1,360,376,367	2,659,182			\$147,988,308
							60					

01 D											
Class B										2022	
Customer		Revenue	Expense								
Class Name	UoM	USA#	USA#	Volume	rate (\$/kWh):		Amount	Volume	rate (\$/kWh):		Amount
Residential	kWh	4006	4705	2,329,086,271	0.1316		\$306,456,786	2,350,676,150	\$0.1416		\$332,809,945
General Service < 50 kW	kWh	4010	4705	723,526,640	0.1316		\$95,200,273	722,764,729	\$0.1416		\$102,329,404
General Service 50 to 1,499 kW	kWh	4035	4705	2,639,966,134	0.1316		\$347,361,774	2,645,057,358	\$0.1416		\$374,488,589
General Service 1,500-4999 kW	kWh	4010	4705	194,478,941	0.1316		\$25,589,173	194,302,949	\$0.1416		\$27,509,512
Large Use	kWh	4025	4705	0	0.1316		\$0	0	\$0.1416		\$0
Unmetered Scattered Load	kWh	4025	4705	14,061,748	0.1316		\$1,850,218	13,573,794	\$0.1416		\$1,921,785
Sentinel Lighting	kWh	4025	4705	48,589	0.1316		\$6,393	48,589	\$0.1416		\$6,879
Street Lighting	kWh	4025	4705	22,854,217	0.1316		\$3,007,115	21,942,405	\$0.1416		\$3,106,617
Drycore	kW	4025	4705	5,160,730	0.1316		\$679,039	5,160,730	\$0.1416		\$730,659
TOTAL				5,929,183,270			\$780,150,771	5,953,526,704			\$842,903,390

otal									2022	
Customer		Revenue	Expense							
Class Name	UoM	USA#	USA#	Volume	avg rate (\$/kWh):	Amount	Volume	avg rate (\$/kWh):		Γ
Residential	kWh	4006	4705	2,329,086,271	0.13158	\$306,456,786	2,350,676,150	0.1416		Г
General Service < 50 kW	kWh	4010	4705	723,526,640	0.13158	\$95,200,273	722,764,729	0.1416		Г
General Service 50 to 1,499 kW	kWh	4035	4705	2,912,945,497	0.12934	\$376,774,387	2,918,563,166	0.1389		
General Service 1,500-4999 kW	kWh	4010	4705	706,001,662	0.11451	\$80,847,112	705,362,774	0.1208		
Large Use	kWh	4025	4705	577,220,889	0.09837	\$56,782,346	575,810,734	0.1033		Г
Unmetered Scattered Load	kWh	4025	4705	14,061,748	0.13158	\$1,850,218	13,573,794	0.1416		
Sentinel Lighting	kWh	4025	4705	48,589	0.13157	\$6,393	48,589	0.1416		
Street Lighting	kWh	4025	4705	22,854,217	0.13158	\$3,007,115	21,942,405	0.1416		
Drycore	kWh	4025	4705	5,160,730	0.13158	\$679,039	5,160,730	0.1416		Г
TOTAL				7,290,906,243		\$921,603,669	7,313,903,071			

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020
\*\* Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

#### UPDATED - 2023 Commodity Expense

2019 Historical Actuals

						1	non-RPP		RPP	Proportions	(by Class)	
								Total		non-RPP	RPP	
Customer Class Name	Last A	Actual kWh's	Class A kWh	Class B kWh	1					%	%	
Residential	2	2,263,214,648		2,263,214,648		42,764,069		42,764,069	2,220,450,579	1.89%	98.11%	
General Service < 50 kW		724,761,279		724,761,279		111,717,613		111,717,613	613,043,666	15.41%	84.59%	
General Service 50 to 1,499 kW	2	2,881,554,111	270,037,598	2,611,516,513		2,264,281,812		2,264,281,812	347,234,701	78.58%	12.05%	
General Service 1,500-4999 kW		723,017,994	523,851,645	199,166,349		198,751,269		198,751,269	415,080	100.00%	0.06%	
Large Use		602,082,783	602,082,783	-				-	0	100.00%	0.00%	
Unmetered Scattered Load		14,549,690		14,549,690				-	14,549,690	0.00%	100.00%	
Sentinel Lighting		47,813		47,813				-	47,813	0.00%	100.00%	
Street Lighting		26,730,515		26,730,515		26,730,515		26,730,515	0			
				-					0			
	7.	7,235,958,833	1,395,972,026	5,839,986,807		2,644,245,278	0	2,644,245,278	.,, ,			
TOTAL												
%		100.00%		100.00%	J	45.28%	0.00%	<u> </u>	54.72%	45.28%	54.72%	100.00
% 2021 Forecasted Commodity Pr	(S/MWh)			]		non-F	PP .	Source:	Table 1: RPP		54.72%  odifier: May 1, 201	9 to October
2021 Forecasted Commodity Pr GA Modifier Forecasted Commodity Prices	(\$/MWh) Table 1: Average I	e RPP Supply C		]			PP .	Source:				
2021 Forecasted Commodity Pr GA Modifier Forecasted Commodity Prices HOEP (\$MWh)	(S/MWh)  Table 1: Average I  Load-Weighted Price	e RPP Supply C		]	ı	non-F	RPP \$30.09	Source:	Table 1: RPP			
2021 Forecasted Commodity Pr  GA Modifier  Forecasted Commodity Prices  HOEP (S/MWh)  Global Adjustment (S/MWh)	(\$/MWh) Table 1: Average I	e RPP Supply C		]		non-F	RPP	Source:	Table 1: RPP			
2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (\$/MWh)  Global Adjustment (\$/MWh)  Adjustments (\$/MWh)	Table 1: Average I Load-Weighted Price Impact of the Global	e RPP Supply C ice for RPP Consu al Adjustment	umers	]		non-R non-F \$30.09 \$120.94	\$30.09 \$120.94	Source:	Table 1: RPP			
2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (s/MWh) Global Adjustment (s/MWh) Adjustments (s/MWh) TOTAL (s/MWh)	(S/MWh)  Table 1: Average I  Load-Weighted Price	e RPP Supply C ice for RPP Consu al Adjustment	umers	]		non-F	\$30.09 \$120.94 \$151.04	Source:	Table 1: RPP  RPP  \$1.00 \$152.04			
2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (s/MWh)  Global Adjustment (s/MWh)  TOTAL (s/MWh)  S/MWh	(S/MWh)  Table 1: Average I  Load-Weighted Price Impact of the Global  Average Supply Co	e RPP Supply C ice for RPP Const al Adjustment Cost for RPP Cc	umers	]		non-R 330.09 \$120.94 \$151.04	\$30.09 \$120.94 \$151.04 \$0.15104	Source:	Table 1: RPP  RPP  \$1.00 \$152.04 \$0.15204			
2021 Forecasted Commodity Pr GA Modifier  Forecasted Commodity Prices  HOEP (s/MWh) Global Adjustment (s/MWh) Adjustments (s/MWh) TOTAL (s/MWh)	(S/MWh)  Table 1: Average I  Load-Weighted Price Impact of the Global  Average Supply Co	e RPP Supply C ice for RPP Consu al Adjustment Cost for RPP Co	umers	]		non-F	\$30.09 \$120.94 \$151.04	Source:	Table 1: RPP  RPP  \$1.00 \$152.04			

#### Step 3: Commodity Expense

Step 1: Allocation of Commodity

(volumes for the bridge and test year are loss adjusted)

Class A						2022					2023		
Customer		Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
General Service 50 to 1,499 kW		4035	4705	273,505,808	558,888	0.02645	42.12	\$30,774,871	274,094,742	559,184	0.03009	42.12	\$31,799,773
General Service 1,500-4999 kW		4010	4705	511,059,825	1,049,527	0.02645	42.12	\$57,724,122	511,212,626	1,049,785	0.03009	42.12	\$59,598,260
Large Use				575,810,734	1,050,767	0.02645	42.12	\$59,489,315	574,950,368	1,049,467	0.03009	42.12	\$61,502,837
		•		1,360,376,367	2,659,182			\$147,988,308	1,360,257,736	2,658,436			\$152,900,870
Class B						2022					2023		
Customer		Revenue	Expense										
Class Name	UoM	USA#	USA#	Volume	rate (\$/kWh):			Amount	Volume	rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,350,676,150	0.1416			\$332,809,945	2,377,084,571	\$0.1516			\$360,325,176
General Service < 50 kW	kWh	4010	4705	722,764,729	0.1416			\$102,329,404	721,216,097	\$0.1516			\$109,323,968
General Service 50 to 1,499 kW	kWh	4035	4705	2,645,057,358	0.1416			\$374,488,589	2,650,752,894	\$0.1516			\$401,808,592
General Service 1,500-4999 kW	kWh	4010	4705	194,302,949	0.1416			\$27,509,512	194,361,043	\$0.1516			\$29,461,794
Large Use	kWh	4025	4705	0	0.1416			\$0	0	\$0.1516			\$0
Unmetered Scattered Load	kWh	4025	4705	13,573,794	0.1416			\$1,921,785	13,091,009	\$0.1516			\$1,984,372
Sentinel Lighting	kWh	4025	4705	48,589	0.1416			\$6,879	48,589	\$0.1516			\$7,365
Street Lighting	kWh	4025	4705	21,942,405	0.1416			\$3,106,617	21,102,959	\$0.1516			\$3,198,846
Drycore	kW	4025	4705	5,160,730	0.1416			\$730,659	5,160,730	\$0.1516			\$782,278
TOTAL				5,953,526,704				\$842,903,390	5,982,817,892				\$906,892,391
Total						2022					2023		1
Customer		Revenue											
Class Name	UoM	USA#	USA#		avg rate (\$/kWh):			Amount		avg rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,350,676,150	0.14158			\$332,809,945	2,377,084,571	0.1516	4		\$360,325,176
General Service < 50 kW	kWh	4010	4705	722,764,729	0.14158			\$102,329,404	721,216,097	0.1516			\$109,323,968
General Service 50 to 1,499 kW	kWh	4035	4705	2,918,563,166	0.13886			\$405,263,460	2,924,847,636	0.1482			\$433,608,365
General Service 1,500-4999 kW	kWh	4010	4705	705,362,774	0.12084			\$85,233,634	705,573,669	0.1262			\$89,060,054
Large Use	kWh	4025	4705	575,810,734	0.10331			\$59,489,315	574,950,368	0.1070			\$61,502,837
Unmetered Scattered Load	kWh	4025	4705	13,573,794	0.14158			\$1,921,785	13,091,009	0.1516			\$1,984,372
Sentinel Lighting	kWh	4025	4705	48,589	0.14158			\$6,879	48,589	0.1516			\$7,365
Street Lighting	kWh	4025	4705	21,942,405	0.14158			\$3,106,617	21,102,959	0.1516			\$3,198,846
Drycore	kWh	4025	4705	5,160,730	0.14158			\$730,659	5,160,730	0.1516			\$782,278
TOTAL		1	I	7,313,903,071				\$990,891,698	7,343,075,628				\$1,059,793,261

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020
\*\* Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

Allocation of Commodity

#### UPDATED - 2024 Commodity Expense

2019 Historical Actuals

								non-RPP		RPP	Proportions	(by Class)
									Total		non-RPP	RPP
Customer Class Nan	me	Li	ast Actual kWh's	Class A kWh	Class B kWh			•			%	%
Residential			2,263,214,648		2,263,214,648	1	42,764,069		42,764,069	2,220,450,579	1.89%	98.11%
General Service < 50	kW		724,761,279		724,761,279	Ī	111,717,613		111,717,613	613,043,666	15.41%	84.59%
General Service 50 to	1,499 kW		2,881,554,111	270,037,598	2,611,516,513		2,264,281,812		2,264,281,812	347,234,701	78.58%	12.05%
General Service 1,500	10-4999 kW		723,017,994	523,851,645	199,166,349		198,751,269		198,751,269	415,080	100.00%	0.06%
Large Use			602,082,783	602,082,783	-				-	0	100.00%	0.00%
Unmetered Scattered	d Load		14,549,690		14,549,690				-	14,549,690	0.00%	100.00%
Sentinel Lighting			47,813		47,813				-	47,813	0.00%	100.00%
Street Lighting			26,730,515		26,730,515		26,730,515			0		
					-					0		
			7,235,958,833	1,395,972,026	5,839,986,807		2,644,245,278	0	2,617,514,763	3,195,741,529		
TOTAL												
%			100.00%		100.00%		45.28%	0.00%		54.72%	45.28%	54.72%
	Commodity Pr	ices (\$/MWh)	100.00%		100.00%		45.28% non-l		Source:		45.28%	
% 2021 Forecasted		(\$/MWh) Table 1: Aver	rage RPP Supply (		]			RPP	<u> </u>			
% 2021 Forecasted GA Modifier		(\$/MWh)  Table 1: Aver	rage RPP Supply (		]		non-l	RPP	<u> </u>	Table 1: RPP		
%  2021 Forecasted  GA Modifier  Forecasted Comm	nodity Prices	(\$/MWh)  Table 1: Aver	rage RPP Supply (		]		non-l	RPP	<u> </u>	Table 1: RPP		
2021 Forecasted  GA Modifier  Forecasted Comm  HOEP (\$/MWh)	nodity Prices	(\$/MWh)  Table 1: Aver	rage RPP Supply (		]		non-l	RPP \$40.82	<u> </u>	Table 1: RPP		
2021 Forecasted  GA Modifier  Forecasted Comm  HOEP (\$MWh) Global Adjustment (\$'	nodity Prices	(\$/MWh)  Table 1: Aver  Load-Weighted Impact of the G	rage RPP Supply (	sumers	]		non-l	RPP \$40.82	<u> </u>	Table 1: RPP		
2021 Forecasted  GA Modifier  Forecasted Comm  HOEP (\$MWh) Global Adjustment (\$'x' Adjustments (\$'x'Adjustment (\$'x') Adjustment (\$'x') Ad	nodity Prices	(\$/MWh)  Table 1: Aver  Load-Weighted Impact of the G	rage RPP Supply ( I Price for RPP Cons Global Adjustment	sumers	]		non-1	RPP \$40.82 \$122.22	<u> </u>	Table 1: RPP		
2021 Forecasted  GA Modifier  Forecasted Comm  HOEP (\$MWh) Global Adjustment (\$/ Adjustments (\$/AMWh) TOTAL (\$MWh)	nodity Prices	(\$/MWh)  Table 1: Aver  Load-Weighted Impact of the G  Average Supp	rage RPP Supply ( I Price for RPP Cons Slobal Adjustment bly Cost for RPP C	sumers	]		non-l 840.82 \$122.22	\$40.82 \$122.22	Source:	Table 1: RPP  RPP  \$1.00 \$164.04		

#### Step 3: Commodity Expense

					2023					2024		
	Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
	4035	4705	274,094,742	559,184	0.03009	42.12	\$31,799,773	275,331,705	560,607	0.04082	42.12	\$34,851,156
	4010	4705	511,212,626	1,049,785	0.03009	42.12	\$59,598,260	512,638,767	1,052,205	0.04082	42.12	\$65,243,562
			574,950,368	1,049,467	0.03009	42.12	\$61,502,837	575,755,453	1,050,683	0.04082	42.12	\$67,755,963
			1,360,257,736	2,658,436			\$152,900,870	1,363,725,925	2,663,495			\$167,850,681
					2023					2024		
	Revenue	Expense										
UoM	USA#	USA#	Volume	rate (\$/kWh):			Amount	Volume	rate (\$/kWh):			Amount
kWh	4006	4705	2,377,084,571	0.1516			\$360,325,176	2,412,060,092	\$0.1636			\$394,578,339
kWh	4010	4705	721,216,097	0.1516			\$109,323,968	721,358,761	\$0.1636			\$118,003,918
kWh	4035	4705	2,650,752,894	0.1516			\$401,808,592	2,662,715,489	\$0.1636			\$435,581,957
kWh	4010	4705	194,361,043	0.1516			\$29,461,794	194,903,257	\$0.1636			\$31,883,370
kWh	4025	4705	0	0.1516			\$0	0	\$0.1636			\$0
kWh	4025	4705	13,091,009	0.1516			\$1,984,372	12,607,191	\$0.1636			\$2,062,355
kWh	4025	4705	48,589	0.1516			\$7,365	48,589	\$0.1636			\$7,948
kWh	4025	4705	21,102,959	0.1516			\$3,198,846	20,265,581	\$0.1636			\$3,315,158
kW	4025	4705	5,160,730	0.1516			\$782,278	5,160,730	\$0.1636			\$844,221
			5,982,817,892				\$906,892,391	6,029,119,690				\$986,277,266
					2023					2024		
	Revenue	Expense										
UoM	USA#	USA#	Volume	avg rate (\$/kWh):			Amount	Volume	avg rate (\$/kWh):			Amount
kWh	4006	4705	2,377,084,571	0.15158			\$360,325,176	2,412,060,092	0.1636			\$394,578,339
kWh	4010	4705	721,216,097	0.15158			\$109,323,968	721,358,761	0.1636			\$118,003,918
kWh	4035	4705	2,924,847,636	0.14825			\$433,608,365	2,938,047,194	0.1601			\$470,433,113
kWh	4010	4705	705,573,669	0.12622			\$89,060,054	707,542,024	0.1373			\$97,126,932
	kWh kWh kWh kWh kWh kWh kWh kWh kWh	Revenue   UoM   USA #   KWh   4006   KWh   4015   KWh   4025   KWh	Revenue   Expense	Revenue   Expense	A035	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue   Expense   KWh Volume   4035   4705   274,094,742   599,184   0.03009   42.12   \$31,799,773   275,331,705   590,697   0.04082     4010	Revenue   Expense   KWh Volume   4035   4705   274,946,742   559,184   0.03009   42:12   \$51,798,773   275,533,705   560,607   0.04062   42:12   \$1,049,475   0.03009   42:12   \$51,968,800   512,638,776   1.052,205   0.04062   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.03009   42:12   \$1,049,475   0.04002   42:12

0.1373 0.1177 0.1636

0.1636 0.1636

0.1636

\$61,502,837 \$1,984,372

\$782,278 5,160,730 \$1,059,793,261 7,392,845,615

575,755,453 12,607,191

\$97,126,932 \$67,755,963 \$2,062,355

\$7,948 \$3,315,158

\$844,221 \$1,154,127,947

0.12622 0.10697 0.15158

0.15158 0.15158

0.15158

kWh kWh

kWh kWh

kWh

4705 4705 4705

4705 4705

4025 4705

574,950,368 13,091,009

5,160,730

4025 4025

4025 4025

Large Use Unmetered Scattered Load Sentinel Lighting Street Lighting

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020

<sup>\*\*</sup> Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

#### UPDATED - 2025 Commodity Expense

2019 Historical Actuals

						non-RPP		RPP	Proportions	(by Class)	
							Total		non-RPP	RPP	
Customer Class Name	Last A	Actual kWh's	Class A kWh	Class B kWh		•	•		%	%	
Residential		2,263,214,648		2,263,214,648	42,764,0	9	42,764,069	2,220,450,579	1.89%	98.11%	
General Service < 50 kW		724,761,279		724,761,279	111,717,6	3	111,717,613	613,043,666	15.41%	84.59%	
General Service 50 to 1,499 kW		2,881,554,111	270,037,598	2,611,516,513	2,264,281,8	2	2,264,281,812	347,234,701	78.58%	12.05%	
General Service 1,500-4999 kW		723,017,994	523,851,645	199,166,349	198,751,2	9	198,751,269	415,080	100.00%	0.06%	
Large Use		602,082,783	602,082,783	-			-	0	100.00%	0.00%	
Unmetered Scattered Load		14,549,690		14,549,690			-	14,549,690	0.00%	100.00%	
Sentinel Lighting		47,813		47,813			-	47,813	0.00%	100.00%	
Street Lighting		26,730,515		26,730,515	26,730,5	5		0			
				-				0			
		7.235.958.833	1,395,972,026	5,839,986,807	2,644,245,2		0 2,617,514,763	3,195,741,529			
TOTAL				400.000/	45.5		0/	E 4 700/	45.000/		
%		100.00%		100.00%	45.3	0.00	<u>%</u>	54.72%	45.28%	54.72%	100.00%
	rices			100.00%		0.00	% 	54.72%	45.28%	54.72%	100.00%
%				100.00%			% Source:			54.72% odifier: May 1, 2019	
% 2021 Forecasted Commodity P	rices	100.00%	Cost Summary**	]	n						
% 2021 Forecasted Commodity P GA Modifier	rices (\$/MWh)	100.00%		]	n	n-RPP	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices	rices (\$/MWh) Table 1: Average	100.00%  e RPP Supply Coice for RPP Consi		]	n	n-RPP 8 \$40.1	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (\$MWh)	rices (\$/MWh) Table 1: Average Load-Weighted Pric	100.00%  e RPP Supply Coice for RPP Consi		]	n r s40	n-RPP 8 \$40.1	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (S/MWh) Global Adjustment (S/MWh) Adjustments (S/MWh) TOTAL (S/MWh)	rices (\$/MWh) Table 1: Average Load-Weighted Pric	100.00%  e RPP Supply C ice for RPP Consi	umers	]	n r s40	n-RPP 8 \$40.1 6 \$129.8 4 \$170.0	Source:	Table 1: RPP  RPP  \$1.00 \$171.04			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (\$MWh) Global Adjustment (\$MWh) Adjustments (\$MWh)	Table 1: Average Load-Weighted Pric Impact of the Global	100.00%  e RPP Supply C ice for RPP Consi	umers	]		n-RPP 8 \$40.1 6 \$129.8 4 \$170.0	Source:	Table 1: RPP			
2021 Forecasted Commodity P  GA Modifier  Forecasted Commodity Prices  HOEP (\$MWh) Global Adjustment (\$/MWh) Adjustments (\$/MWh) TOTAL (\$MWh)	rices (s/MWh)  Table 1: Average Load-Weighted Pric Impact of the Global Average Supply C	e RPP Supply Coice for RPP Consial Adjustment Cost for RPP Co	umers	]	\$40 \$122 \$170	n-RPP  8 \$40.1 66 \$129.8 4 \$170.0 45 \$0.1700 66 9.0	Source:	Table 1: RPP  RPP  \$1.00 \$171.04			

#### Step 3: Commodity Expense

Step 1: Allocation of Commodity

olumes for the bridge and test year are loss adjusted)

Class A						2024					2025		
Customer		Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
General Service 50 to 1,499 kW		4035	4705	275,331,705	560,607	0.04082	42.12	\$34,851,156	275,418,219	560,021	0.04018	42.12	\$34,654,592
General Service 1,500-4999 kW		4010	4705	512,638,767	1,052,205	0.04082	42.12	\$65,243,562	511,981,873	1,051,094	0.04018	42.12	\$64,843,872
Large Use				575,755,453	1,050,683	0.04082	42.12	\$67,755,963	573,298,989	1,046,964	0.04018	42.12	\$67,133,915
		•	•	1,363,725,925	2,663,495			\$167,850,681	1,360,699,081	2,658,079			\$166,632,379
Class B						2024					2025		
Customer		Revenue	Expense										
Class Name	UoM	USA#	USA#	Volume	rate (\$/kWh):			Amount	Volume	rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,412,060,092	0.1636			\$394,578,339	2,432,685,436	\$0.1706			\$414,985,282
General Service < 50 kW	kWh	4010	4705	721,358,761	0.1636			\$118,003,918	719,356,291	\$0.1706			\$122,713,060
General Service 50 to 1,499 kW	kWh	4035	4705	2,662,715,489	0.1636	1		\$435,581,957	2,663,552,159	\$0.1706			\$454,368,217
General Service 1,500-4999 kW	kWh	4010	4705	194,903,257	0.1636	1		\$31,883,370	194,653,509	\$0.1706			\$33,205,420
Large Use	kWh	4025	4705	0	0.1636			\$0	0	\$0.1706			\$0
Unmetered Scattered Load	kWh	4025	4705	12,607,191	0.1636	1		\$2,062,355	12,124,406	\$0.1706			\$2,068,270
Sentinel Lighting	kWh	4025	4705	48,589	0.1636	1		\$7,948	48,589	\$0.1706			\$8,289
Street Lighting	kWh	4025	4705	20,265,581	0.1636			\$3,315,158	19,491,265	\$0.1706			\$3,324,963
Drycore	kW	4025	4705	5,160,730	0.1636			\$844,221	5,160,730	\$0.1706			\$880,355
TOTAL				6,029,119,690				\$986,277,266	6,047,072,385				\$1,031,553,856
Total						2024					2025		
Customer		Revenue	Expense										
Class Name	UoM	USA#	USA#	Volume	avg rate (\$/kWh)			Amount	Volume	avg rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,412,060,092	0.16359			\$394,578,339	2,432,685,436	0.1706			\$414,985,282
General Service < 50 kW	kWh	4010	4705	721,358,761	0.16359			\$118,003,918	719,356,291	0.1706			\$122,713,060
General Service 50 to 1,499 kW	kWh	4035	4705	2,938,047,194	0.16012			\$470,433,113	2,938,970,378	0.1664			\$489,022,809
General Service 1,500-4999 kW	kWh	4010	4705	707,542,024	0.13727			\$97,126,932	706,635,382	0.1388			\$98,049,292
Large Use	kWh	4025	4705	575,755,453	0.11768			\$67,755,963	573,298,989	0.1171			\$67,133,915
Unmetered Scattered Load	kWh	4025	4705	12,607,191	0.16359			\$2,062,355	12,124,406	0.1706			\$2,068,270
Sentinel Lighting	kWh	4025	4705	48,589	0.16358			\$7,948	48,589	0.1706			\$8,289
Street Lighting	kWh	4025	4705	20,265,581	0.16359			\$3,315,158	19,491,265	0.1706			\$3,324,963
Drycore	kWh	4025	4705	5,160,730	0.16359			\$844,221	5,160,730	0.1706			\$880,355
TOTAL				7,392,845,615				\$1,154,127,947	7,407,771,466				\$1,198,186,235

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020
\*\* Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

#### UPDATED - 2025 Commodity Expense

2019 Historical Actuals

						non-RPP		RPP	Proportions	(by Class)	
							Total		non-RPP	RPP	
Customer Class Name	Last A	Actual kWh's	Class A kWh	Class B kWh		•	•		%	%	
Residential		2,263,214,648		2,263,214,648	42,764,0	9	42,764,069	2,220,450,579	1.89%	98.11%	
General Service < 50 kW		724,761,279		724,761,279	111,717,6	3	111,717,613	613,043,666	15.41%	84.59%	
General Service 50 to 1,499 kW		2,881,554,111	270,037,598	2,611,516,513	2,264,281,8	2	2,264,281,812	347,234,701	78.58%	12.05%	
General Service 1,500-4999 kW		723,017,994	523,851,645	199,166,349	198,751,2	9	198,751,269	415,080	100.00%	0.06%	
Large Use		602,082,783	602,082,783	-			-	0	100.00%	0.00%	
Unmetered Scattered Load		14,549,690		14,549,690			-	14,549,690	0.00%	100.00%	
Sentinel Lighting		47,813		47,813			-	47,813	0.00%	100.00%	
Street Lighting		26,730,515		26,730,515	26,730,5	5		0			
				-				0			
		7.235.958.833	1,395,972,026	5,839,986,807	2,644,245,2		0 2,617,514,763	3,195,741,529			
TOTAL				400.000/	45.5		0/	E 4 700/	45.000/		
%		100.00%		100.00%	45.3	0.00	<u>%</u>	54.72%	45.28%	54.72%	100.00%
	rices			100.00%		0.00	% 	54.72%	45.28%	54.72%	100.00%
%				100.00%			% Source:			54.72% odifier: May 1, 2019	
% 2021 Forecasted Commodity P	rices	100.00%	Cost Summary**	]	n						
% 2021 Forecasted Commodity P GA Modifier	rices (\$/MWh)	100.00%		]	n	n-RPP	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices	rices (\$/MWh) Table 1: Average	100.00%  e RPP Supply Coice for RPP Consi		]	n	n-RPP 8 \$40.1	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (\$MWh)	rices (\$/MWh) Table 1: Average Load-Weighted Pric	100.00%  e RPP Supply Coice for RPP Consi		]	n r s40	n-RPP 8 \$40.1	Source:	Table 1: RPP			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (S/MWh) Global Adjustment (S/MWh) Adjustments (S/MWh) TOTAL (S/MWh)	rices (\$/MWh) Table 1: Average Load-Weighted Pric	100.00%  e RPP Supply C ice for RPP Consi	umers	]	n r s40	n-RPP 8 \$40.1 6 \$129.8 4 \$170.0	Source:	Table 1: RPP  RPP  \$1.00 \$171.04			
2021 Forecasted Commodity P GA Modifier Forecasted Commodity Prices HOEP (\$MWh) Global Adjustment (\$MWh) Adjustments (\$MWh)	Table 1: Average Load-Weighted Pric Impact of the Global	100.00%  e RPP Supply C ice for RPP Consi	umers	]		n-RPP 8 \$40.1 6 \$129.8 4 \$170.0	Source:	Table 1: RPP			
2021 Forecasted Commodity P  GA Modifier  Forecasted Commodity Prices  HOEP (\$MWh) Global Adjustment (\$/MWh) Adjustments (\$/MWh) TOTAL (\$MWh)	rices (s/MWh)  Table 1: Average Load-Weighted Pric Impact of the Global Average Supply C	e RPP Supply Coice for RPP Consial Adjustment Cost for RPP Co	umers	]	\$40 \$122 \$170	n-RPP  8 \$40.1 66 \$129.8 4 \$170.0 45 \$0.1700 66 9.0	Source:	Table 1: RPP  RPP  \$1.00 \$171.04			

#### Step 3: Commodity Expense

Step 1: Allocation of Commodity

olumes for the bridge and test year are loss adjusted)

Class A						2024					2025		
Customer		Revenue	Expense	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount	kWh Volume	kW Volume	HOEP Rate/kWh	Avg GA/kW	Amount
General Service 50 to 1,499 kW		4035	4705	275,331,705	560,607	0.04082	42.12	\$34,851,156	275,418,219	560,021	0.04018	42.12	\$34,654,592
General Service 1,500-4999 kW		4010	4705	512,638,767	1,052,205	0.04082	42.12	\$65,243,562	511,981,873	1,051,094	0.04018	42.12	\$64,843,872
Large Use				575,755,453	1,050,683	0.04082	42.12	\$67,755,963	573,298,989	1,046,964	0.04018	42.12	\$67,133,915
		•	•	1,363,725,925	2,663,495			\$167,850,681	1,360,699,081	2,658,079			\$166,632,379
Class B						2024					2025		
Customer		Revenue	Expense										
Class Name	UoM	USA#	USA#	Volume	rate (\$/kWh):			Amount	Volume	rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,412,060,092	0.1636			\$394,578,339	2,432,685,436	\$0.1706			\$414,985,282
General Service < 50 kW	kWh	4010	4705	721,358,761	0.1636			\$118,003,918	719,356,291	\$0.1706			\$122,713,060
General Service 50 to 1,499 kW	kWh	4035	4705	2,662,715,489	0.1636	1		\$435,581,957	2,663,552,159	\$0.1706			\$454,368,217
General Service 1,500-4999 kW	kWh	4010	4705	194,903,257	0.1636	1		\$31,883,370	194,653,509	\$0.1706			\$33,205,420
Large Use	kWh	4025	4705	0	0.1636			\$0	0	\$0.1706			\$0
Unmetered Scattered Load	kWh	4025	4705	12,607,191	0.1636			\$2,062,355	12,124,406	\$0.1706			\$2,068,270
Sentinel Lighting	kWh	4025	4705	48,589	0.1636	1		\$7,948	48,589	\$0.1706			\$8,289
Street Lighting	kWh	4025	4705	20,265,581	0.1636			\$3,315,158	19,491,265	\$0.1706			\$3,324,963
Drycore	kW	4025	4705	5,160,730	0.1636			\$844,221	5,160,730	\$0.1706			\$880,355
TOTAL				6,029,119,690				\$986,277,266	6,047,072,385				\$1,031,553,856
Total						2024					2025		
Customer		Revenue	Expense										
Class Name	UoM	USA#	USA#	Volume	avg rate (\$/kWh)			Amount	Volume	avg rate (\$/kWh):			Amount
Residential	kWh	4006	4705	2,412,060,092	0.16359			\$394,578,339	2,432,685,436	0.1706			\$414,985,282
General Service < 50 kW	kWh	4010	4705	721,358,761	0.16359			\$118,003,918	719,356,291	0.1706			\$122,713,060
General Service 50 to 1,499 kW	kWh	4035	4705	2,938,047,194	0.16012			\$470,433,113	2,938,970,378	0.1664			\$489,022,809
General Service 1,500-4999 kW	kWh	4010	4705	707,542,024	0.13727			\$97,126,932	706,635,382	0.1388			\$98,049,292
Large Use	kWh	4025	4705	575,755,453	0.11768			\$67,755,963	573,298,989	0.1171			\$67,133,915
Unmetered Scattered Load	kWh	4025	4705	12,607,191	0.16359			\$2,062,355	12,124,406	0.1706			\$2,068,270
Sentinel Lighting	kWh	4025	4705	48,589	0.16358			\$7,948	48,589	0.1706			\$8,289
Street Lighting	kWh	4025	4705	20,265,581	0.16359			\$3,315,158	19,491,265	0.1706			\$3,324,963
Drycore	kWh	4025	4705	5,160,730	0.16359			\$844,221	5,160,730	0.1706			\$880,355
TOTAL				7,392,845,615				\$1,154,127,947	7,407,771,466				\$1,198,186,235

<sup>\*</sup>Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2019 – April 30, 2020
\*\* Regulated Price Plan Cost Suppy Report May 1, 2019 - April 30, 2020

				2021	Cost of Po	wer							
Loss Factors	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
LOSS FACTOR-every class but LU	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	
LOSS FACTOR-LARGE USERS	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	
SALES													
UNADJUSTED SALES (KWH)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
RESIDENTIAL	222,036,000	194,335,000	188,420,000	158,765,000	154,321,000	186,705,000	226,524,000	207,661,000	164,634,000	165,818,000	172,468,000	211,250,000	2,252,937,000
GENERAL SERVICE <50KW	67,428,000	61,219,000	61,603,000	54,109,000	52,456,000	54,971,000	61,520,000	58,755,000	52,104,000	53,840,000	57,201,000	64,665,000	699,871,000
DRYCORE GENERAL SERVICE 50-1000KW NONI	416,000	416,000	416,000 98.590.000	416,000 84,848,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	4,992,000
GENERAL SERVICE 50-1000KW NONI GENERAL SERVICE 50-1000KW INT	109,844,000 120,952,000	99,030,000 110,304,000	114.103.000	103.775.000	78,845,000 105.616.000	81,587,000 110.820.000	91,905,000 122.618.000	88,235,000 117,284,000	77,708,000 105.441.000	80,326,000 108,564,000	88,289,000 110,435,000	101,319,000 121,515,000	1,080,526,000 1,351,427,000
GENERAL SERVICE 30-1000KW IN 1	33.284.000	30.679.000	32.369.000	30.649.000	31.265.000	32.109.000	34.867.000	33.868.000	31.036.000	31.280.000	31.283.000	33.065.000	385.754.000
GENERAL SERVICE 1500-5000 KW	58,413,000	53,122,000	56.806.000	53.713.000	55,456,000	57,670,000	63.883.000	61.536.000	55.052.000	54,979,000	54,568,000	57,721,000	682,919,000
LARGE USER	47,874,000	42,822,000	47,722,000	46,055,000	48,373,000	48,727,000	52,777,000	51,545,000	47,265,000	47,632,000	45,925,000	47,575,000	574,292,000
STREETLIGHTING	2,840,000	2,280,000	2,008,000	1,586,000	1,101,000	975,000	1,096,000	1,347,000	1,684,000	2,178,000	2,387,000	2,625,000	22,107,000
SENTINEL	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	47,000
UNMETERED	1,174,000	1,172,000	1,059,000	1,162,000	1,125,000	1,157,000	1,143,000	1,131,000	1,116,000	1,125,000	1,106,000	1,132,000	13,602,000
TOTAL KWH-SALES	664,264,917	595,382,917	603,099,917	535,081,917	528,977,917	575,140,917	656,752,917	621,781,917	536,459,917	546,161,917	564,081,917	641,286,917	7,068,474,000
PURCHASES													
Power Purchases (kWh)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	Total
Total Load Forecast kWh	685,674,000	612,751,000	622,993,000	550,224,000	547,531,000	592,615,000	677,618,000	638,432,000	552,510,000	562,312,000	582,671,000	660,384,000	7,285,715,000
Power Purchased (kW) Power Purchases - coincident peak (kW)	JAN 1.183.000	FEB 1.167.000	MAR 1.087.000	APR 942.000	MAY 1,108,000	JUN 1,237,000	JULY 1.452.000	AUG 1.325.000	SEPT 1.128.000	OCT 928.000	NOV 1.070.000	DEC 1.140.000	Total 13,767,000
Power Purchases - contiduent peak (kw)	1,183,000	1,167,000	1,067,000	942,000	1,108,000	1,237,000	1,432,000	1,323,000	1,120,000	926,000	1,070,000	1,140,000	13,767,000
DEMAND CHARGES													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	
Coincident System Peak	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Transmission Network Charge IESO Transmission Transformation Charge IESO	90.8% 68.7%	89.4%	93.3% 74.2%	99.8% 101.1%	94.5% 73.4%	88.5% 67.2%	91.8% 67.9%	92.6% 70.5%	85.5% 71.4%	93.2% 76.7%	94.7% 73.2%	96.0% 73.6%	
Transmission Transformation Charge IESO Transmission Line Charge IESO	86.3%	71.3% 90.2%	90.4%	112.6%	90.4%	88.1%	90.4%	90.0%	90.6%	94.9%	90.7%	73.6% 89.1%	
Transmission Network Charge HONI	3.7%	3.5%	3.4%	3.4%	3.8%	3.6%	3.7%	3.5%	3.3%	2.9%	2.9%	3.5%	
Transmission Transformation Charge HONI	3.7%	3.4%	3.3%	3.4%	3.7%	3.6%	3.7%	3.4%	3.4%	3.0%	2.9%	3.4%	
Transmission Line Charge HONI	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	
kW Breakdown by Type	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
Transmission Network Charge IESO	1,074,444.21	1,043,154	1,014,525	939,898	1,047,556	1,094,366	1,333,048	1,226,516	964,644	864,938	1,013,633	1,094,012	12,710,733
Transmission Transformation Charge IESO	812,766	831,800	806,303	952,002	813,158	830,796	985,592	934,102	805,181	711,481	782,790	839,046	10,105,017
Transmission Line Charge IESO	1,020,582	1,052,587	982,807	1,060,715	1,002,056	1,089,624	1,312,270	1,192,513	1,022,158	880,586	970,217	1,015,764	12,601,881
Transmission Network Charge HONI	43,508	40,363	36,678	31,691	41,717	44,594	54,399	45,949	37,657	27,357	31,357	39,365	474,635
Transmission Transformation Charge HONI Transmission Line Charge HONI	43,392 4 173	39,575 4 308	36,137 4 305	32,257 4 252	41,172 5.550	44,720 4.315	53,598 5.913	45,207 3,995	38,423 3.485	28,068 3 283	31,269 3,829	39,192 4 296	473,010 51,703
RATES	4,173	4,300	4,303	4,232	5,550	4,313	5,913	3,995	3,403	3,203	3,029	4,290	51,703
Commodity Charge Asserting 27	JAN 80 1216	FEB 60 4246	MAR \$0.1316	APR \$0.1316	MAY \$0.1316	JUN	JULY *0.1216	AUG	SEPT 60 4246	OCT	NOV	DEC ***	
Commodity Charge - Appendix 2Z Transmission Network Charge IESO	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	\$0.1316 \$3.92	
Transmission Transformation Charge IESO	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	\$2.33	
Transmission Line Charge IESO	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	
Transmission Network Charge HONI	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	\$3.40	
Transmission Transformation Charge HONI	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	
Transmission Line Charge HONI	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	
Wholesale Market Charge Smart Metering Entity Charge	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	
	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 3
Schedule 1
Attachment F
UPDATED
May 5, 2020
Page 2 of 10

				2021	Cost of Po	wer							
COST OF POWER				-		-							
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$921,603,669
Transmission Network Charge IESO	\$4,211,821.29	\$4,089,163.19	\$3,976,938.65	\$3,684,398.96	\$4,106,419.73	\$4,289,914.54	\$5,225,547.37	\$4,807,941.37	\$3,781,404.68	\$3,390,557.75	\$3,973,439.69	\$4,288,527.89	\$49,826,075
Transmission Transformation Charge IESO	\$1,893,745.14	\$1,938,095.04	\$1,878,684.92	\$2,218,163.81	\$1,894,659.24	\$1,935,754.81	\$2,296,430.25	\$2,176,457.22	\$1,876,072.24	\$1,657,749.94	\$1,823,900.76	\$1,954,976.92	\$23,544,690
Transmission Line Charge IESO	\$989,964.82	\$1,021,009.83	\$953,323.05	\$1,028,893.35	\$971,994.78	\$1,056,935.36	\$1,272,901.91	\$1,156,737.21	\$991,493.62	\$854,168.30	\$941,110.86	\$985,291.20	\$12,223,824
Transmission Network Charge HONI	\$147,840.77	\$137,153.70	\$124,633.16	\$107,686.69	\$141,755.75	\$151,530.38	\$184,849.37	\$156,133.06	\$127,957.71	\$92,958.12	\$106,549.49	\$133,761.75	\$1,612,810
Transmission Transformation Charge HONI	\$87,625.77	\$79,918.40	\$72,974.83	\$65,139.47	\$83,142.89	\$90,308.18	\$108,235.44	\$91,290.95	\$77,591.86	\$56,681.39	\$63,143.65	\$79,144.36	\$955,197
Transmission Line Charge HONI	\$3,357.18	\$3,465.74	\$3,463.03	\$3,420.42	\$4,465.01	\$3,471.20	\$4,757.01	\$3,214.25	\$2,803.86	\$2,641.24	\$3,080.23	\$3,455.91	\$41,595
Wholesale Market Charge	\$2,674,128.60	\$2,389,728.90	\$2,429,672.70	\$2,145,873.60	\$2,135,370.90	\$2,311,198.50	\$2,642,710.20	\$2,489,884.80	\$2,154,789.00	\$2,193,016.80	\$2,272,416.90	\$2,575,497.60	\$28,414,289
Smart Meter Entity Charge	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$191,830.08	\$193,856.43	\$2,303,987
LV Charges	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$34,923.69	\$419,084
Total	\$87,035,543	\$86,685,594	\$86,466,750	\$86,280,636	\$86,364,868	\$86,866,172	\$88,762,491	\$87,908,718	\$86,039,172	\$85,274,833	\$86,210,701	\$87,049,742	\$1,040,945,221
Switchgear Credit	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$3,261,312
Cost of Power Summary	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$76,800,306	\$921,603,669
Transmission Network	\$4,359,662	\$4,226,317	\$4,101,572	\$3,792,086	\$4,248,175	\$4,441,445	\$5,410,397	\$4,964,074	\$3,909,362	\$3,483,516	\$4,079,989	\$4,422,290	\$51,438,885
Transmission Connection	\$2,702,917	\$2,770,713	\$2,636,670	\$3,043,841	\$2,682,486	\$2,814,694	\$3,410,549	\$3,155,924	\$2,676,186	\$2,299,465	\$2,559,460	\$2,751,092	\$33,503,995
Wholesale Market	\$2,674,129	\$2,389,729	\$2,429,673	\$2,145,874	\$2,135,371	\$2,311,199	\$2,642,710	\$2,489,885	\$2,154,789	\$2,193,017	\$2,272,417	\$2,575,498	\$28,414,289
Smart Metering Entity Charge	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$191,830	\$193,856	\$2,303,987
LV Charges	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$34,924	\$419,084
TOTAL COST of POWER EXPENSE	\$86,763,767	\$86,413,818	\$86,194,974	\$86,008,860	\$86,093,092	\$86,594,396	\$88,490,715	\$87,636,942	\$85,767,396	\$85,003,057	\$85,938,925	\$86,777,966	\$1,037,683,909

				0000	)4 -4 D								
				2022 C	Cost of Pov	wer							
Loss Factors	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	
LOSS FACTOR-every class but LU LOSS FACTOR-LARGE USERS	1.0338 1.0051	1.0338 1.0051	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338 1.0051	
SALES													
UNADJUSTED SALES (KWH)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
RESIDENTIAL	223,479,000	195,655,000	189,755,000	159,997,000	155,765,000	188,927,000	229,642,000	210,372,000	166,398,000	167,228,000	173,808,000	212,795,000	2,273,821,0
GENERAL SERVICE <50KW	67,286,000	61,089,000	61,520,000	54,035,000	52,413,000	54,961,000	61,561,000	58,773,000	52,062,000	53,772,000	57,108,000	64,554,000	699,134,00
DRYCORE	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	4,992,00
GENERAL SERVICE 50-1000KW NONI	106,031,000	95,582,000	95,168,000	81,819,000	75,922,000	78,579,000	88,615,000	85,062,000	74,817,000	77,330,000	85,133,000	97,795,000	1,041,853,00
GENERAL SERVICE 50-1000KW INT	124,817,000	113,823,000	117,780,000	107,051,000	108,889,000	114,296,000	126,580,000	121,049,000	108,709,000	111,914,000	113,936,000	125,451,000	1,394,295,00
GENERAL SERVICE 1000-1500KW	33,367,000	30,756,000	32,471,000	30,748,000	31,377,000	32,229,000	35,008,000	33,997,000	31,136,000	31,375,000	31,371,000	33,158,000	386,993,00
GENERAL SERVICE 1500-5000 KW	58,074,000	52,862,000	56,674,000	53,633,000	55,445,000	57,704,000	63,974,000	61,606,000	55,063,000	54,982,000	54,559,000	57,725,000	682,301,00
LARGE USER	47,569,000	42,595,000	47,557,000	45,937,000	48,287,000	48,656,000	52,705,000	51,474,000	47,193,000	47,560,000	45,853,000	47,503,000	572,889,00
STREETLIGHTING	2,741,000	2,191,000	1,928,000	1,513,000	1,031,000	907,000	1,029,000	1,279,000	1,617,000	2,111,000	2,320,000	2,558,000	21,225,00
SENTINEL UNMETERED	3,917 1 133 000	3,917 1 132 000	3,917 1 023 000	3,917 1 122 000	3,917 1,086,000	3,917 1 117 000	3,917 1 103 000	3,917 1 092 000	3,917 1,077,000	3,917 1 086 000	3,917 1,067,000	3,917 1,092,000	47,00 13 130 00
TOTAL KWH-SALES	664,916,917	596,104,917	604,295,917	536,274,917	530,634,917	577,795,917	660,636,917	625,123,917	538,491,917	547,777,917	565,574,917	643,050,917	7,090,680,00
PURCHASES													
Power Purchases (kWh)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	Total
Total Load Forecast kWh	686,347,000	613,494,000	624,227,000	551,450,000	549,245,000	595,351,000	681,626,000	641,863,000	554,604,000	563,976,000	584,214,000	662,200,000	7,308,597,00
			MAR										
Power Purchased (kW) Power Purchases - coincident peak (kW)	JAN 1,185,000	FEB 1,170,000	MAR 1.090.000	APR 944.000	MAY 1,111,000	JUN 1,242,000	JULY 1,460,000	AUG 1.332.000	SEPT 1.132.000	930.000	1.073.000	DEC 1.143.000	Total 13.812.00
DEMAND CHARGES			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, , , , , , , , , , , , , , , , , , , ,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,-
kW Breakdown by Type	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
Coincident System Peak	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Transmission Network Charge IESO	90.8%	89.4%	93.3%	99.8%	94.5%	88.5%	91.8%	92.6%	85.5%	93.2%	94.7%	96.0%	
Transmission Transformation Charge IESO	68.7%	71.3%	74.2%	101.1%	73.4%	67.2%	67.9%	70.5%	71.4%	76.7%	73.2%	73.6%	
Transmission Line Charge IESO	86.3%	90.2%	90.4%	112.6%	90.4%	88.1%	90.4%	90.0%	90.6%	94.9%	90.7%	89.1%	
Transmission Network Charge HONI	3.7%	3.5%	3.4%	3.4%	3.8%	3.6%	3.7%	3.5%	3.3%	2.9%	2.9%	3.5%	
Transmission Transformation Charge HONI	3.7%	3.4%	3.3%	3.4%	3.7%	3.6%	3.7%	3.4%	3.4%	3.0%	2.9%	3.4%	
Transmission Line Charge HONI	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Transmission Network Charge IESO	1.076,260.68	1,045,836	1,017,325	941,893	1.050.392	1,098,789	1.340.392	1.232.995	968.065	866.802	1,016,475	1.096.891	12,752,11
Transmission Transformation Charge IESO	814.140	833.939	808.528	954.023	815.360	834.154	991.023	939.037	808.036	713.014	784.985	841.254	10,137,49
Transmission Line Charge IESO	1.022.308	1.055.293	985.520	1.062.967	1.004.770	1.094.028	1.319.500	1.198.813	1.025.783	882,484	972.938	1.018.437	12,642,84
Transmission Network Charge HONI	43.582	40.467	36,780	31.758	41,830	44.774	54.699	46.191	37.790	27,416	31.444	39.468	476,20
Transmission Transformation Charge HONI	43,465	39,677	36,237	32,325	41,284	44,901	53,893	45,446	38,559	28,129	31,356	39,295	474,56
Transmission Line Charge HONI	4,180	4,319	4,316	4,261	5,565	4,332	5,946	4,016	3,498	3,290	3,839	4,307	51,87
RATES													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
Commodity Charge	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	\$0.1416	
Transmission Network Charge IESO	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	
Transmission Transformation Charge IESO	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38	
Transmission Line Charge IESO	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	
Transmission Network Charge HONI	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	\$3.45	
Transmission Transformation Charge HONI	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	
					\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	
Transmission Line Charge HONI	\$0.82	\$0.82	\$0.82	\$0.82									
Transmission Line Charge HONI Wholesale Market Charge Smart Metering Entity Charge	\$0.82 \$0.00390 \$0.570	\$0.82 \$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	\$0.00390 \$0.570	

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 3
Schedule 1
Attachment F
UPDATED
May 5, 2020
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				2022 C	ost of Pov	ver							
Cost of Power													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$990,891,69
Transmission Network Charge IESO	\$4,305,043	\$4,183,342	\$4,069,301	\$3,767,573	\$4,201,570	\$4,395,158	\$5,361,570	\$4,931,981	\$3,872,259	\$3,467,209	\$4,065,898	\$4,387,565	\$51,008,46
Transmission Transformation Charge IESO	\$1,937,654	\$1,984,774	\$1,924,296	\$2,270,574	\$1,940,557	\$1,985,287	\$2,358,634	\$2,234,907	\$1,923,127	\$1,696,973	\$1,868,264	\$2,002,184	\$24,127,23
Transmission Line Charge IESO	\$1,012,085	\$1,044,740	\$975,665	\$1,052,337	\$994,722	\$1,083,088	\$1,306,305	\$1,186,825	\$1,015,525	\$873,659	\$963,208	\$1,008,253	\$12,516,41
Transmission Network Charge HONI	\$150,387	\$139,639	\$126,915	\$109,589	\$144,344	\$154,502	\$188,750	\$159,392	\$130,403	\$94,603	\$108,505	\$136,194	\$1,643,22
Transmission Transformation Charge HONI	\$89,134	\$81,366	\$74,310	\$66,290	\$84,660	\$92,079	\$110,519	\$93,196	\$79,074	\$57,684	\$64,302	\$80,583	\$973,19
Transmission Line Charge HONI	\$3,415	\$3,529	\$3,527	\$3,481	\$4,547	\$3,539	\$4,858	\$3,281	\$2,858	\$2,688	\$3,137	\$3,519	\$42,37
Wholesale Market Charge	\$2,676,753	\$2,392,627	\$2,434,485	\$2,150,655	\$2,142,056	\$2,321,869	\$2,658,341	\$2,503,266	\$2,162,956	\$2,199,506	\$2,278,435	\$2,582,580	\$28,503,52
Smart Meter Entity	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$193,856	\$195,736	\$2,328,15
LV Charges	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$425,58
Total	\$92,978,101	\$92,633,646	\$92,412,129	\$92,224,129	\$92,316,085	\$92,839,152	\$94,792,606	\$93,916,478	\$91,989,831	\$91,195,953	\$92,155,379	\$93,006,387	\$1,112,459,87
Switchgear Credit	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$3,261,31
Cost of Power Summary	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$82,574,308	\$82,574,308	\$82.574.308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$82,574,308	\$990,891,69
Transmission Network	\$4,455,430	\$4,322,981	\$4,196,216	\$3.877.162	\$4,345,914	\$4,549,660	\$5.550.320	\$5.091,374	\$4.002.662	\$3,561,812	\$4,174,403	\$4,523,759	\$52,651,69
Transmission Connection	\$2,770,512	\$2.842.633	\$2,706,022	\$3,120,906	\$2,752,710	\$2.892.217	\$3,508,539	\$3,246,433	\$2,748,807	\$2,359,228	\$2,627,135	\$2,822,763	\$34,397,90
Wholesale Market	\$2,676,753	\$2,392,627	\$2,434,485	\$2,150,655	\$2,142,056	\$2,321,869	\$2,658,341	\$2,503,266	\$2,162,956	\$2,199,506	\$2,278,435	\$2,582,580	\$28,503,52
Smart Metering Entity Charge	\$193.856	\$193.856	\$193,856	\$193.856	\$193.856	\$193.856	\$193.856	\$193,856	\$193,856	\$193,856	\$193,856	\$195,736	\$2,328,15
LV Charges	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$35.465	\$35,465	\$35,465	\$35,465	\$35,465	\$35,465	\$425,58
	\$92,706,325	\$92,361,870	\$92,140,353	\$91,952,353	\$92,044,309	\$92,567,376	\$94,520,830	\$93,644,702	\$91,718,055	\$90,924,177	\$91.883.603	\$92,734,611	\$1,109,198,56

				2023 C	ost of Pov	ver							
Loss Factors	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ост	NOV	DEC	
LOSS FACTOR-every class but LU	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	
LOSS FACTOR-LARGE USERS	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	
	1												
SALES	l												
UNADJUSTED SALES (KWH)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
RESIDENTIAL	225,646,000	197,583,000	191,720,000	161,805,000	157,667,000	191,266,000	232,553,000	213,034,000	168,457,000	169,137,000	175,658,000	214,840,000	2,299,366,000
GENERAL SERVICE <50KW DRYCORE	67,162,000 416,000	60,936,000 416,000	61,389,000 416,000	53,893,000 416,000	52,288,000 416,000	54,854,000 416,000	61,493,000 416,000	58,687,000 416,000	51,933,000 416,000	53,632,000 416,000	56,957,000 416,000	64,412,000 416,000	697,636,000 4,992,000
GENERAL SERVICE 50-1000KW NONI	102,399,000	92,239,000	91,801,000	78,812,000	72,994,000	75,543,000	85,278,000	81.847.000	71,901,000	74.311.000	81.948.000	94,242,000	1,003,315,000
GENERAL SERVICE 50-1000KW INT	128,914,000	117,480,000	121,549,000	110,378,000	112,184,000	117,769,000	130,526,000	124,797,000	111,970,000	115,256,000	117,424,000	129,379,000	1,437,626,000
GENERAL SERVICE 1000-1500KW	33,485,000	30.849.000	32,581,000	30,847,000	31,484,000	32.341.000	35.141.000	34,121,000	31,236,000	31.473.000	31,463,000	33,258,000	388.279.000
GENERAL SERVICE 1500-5000 KW	58.099.000	52.840.000	56.689.000	53.630.000	55.462.000	57.736.000	64.055.000	61,666,000	55.069.000	54.983.000	54.546.000	57.730.000	682,505,000
LARGE USER	47.497.000	42.524.000	47.485.000	45.866.000	48.215.000	48.584.000	52.634.000	51,403,000	47.122.000	47.489.000	45.782.000	47.432.000	572,033,000
STREETLIGHTING	2,673,000	2,124,000	1,860,000	1,445,000	964,000	840,000	961,000	1,212,000	1,549,000	2,043,000	2,252,000	2,490,000	20,413,000
SENTINEL	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	47,000
UNMETERED	1,093,000	1,092,000	987,000	1,082,000	1,047,000	1,078,000	1,064,000	1,053,000	1,038,000	1,047,000	1,029,000	1,053,000	12,663,000
TOTAL KWH-SALES	667,387,917	598,086,917	606,480,917	538,177,917	532,724,917	580,430,917	664,124,917	628,239,917	540,694,917	549,790,917	567,478,917	645,255,917	7,118,875,000
PURCHASES													
Power Purchases (kWh)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	Total
Total Load Forecast kWh	688,899,000	615,531,000	626,486,000	553,408,000	551,409,000	598,067,000	685,223,000	645,062,000	556,872,000	566,048,000	586,180,000	664,470,000	7,337,655,000
Power Purchased (kW)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	Total
Power Purchases - coincident peak (kW)	1,189,000	1,174,000	1,093,000	948,000	1,115,000	1,247,000	1,468,000	1,338,000	1,136,000	934,000	1,076,000	1,147,000	13,865,000
DEMAND CHARGES	]												
kW Breakdown by Type	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
Coincident System Peak	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Transmission Network Charge IESO	90.8%	89.4%	93.3%	99.8%	94.5%	88.5%	91.8%	92.6%	85.5%	93.2%	94.7%	96.0%	
Transmission Transformation Charge IESO	68.7%	71.3%	74.2%	101.1%	73.4%	67.2%	67.9%	70.5%	71.4%	76.7%	73.2%	73.6%	
Transmission Line Charge IESO	86.3%	90.2%	90.4%	112.6%	90.4%	88.1%	90.4%	90.0%	90.6%	94.9%	90.7%	89.1%	
Transmission Network Charge HONI	3.7%	3.5%	3.4%	3.4%	3.8%	3.6%	3.7%	3.5%	3.3%	2.9%	2.9%	3.5%	
Transmission Transformation Charge HONI Transmission Line Charge HONI	3.7% 0.4%	3.4% 0.4%	3.3% 0.4%	3.4% 0.5%	3.7% 0.5%	3.6% 0.3%	3.7% 0.4%	3.4% 0.3%	3.4% 0.3%	3.0% 0.4%	2.9% 0.4%	3.4% 0.4%	
I ransmission Line Charge HONI	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	
Township In National Observe ITOO	JAN 1.079.893.63	FEB 1.049.411	MAR 1,020,125	APR 945.884	MAY 1.054,174	JUN 1,103,213	JULY 1,347,737	AUG 1.238.549	SEPT 971.485	OCT 870.530	NOV 1,019,316	DEC 1,100,730	TOTAL 12.801.050
Transmission Network Charge IESO Transmission Transformation Charge IESO	816.888	1,049,411	810.753	945,884 958.065	818.296	1,103,213 837.512	1,347,737	943.267	971,485 810.892	870,530 716.081	787.180	844.198	12,801,050
Transmission Transformation Charge IESO Transmission Line Charge IESO	1.025.759	1,058,901	988.232	1,067,471	1.008.387	1.098.433	1,326,730	1.204.213	1.029.408	886.279	975.658	1,022,001	12,691,472
Transmission Network Charge HONI	43.729	40.605	36.881	31,893	41,981	44.954	54.999	46.399	37.924	27.534	31.532	39.607	478,038
Transmission Transformation Charge HONI	43.612	39.813	36.336	32.462	41,432	45.082	54.188	45,651	38.696	28.250	31,444	39.433	476,399
Transmission Line Charge HONI	4,194	4,334	4,328	4,279	5,585	4,350	5,978	4,035	3,510	3,304	3,850	4,322	52,069
RATES	Į												
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
Commodity Charge	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	\$0.0213	
Transmission Network Charge IESO	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	\$4.08	
Transmission Transformation Charge IESO	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	\$2.43	
Transmission Line Charge IESO	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	\$1.01	
Transmission Network Charge HONI	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	
Transmission Transformation Charge HONI	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	\$2.08	
Transmission Line Charge HONI	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	\$0.83	
Wholesale Market Charge Smart Metering Entity Charge	\$0.00390 \$0.570												
ornant wetering Entity Griange	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	\$0.570	фU.5/U	\$0.570	\$0.570	\$0.570	

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				2023 C	ost of Pov	wer							
Cost of Power													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$1,059,793,26
Transmission Network Charge IESO	\$4,405,966	\$4,281,597	\$4,162,110	\$3,859,208	\$4,301,031	\$4,501,109	\$5,498,767	\$5,053,282	\$3,963,661	\$3,551,764	\$4,158,811	\$4,490,978	\$52,228,28
Transmission Transformation Charge IESO	\$1,985,039	\$2,033,399	\$1,970,130	\$2,328,099	\$1,988,459	\$2,035,155	\$2,421,381	\$2,292,138	\$1,970,467	\$1,740,076	\$1,912,846	\$2,051,401	\$24,728,58
Transmission Line Charge IESO	\$1,036,016	\$1,069,490	\$998,114	\$1,078,146	\$1,018,471	\$1,109,417	\$1,339,998	\$1,216,255	\$1,039,702	\$895,142	\$985,414	\$1,032,221	\$12,818,387
Transmission Network Charge HONI	\$153,235	\$142,289	\$129,238	\$111,760	\$147,110	\$157,530	\$192,727	\$162,593	\$132,893	\$96,483	\$110,496	\$138,789	\$1,675,141
Transmission Transformation Charge HONI	\$90,822	\$82,910	\$75,670	\$67,603	\$86,283	\$93,883	\$112,847	\$95,067	\$80,584	\$58,830	\$65,482	\$82,119	\$992,100
Transmission Line Charge HONI	\$3,480	\$3,596	\$3,591	\$3,550	\$4,634	\$3,609	\$4,960	\$3,347	\$2,912	\$2,742	\$3,195	\$3,586	\$43,202
Wholesale Market Charge	\$2,686,706	\$2,400,571	\$2,443,295	\$2,158,291	\$2,150,495	\$2,332,461	\$2,672,370	\$2,515,742	\$2,171,801	\$2,207,587	\$2,286,102	\$2,591,433	\$28,616,855
Smart Meter Entity	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$197,522	\$2,350,621
LV Charges	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$432,177
Total	\$98,909,120	\$98,561,708	\$98,330,006	\$98,154,512	\$98,244,338	\$98,781,019	\$100,790,906	\$99,886,279	\$97,909,875	\$97,100,481	\$98,070,202	\$98,940,168	\$1,183,678,614
Switchgear Credit	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$3,261,312
Cost of Power Summary	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$88,316,105	\$1,059,793,261
Transmission Network	\$4,559,201	\$4,423,886	\$4,291,348	\$3,970,968	\$4,448,140	\$4,658,638	\$5,691,494	\$5,215,874	\$4,096,554	\$3,648,248	\$4,269,307	\$4,629,767	\$53,903,424
Transmission Connection	\$2,843,581	\$2,917,619	\$2,775,730	\$3,205,621	\$2,826,070	\$2,970,288	\$3,607,410	\$3,335,031	\$2,821,889	\$2,425,014	\$2,695,161	\$2,897,551	\$35,320,965
Wholesale Market	\$2,686,706	\$2,400,571	\$2,443,295	\$2,158,291	\$2,150,495	\$2,332,461	\$2,672,370	\$2,515,742	\$2,171,801	\$2,207,587	\$2,286,102	\$2,591,433	\$28,616,855
Smart Metering Entity Charge	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$195,736	\$197,522	\$2,350,621
LV Charges	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$36,015	\$432,177
TOTAL COST of POWER EXPENSE	\$98,637,344	\$98,289,932	\$98,058,230	\$97,882,736	\$97,972,562	\$98,509,243	\$100,519,130	\$99,614,503	\$97,638,099	\$96,828,705	\$97,798,426	\$98,668,392	\$1,180,417,302

				2024 (	Cost of Pov	ver							
Loss Factors	JAN	FEB	MAR	APR	MAY	JIIN	JULY	AUG	SEPT	ост	NOV	DEC	
LOSS FACTOR-every class but LU	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	
LOSS FACTOR-LARGE USERS	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	
SALES													
UNADJUSTED SALES (KWH)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
RESIDENTIAL	227,773,000	206,833,000	193,639,000	163,582,000	159,603,000	193,804,000	235,864,000	216,004,000	170,614,000	171,046,000	177,514,000	216,922,000	2,333,198,000
GENERAL SERVICE <50KW	67,017,000	62,393,000	61,247,000	53,746,000	52,160,000	54,749,000	61,433,000	58,611,000	51,811,000	53,502,000	56,821,000	64,284,000	697,774,000
DRYCORE	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	4,992,000
GENERAL SERVICE 50-1000KW NONI	98,708,000	91,320,000	88,396,000	75,779,000	70,045,000	72,490,000	81,927,000	78,623,000	68,980,000	71,291,000	78,769,000	90,696,000	967,024,000
GENERAL SERVICE 50-1000KW INT	132,968,000	124,466,000	125,298,000	113,691,000	115,475,000	121,252,000	134,502,000	128,578,000	115,255,000	118,627,000	120,948,000	133,351,000	1,484,411,000
GENERAL SERVICE 1000-1500KW	33,600,000	31,762,000	32,696,000	30,955,000	31,603,000	32,468,000	35,292,000	34,265,000	31,357,000	31,593,000	31,579,000	33,383,000	390,553,000
GENERAL SERVICE 1500-5000 KW	58,102,000	54,463,000	56,692,000	53,620,000	55,477,000	57,772,000	64,145,000	61,740,000	55,089,000	55,000,000	54,554,000	57,755,000	684,409,000
LARGE USER STREETLIGHTING	47,426,000 2,606,000	44,108,000 2,056,000	47,414,000	45,794,000 1,377,000	48,144,000 896,000	48,513,000 772,000	52,563,000	51,331,000	47,051,000	47,418,000	45,711,000	47,361,000 2,423,000	572,834,000 19,603,000
SENTINEL	2,606,000	2,056,000	1,793,000 3,917	1,377,000	3,917	3.917	894,000 3.917	1,144,000 3.917	1,482,000 3,917	1,976,000 3,917	2,184,000 3,917	3,917	19,603,000
UNMETERED	1.054.000	1.052.000	950.000	1.043.000	1.009.000	1.038.000	1.025.000	1.014.000	999.000	1.008.000	990.000	1.013.000	12.195.000
TOTAL KWH-SALES	669.673.917	618.872.917	608.544.917	540.006.917	534.831.917	583.277.917	668.064.917	631,729,917	543.057.917	551.880.917	569.489.917	647,607,917	7.167.040.000
PURCHASES			, , , ,		, , , ,	, ,		. , , , .	, , , ,		, ,	, , , , ,	
Power Purchases (kWh)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ост	NOV	DEC	Total
Total Load Forecast kWh	691,257,000	636.926.000	628.619.000	555,289,000	553.588.000	601.001.000	689,289,000	648.646.000	559.306.000	568.199.000	588.257.000	666.893.000	7,387,270,000
						,							.,==:,=:=
Power Purchased (kW)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	Total
Power Purchases - coincident peak (kW)	1,196,000	1,145,000	1,099,000	954,000	1,121,000	1,256,000	1,480,000	1,348,000	1,143,000	940,000	1,082,000	1,153,000	13,917,000
DEMAND CHARGES													
kW Breakdown by Type	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	
Coincident System Peak	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Transmission Network Charge IESO	90.8%	89.4%	93.3%	99.8%	94.5%	88.5%	91.8%	92.6%	85.5%	93.2%	94.7%	96.0%	
Transmission Transformation Charge IESO	68.7%	71.3%	74.2%	101.1%	73.4%	67.2%	67.9%	70.5%	71.4%	76.7%	73.2%	73.6%	
Transmission Line Charge IESO	86.3%	90.2%	90.4%	112.6%	90.4%	88.1%	90.4%	90.0%	90.6%	94.9%	90.7%	89.1%	
Transmission Network Charge HONI	3.7%	3.5%	3.4%	3.4%	3.8%	3.6%	3.7%	3.5%	3.3%	2.9%	2.9%	3.5%	
Transmission Transformation Charge HONI	3.7%	3.4%	3.3%	3.4%	3.7%	3.6%	3.7%	3.4%	3.4%	3.0%	2.9%	3.4%	
Transmission Line Charge HONI	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Transmission Network Charge IESO	1,086,251.29	1,023,489	1,025,725	951,871	1,059,847	1,111,175	1,358,754	1,247,806	977,472	876,123	1,025,000	1,106,488	12,850,001
Transmission Transformation Charge IESO	821.698		815.204	964.129	822.699	843.557	1.004.598	950.316	815,888	720,681	791,569	848,614	10,215,073
	821,698	816,120										1.027.347	12,739,557
Transmission Line Charge IESO	1,031,797	816,120 1,032,744	993,657	1,074,227	1,013,813	1,106,360	1,337,575	1,213,213	1,035,751	891,973	981,098		
							1,337,575 55,448	1,213,213 46,746	1,035,751 38,158	891,973 27,710	981,098 31,708	39,814	479,837
Transmission Line Charge IESO	1,031,797	1,032,744	993,657	1,074,227	1,013,813	1,106,360							
Transmission Line Charge IESO Transmission Network Charge HONI	1,031,797 43,986	1,032,744 39,602	993,657 37,083	1,074,227 32,095	1,013,813 42,207	1,106,360 45,279	55,448	46,746	38,158	27,710	31,708	39,814	479,837
Transmission Line Charge IESO Transmission Network Charge HONI Transmission Transformation Charge HONI	1,031,797 43,986 43,869	1,032,744 39,602 38,829	993,657 37,083 36,536	1,074,227 32,095 32,668	1,013,813 42,207 41,655	1,106,360 45,279 45,407	55,448 54,631	46,746 45,992	38,158 38,934	27,710 28,431	31,708 31,619	39,814 39,639	479,837 478,211
Transmission Line Charge IESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI	1,031,797 43,986 43,869	1,032,744 39,602 38,829	993,657 37,083 36,536	1,074,227 32,095 32,668	1,013,813 42,207 41,655	1,106,360 45,279 45,407	55,448 54,631	46,746 45,992	38,158 38,934	27,710 28,431	31,708 31,619	39,814 39,639	479,837 478,211
Transmission Line Charge IESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI	1,031,797 43,986 43,869 4,219	1,032,744 39,602 38,829 4,227	993,657 37,083 36,536 4,352	1,074,227 32,095 32,668 4,306	1,013,813 42,207 41,655 5,615	1,106,360 45,279 45,407 4,381	55,448 54,631 6,027	46,746 45,992 4,065	38,158 38,934 3,532	27,710 28,431 3,326	31,708 31,619 3,872	39,814 39,639 4,345	479,837 478,211
Transmission Line Charge ESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO	1,031,797 43,986 43,869 4,219 JAN \$0,1636 \$4,16	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16	1,074,227 32,095 32,668 4,306 APR \$0.1636 \$4.16	1,013,813 42,207 41,655 5,615 MAY \$0.1636 \$4.16	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16	55,448 54,631 6,027 JULY \$0.1636 \$4.16	46,746 45,992 4,065 AUG \$0.1636 \$4.16	38,158 38,934 3,532 SEPT \$0.1636 \$4.16	27,710 28,431 3,326 OCT \$0.1636 \$4.16	31,708 31,619 3,872 NOV \$0.1636 \$4.16	39,814 39,639 4,345 DEC \$0.1636 \$4.16	479,837 478,211
Transmission Line Charge IESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO Transmission Transformation Charge IESO	1,031,797 43,986 43,869 4,219 JAN \$0,1636 \$4,16 \$2,48	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.48	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.48	1,074,227 32,095 32,668 4,306 APR \$0.1636 \$4.16 \$2.48	1,013,813 42,207 41,655 5,615 MAY \$0,1636 \$4,16 \$2,48	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16 \$2.48	55,448 54,631 6,027 JULY \$0.1636 \$4.16 \$2.48	46,746 45,992 4,065 AUG \$0.1636 \$4.16 \$2.48	38,158 38,934 3,532 SEPT \$0.1636 \$4.16 \$2.48	27,710 28,431 3,326 OCT \$0.1636 \$4.16 \$2.48	31,708 31,619 3,872 NOV \$0.1636 \$4.16 \$2.48	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48	479,837 478,211
Transmission Line Charge ESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO Transmission Transformation Charge IESO Transmission Transformation Charge IESO Transmission Line Charge IESO	1,031,797 43,986 43,889 4,219 JAN \$0,1636 \$4.16 \$2.48 \$1.03	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.48 \$1.03	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.48 \$1.03	1,074,227 32,095 32,668 4,306 APR \$0.1636 \$4.16 \$2.48 \$1.03	1,013,813 42,207 41,655 5,615 MAY \$0.1636 \$4.16 \$2.48 \$1.03	1,106,360 45,279 45,407 4,381 JUN \$0,1636 \$4,16 \$2,48 \$1,03	55,448 54,631 6,027 JULY \$0.1636 \$4.16 \$2.48 \$1.03	46,746 45,992 4,065 AUG \$0.1636 \$4.16 \$2.48 \$1.03	38,158 38,934 3,532 SEPT \$0.1636 \$4.16 \$2.48 \$1.03	27,710 28,431 3,326 OCT \$0.1636 \$4.16 \$2.48 \$1.03	31,708 31,619 3,872 NOV \$0.1636 \$4.16 \$2.48 \$1.03	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48 \$1.03	479,837 478,211
Transmission Line Charge IESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO Transmission Network Charge IESO Transmission Line Charge IESO	1,031,797 43,986 43,989 4,219 JAN \$0,1636 \$4,16 \$2,248 \$1,03 \$3,56	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	1,074,227 32,095 32,668 4,306 APR \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	1,013,813 42,207 41,655 5,615 MAY \$0,1636 \$4,16 \$2,48 \$1,03 \$3,56	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	55,448 54,631 6,027 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	46,746 45,992 4,065 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	38,158 38,934 3,532 SEPT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	27,710 28,431 3,326 OCT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	31,708 31,619 3,872 NOV \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56	479,837 478,211
Transmission Line Charge ESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO Transmission Transformation Charge IESO Transmission Transformation Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Transformation Charge HONI	1,031,797 43,986 43,989 4,219  JAN \$0,1636 \$4,16 \$2,48 \$1,03 \$3,56 \$2,211	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.11	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.211	1,074,227 32,095 32,668 4,306 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	1,013,813 42,207 41,655 5,615 MAY \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.11	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	55,448 54,631 6,027 JULY \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	46,746 45,992 4,065 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	38,158 38,934 3,532 SEPT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	27,710 28,431 3,326 OCT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	31,708 31,619 3,872 NOV \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	479,837 478,211
Transmission Line Charge LESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI  RATES  Commodity Charge Transmission Network Charge LESO Transmission Transformation Charge LESO Transmission Transformation Charge HESO Transmission Transformation Charge HONI	JAN \$0.1636 \$4.1996 \$4.219 JAN \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.04	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	1,074,227 32,095 32,668 4,306 4,306 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	1,013,813 42,207 41,655 5,615 MAY \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	55,448 54,631 6,027 \$0,1636 \$4,16 \$2,48 \$1,03 \$3,56 \$2,11 \$0,84	46,746 45,992 4,065 AUG \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	38,158 38,934 3,532 SEPT \$0,1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	27,710 28,431 3,326 OCT \$0,1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	31,708 31,619 3,872 80,1636 \$4,16 \$2,48 \$1,03 \$3,56 \$2,11 \$0,84	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11 \$0.84	479,837 478,211
Transmission Line Charge ESO Transmission Network Charge HONI Transmission Transformation Charge HONI Transmission Line Charge HONI Transmission Line Charge HONI RATES  Commodity Charge Transmission Network Charge IESO Transmission Transformation Charge IESO Transmission Transformation Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Network Charge HONI Transmission Transformation Charge HONI	1,031,797 43,986 43,989 4,219  JAN \$0,1636 \$4,16 \$2,48 \$1,03 \$3,56 \$2,211	1,032,744 39,602 38,829 4,227 FEB \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.11	993,657 37,083 36,536 4,352 MAR \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.211	1,074,227 32,095 32,668 4,306 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	1,013,813 42,207 41,655 5,615 MAY \$0.1636 \$4.16 \$2.248 \$1.03 \$3.56 \$2.11	1,106,360 45,279 45,407 4,381 JUN \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	55,448 54,631 6,027 JULY \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	46,746 45,992 4,065 \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	38,158 38,934 3,532 SEPT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	27,710 28,431 3,326 OCT \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	31,708 31,619 3,872 NOV \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	39,814 39,639 4,345 DEC \$0.1636 \$4.16 \$2.48 \$1.03 \$3.56 \$2.11	479,837 478,211

Hydro Ottawa Limited
EB-2019-0261
Exhibit 2
Tab 3
Schedule 1
Attachment F
UPDATED
May 5, 2020
Page 8 of 10

				2024	Cost of Pov	ver							
Cost of Power													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ост	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$1,154,127,94
Transmission Network Charge IESO	\$4,518,805	\$4,257,713	\$4,267,016	\$3.959.783	\$4,408,963	\$4,622,489	\$5,652,416	\$5,190,873	\$4,066,283	\$3,644,671	\$4,264,002	\$4,602,989	\$53,456,00
Fransmission Transformation Charge IESO	\$2,037,810	\$2,023,976	\$2,021,705	\$2,391,040	\$2,040,294	\$2,092,021	\$2,491,404	\$2,356,785	\$2,023,403	\$1,787,288	\$1,963,091	\$2,104,563	\$25,333,3
Fransmission Line Charge IESO	\$1,062,751	\$1,063,727	\$1,023,467	\$1,106,454	\$1,044,228	\$1,139,551	\$1,377,703	\$1,249,609	\$1,066,823	\$918,732	\$1,010,531	\$1,058,168	\$13,121,7
Transmission Network Charge HONI	\$156,525	\$140,924	\$131,961	\$114,210	\$150,193	\$161,125	\$197,313	\$166,346	\$135,784	\$98,608	\$112,834	\$141,677	\$1,707,50
Transmission Transformation Charge HONI	\$92,774	\$82,116	\$77,266	\$69,086	\$88,092	\$96,027	\$115,534	\$97,263	\$82,338	\$60,127	\$66,868	\$83,828	\$1,011,32
Transmission Line Charge HONI	\$3,555	\$3,561	\$3,667	\$3,628	\$4,731	\$3,691	\$5,078	\$3,425	\$2,976	\$2,802	\$3,262	\$3,661	\$44,03
Wholesale Market Charge	\$2,695,902	\$2,484,011	\$2,451,614	\$2,165,627	\$2,158,993	\$2,343,904	\$2,688,227	\$2,529,719	\$2,181,293	\$2,215,976	\$2,294,202	\$2,600,883	\$28,810,35
Smart Meter Entity	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$199,244	\$2,371,98
LV Charges	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$438,87
Total	\$106,979,546	\$106,467,452	\$106,388,120	\$106,221,251	\$106,306,918	\$106,870,232	\$108,939,100	\$108,005,444	\$105,970,323	\$105,139,627	\$106,126,214	\$107,008,914	\$1,280,423,14
Switchgear Credit	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$3,261,31
Cost of Power Summary	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ост	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$96,177,329	\$96,177,329	\$96.177.329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$96,177,329	\$1,154,127,94
Transmission Network	\$4.675.331	\$4,398,637	\$4,398,977	\$4,073,993	\$4,559,156	\$4,783,614	\$5.849.730	\$5.357.219	\$4,202,066	\$3,743,278	\$4,376,835	\$4,744,666	\$55,163,50
Transmission Connection	\$2,925,114	\$2,901,605	\$2,854,329	\$3,298,432	\$2,905,569	\$3,059,515	\$3,717,943	\$3,435,306	\$2,903,764	\$2,497,173	\$2,771,977	\$2,978,444	\$36,249,17
Wholesale Market	\$2,695,902	\$2,484,011	\$2,451,614	\$2,165,627	\$2,905,569	\$2,343,904	\$2,688,227	\$2,529,719	\$2,181,293	\$2,215,976	\$2,771,977	\$2,600,883	\$28,810,35
Smart Metering Entity Charge	\$197.522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$197,522	\$199,244	\$2,371,98
I V Charges	\$36.573	\$36,573	\$36,573	\$36.573	\$36,573	\$36,573	\$36,573	\$36,573	\$36,573	\$36.573	\$36.573	\$36.573	\$438.87
TOTAL COST of POWER EXPENSE	\$106,707,770	\$106,195,676	\$106,116,344	\$105,949,475	\$106,035,142	\$106,598,456	\$108,667,324	\$107.733.668	\$105,698,547	\$104.867.851	\$105.854,438	\$106.737.138	\$1,277,161,83
TOTAL GOOT OF CHILL EAR LINGE	4.30,707,770												

				2023	Cost of Pov	VEI							
Loss Factors	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	
LOSS FACTOR-every class but LU	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	1.0338	
LOSS FACTOR-LARGE USERS	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	1.0051	
SALES	I												
UNADJUSTED SALES (KWH)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
RESIDENTIAL	229,970,000	201,408,000	195,637,000	165,418,000	161,599,000	196,430,000	239,304,000	219,080,000	172,830,000	172,997,000	179,416,000	219,060,000	2,353,149,000
GENERAL SERVICE <50KW	66,888,000	60,631,000	61,150,000	53,657,000	52,106,000	54,737,000	61,484,000	58,658,000	51,825,000	53,520,000	56,846,000	64,335,000	695,837,000
DRYCORE	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	416,000	4,992,000
GENERAL SERVICE 50-1000KW NONI	95,025,000	85,478,000	84,994,000	72,746,000	67,092,000	69,433,000	78,581,000	75,415,000	66,089,000	68,311,000	75,645,000	87,219,000	926,028,000
SENERAL SERVICE 50-1000KW INT SENERAL SERVICE 1000-1500KW	137,063,000 33.741.000	124,763,000	129,079,000 32.836.000	117,029,000 31.087.000	118,793,000	124,767,000	138,545,000	132,439,000 34.444.000	118,626,000 31.516.000	122,101,000	124,591,000 31,743,000	137,465,000 33,561,000	1,525,261,000
GENERAL SERVICE 1000-1500KW GENERAL SERVICE 1500-5000 KW	58,124,000	31,066,000 52,783,000	56.713.000	53,625,000	31,746,000 55,506,000	32,620,000 57,823,000	35,475,000 64,272,000	61.864.000	55.173.000	31,757,000 55.097.000	54,657,000	57,895,000	391,592,000 683,532,000
ARGE USER	47.355.000	42.381.000	47.343.000	45.723.000	48.073.000	48.442.000	52.495.000	51,266,000	46.989.000	47.359.000	45.655.000	47.309.000	570,390,000
STREETLIGHTING	2,538,000	1,989,000	1,725,000	1,310,000	828,000	704,000	829,000	1,083,000	1,423,000	1,920,000	2,132,000	2,373,000	18,854,000
SENTINEL	3,917	3.917	3.917	3.917	3.917	3.917	3.917	3.917	3.917	3.917	3,917	3,917	47.000
JNMETERED	1,014,000	1,013,000	914,000	1,003,000	970,000	998,000	985,000	975,000	961,000	969,000	952,000	974,000	11,728,000
TOTAL KWH-SALES	672,137,917	601,931,917	610,810,917	542,017,917	537,132,917	586,373,917	672,389,917	635,643,917	545,851,917	554,450,917	572,056,917	650,610,917	7,181,410,000
PURCHASES	I												
Power Purchases (kWh)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	Total
Total Load Forecast kWh	693,802,000	619,488,000	630,959,000	557,357,000	555,971,000	604,191,000	693,751,000	652,667,000	562,184,000	570,845,000	590,910,000	669,985,000	7,402,110,000
Power Purchased (kW)	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	Total
Power Purchases - coincident peak (kW)	1,198,000	1,182,000	1,101,000	955,000	1,123,000	1,260,000	1,487,000	1,354,000	1,146,000	941,000	1,084,000	1,155,000	13,986,000
DEMAND CHARGES	I												
kW Breakdown by Type	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	
Coincident System Peak	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Fransmission Network Charge IESO	90.8%	89.4%	93.3%	99.8%	94.5%	88.5%	91.8%	92.6%	85.5%	93.2%	94.7%	96.0%	
Fransmission Transformation Charge IESO	68.7%	71.3%	74.2%	101.1%	73.4%	67.2%	67.9%	70.5%	71.4%	76.7%	73.2%	73.6%	
Transmission Line Charge IESO	86.3%	90.2%	90.4%	112.6%	90.4%	88.1%	90.4%	90.0%	90.6%	94.9%	90.7%	89.1%	
Fransmission Network Charge HONI Fransmission Transformation Charge HONI	3.7% 3.7%	3.5% 3.4%	3.4%	3.4% 3.4%	3.8% 3.7%	3.6%	3.7% 3.7%	3.5% 3.4%	3.3%	2.9% 3.0%	2.9% 2.9%	3.5% 3.4%	
Transmission Transformation Charge HONI	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	
Talishission Line Charge HONI	0.476	0.478	0.470	0.5%	0.576	0.376	0.470	0.3%	0.376	0.470	0.470	0.470	
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
Transmission Network Charge IESO	1,088,067.76 823,072	1,056,562 842,492	1,027,592 816,687	952,869 965,140	1,061,738 824,167	1,114,714 846,243	1,365,180 1,009,350	1,253,360 954,546	980,037 818,030	877,055 721,448	1,026,895 793,032	1,108,407 850,086	12,912,477 10,264,293
Transmission Transformation Charge IESO Transmission Line Charge IESO	1.033.523	1.066.117	995.465	1.075.353	1.015.622	1.109.884	1,009,350	1.218.613	1.038.469	721,448 892.922	793,032 982.912	1.029.129	10,264,293
Transmission Line Charge IESO  Transmission Network Charge HONI	44.060	40.882	37.151	32.129	42.282	45.423	55.711	46.954	38.258	27.740	31.767	39.883	482.239
Fransmission Transformation Charge HONI	43.942	40.084	36.602	32,702	41.729	45,552	54.890	46,196	39.036	28 462	31,678	39.708	480,581
Fransmission Line Charge HONI	4,226	4,363	4,360	4,310	5,625	4,395	6,056	4,083	3,541	3,329	3,879	4,352	52,519
RATES													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	ОСТ	NOV	DEC	
Commodity Charge	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	
Fransmission Network Charge IESO	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	
Fransmission Transformation Charge HONI Fransmission Line Charge HONI	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	\$2.15 \$0.86	
ransmission Line Charge HONI Wholesale Market Charge	\$0.86	\$0.86	\$0.86	\$0.86	\$0.86 \$0.00390	\$0.86	\$0.86 \$0.00390	\$0.86 \$0.00390	\$0.86 \$0.00390	\$0.86 \$0.00390	\$0.86	\$0.86	
rynolesale market Charge Smart Metering Entity Charge	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	\$0.00390	
Commodity Charge	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	\$0.1706	

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				2025	Cost of Pov	wer							
ost of Power													
	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$1,198,186,2
ransmission Network Charge IESO	\$4,613,407	\$4,479,823	\$4,356,989	\$4,040,163	\$4,501,768	\$4,726,387	\$5,788,365	\$5,314,247	\$4,155,358	\$3,718,712	\$4,354,035	\$4,699,646	\$54,748,9
ransmission Transformation Charge IESO	\$2,082,371	\$2,131,505	\$2,066,219	\$2,441,803	\$2,085,142	\$2,140,996	\$2,553,655	\$2,415,002	\$2,069,616	\$1,825,262	\$2,006,371	\$2,150,717	\$25,968,6
ransmission Line Charge IESO	\$1,085,199	\$1,119,423	\$1,045,239	\$1,129,121	\$1,066,403	\$1,165,378	\$1,411,097	\$1,279,544	\$1,090,393	\$937,568	\$1,032,057	\$1,080,586	\$13,442,0
ransmission Network Charge HONI	\$159,219	\$147,735	\$134,252	\$116,103	\$152,795	\$164,146	\$201,322	\$169,678	\$138,252	\$100,244	\$114,796	\$144,124	\$1,742,6
Fransmission Transformation Charge HONI	\$94,370	\$86,084	\$78,607	\$70,231	\$89,618	\$97,827	\$117,881	\$99,211	\$83,834	\$61,124	\$68,031	\$85,276	\$1,032,0
Fransmission Line Charge HONI	\$3,616	\$3,734	\$3,731	\$3,688	\$4,813	\$3,761	\$5,182	\$3,494	\$3,030	\$2,849	\$3,319	\$3,724	\$44,94
Wholesale Market Charge	\$2,705,828	\$2,416,003	\$2,460,740	\$2,173,692	\$2,168,287	\$2,356,345	\$2,705,629	\$2,545,401	\$2,192,518	\$2,226,296	\$2,304,549	\$2,612,942	\$28,868,22
Smart Meter Entity	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$200,937	\$2,392,61
_V Charges	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$445,67
Fotal	\$110,829,247	\$110,469,543	\$110,231,013	\$110,060,038	\$110,154,064	\$110,740,075	\$112,868,367	\$111,911,814	\$109,818,237	\$108,957,291	\$109,968,395	\$110,863,946	\$1,326,872,02
Switchgear Credit	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$271,776.00	-\$3,261,31
Cost of Power Summary	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Commodity Charge Including Global Adjustment	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$99,848,853	\$1,198,186,23
Fransmission Network	\$4,772,626	\$4,627,558	\$4,491,241	\$4,156,266	\$4,654,563	\$4,890,533	\$5,989,687	\$5,483,925	\$4,293,610	\$3,818,956	\$4,468,831	\$4,843,771	\$56,491,56
Fransmission Connection	\$2,993,781	\$3,068,969	\$2,922,019	\$3,373,067	\$2,974,201	\$3,136,186	\$3,816,039	\$3,525,475	\$2,975,097	\$2,555,027	\$2,838,003	\$3,048,528	\$37,226,39
Wholesale Market	\$2,705,828	\$2,416,003	\$2,460,740	\$2,173,692	\$2,168,287	\$2,356,345	\$2,705,629	\$2,545,401	\$2,192,518	\$2,226,296	\$2,304,549	\$2,612,942	\$28,868,22
Smart Metering Entity Charge	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$199,244	\$200,937	\$2,392,61
_V Charges	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$37,140	\$445,67
TOTAL COST of POWER EXPENSE	\$110,557,471	\$110,197,767	\$109,959,237	\$109,788,262	\$109.882.288	\$110,468,299	\$112,596,591	\$111.640.038	\$109,546,461	\$108,685,515	\$109,696,619	\$110.592.170	\$1,323,610,7



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#### UPDATED CAPITAL EXPENDITURE SUMMARY

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#### 3 1. INTRODUCTION

4 The capital expenditure plan for the 2021-2025 period details the system investments planned

- 5 by Hydro Ottawa utilizing the asset management and capital expenditure planning process
- 6 outlined in Exhibit 2-4-3: Distribution System Plan. Expenditures are planned in the following
- 7 OEB-defined categories: System Access, System Renewal, System Service, and General Plant.
- Backgright Table 1 provides a summary of these expenditures for 2021-2025. Updates to capital
- 9 expenditures in 2021 and 2022 are the result of the updated MiGen project, as described in the
- 10 updates to section 2.3.3 of Attachment 2-4-3(E): Material Investments.

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Table 1 – AS ORIGINALLY SUBMITTED – Summary of 2021-2025 Capital Expenditures (\$'000,000s)

Investment Category	2021	2022	2023	2024	2025	Average 2021-2025
System Access	\$56.7	\$41.0	\$37.4	\$34.5	\$34.0	\$40.7
System Renewal	\$43.3	\$44.0	\$40.2	\$39.4	\$40.5	\$41.5
System Service	\$31.0	\$27.4	\$24.3	\$25.2	\$23.9	\$26.4
General Plant	\$32.0	\$11.7	\$7.6	\$17.4	\$16.9	\$17.1
Capital Contributions	\$(41.3)	\$(25.2)	\$(19.9)	\$(19.2)	\$(19.3)	\$(25.0)
TOTAL	\$121.8	\$98.9	\$89.6	\$97.2	\$96.0	\$100.7

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### Table 1 – UPDATED FOR 2019 ACTUALS – Summary of 2021-2025 Capital Expenditures (\$'000,000s)

Investment Category	2021	2022	2023	2024	2025	Average 2021-2025
System Access	\$56.7	\$41.0	\$37.4	\$34.5	\$34.0	\$40.7
System Renewal	\$43.3	\$44.0	\$40.2	\$39.4	\$40.5	\$41.5
System Service	\$26.7	\$28.3	\$24.3	\$25.2	\$23.9	\$25.7
General Plant	\$32.0	\$11.7	\$7.6	\$17.4	\$16.9	\$17.1
Capital Contributions	\$(39.2)	\$(23.5)	\$(19.9)	\$(19.2)	\$(19.3)	\$(24.2)
TOTAL	\$119.5	\$101.5	\$89.6	\$97.2	\$96.0	\$100.8



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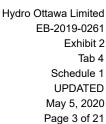
1 UPDATED Attachment 2-4-3(A): OEB Appendix 2-AA - Capital Programs Table and UPDATED 2 Attachment 2-4-3(B): OEB Appendix 2-AB - Capital Expenditure Summary provide an overview 3 of Hydro Ottawa's capital programs and expenditures, respectively. For comprehensive 4 explanatory notes and variance analyses of Hydro Ottawa's capital expenditures, please refer to 5 section 8 of Exhibit 2-4-3: Distribution System Plan.

6

The utility's 2016-2020 capital plan represented the highest level of average annual capital expenditures in any multi-year rate term in Hydro Ottawa's history. Capital spending during this period has focused on the enhancement of system capacity to keep pace with growth and shifts in loads within the service territory, as well as renewal of the aged and aging infrastructure at risk of failure. Key accomplishments have included the following: extensive replacements and enhancements of core infrastructure, such as overhead power lines and underground cables; upgrades to fibre optic networks; acquisition of a new Supervisory Control and Data Acquisition System ("SCADA"); and asset relocations and expansions to support major local infrastructure projects, such as the City of Ottawa's Light Rail Transit and renewal of north-south arteries in the downtown core. These and other initiatives have translated into improved system reliability and performance, with the utility having consistently met or exceeded its reliability targets over the 2016-2019 timeframe. Hydro Ottawa is on track to successfully complete its plan for 2016-2020, with adjustments for typical changes and evolving circumstances.

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Notwithstanding this progress, however, renewing Hydro Ottawa's aged and aging infrastructure in deteriorating condition (i.e. stations, and underground and overhead systems) at an appropriate pace remains a priority for both near-term performance and long-term sustainability of the distribution system. Hydro Ottawa's service territory continues to be characterized by both a growing and a shifting customer base. In terms of growth, expanding suburban areas and load intensification in established communities are driving a need for investments to maintain reliability, increase supply capacity, and reduce the frequency and duration of outages. At the same time, as customer priorities and needs evolve with the advancement of technology and innovation, they are triggering discernible shifts: in patterns of supply and demand, in





1 preferences with regards to the availability of information on the services received by 2 customers, and in expectations for how quickly and effectively Hydro Ottawa can restore service 3 when an outage occurs.

4

These pressures and priorities are reflected in the top four drivers of the utility's planned expenditures for 2021-2025: Customer Service Requests, Failure Risk, System Capital Investment Support, and Capacity Constraints. Many programs under the System Access investment category are driven by Customer Service Requests, including expansion of the distribution system, residential connections, commercial connections, and generation connections. Assets that are being replaced due to Failure Risk in the System Renewal investment category include the following: station transformers, station switchgear, protection and control ("P&C") equipment, batteries, poles, overhead ("OH") switches, cables, civil structures, and underground ("UG") switchgear. Projects driven by System Capital Investment Support include capital contributions to intangible assets purchased from Hydro One Networks Inc. ("HONI") in conjunction with Hydro Ottawa's major station projects, especially the new Cambrian Municipal Transformer Station ("MTS") and the New East Station. (Additional information on Cambrian MTS is presented in section 3 below). Projects driven by Capacity Constraints likewise include construction of the aforementioned stations as well as associated distribution work to bring additional capacity to growth pockets.

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The updated version of Figure 1 shows annual capital expenditures for both the 2016-2020 and 22 2021-2025 periods.

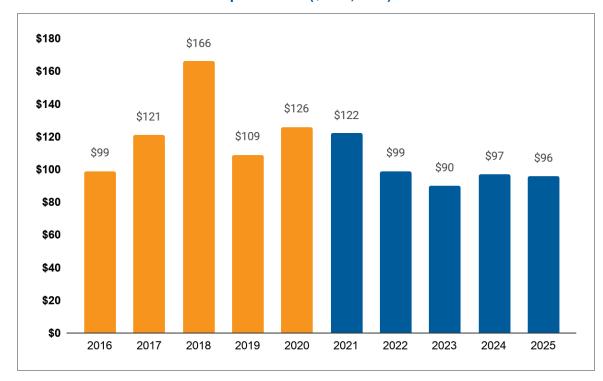
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<sup>&</sup>lt;sup>23</sup> The previous project name for Cambrian MTS was South Nepean MTS.



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# Figure 1 – AS ORIGINALLY SUBMITTED – Summary of 2016-2025 Annual Capital Expenditures (\$'000,000s)



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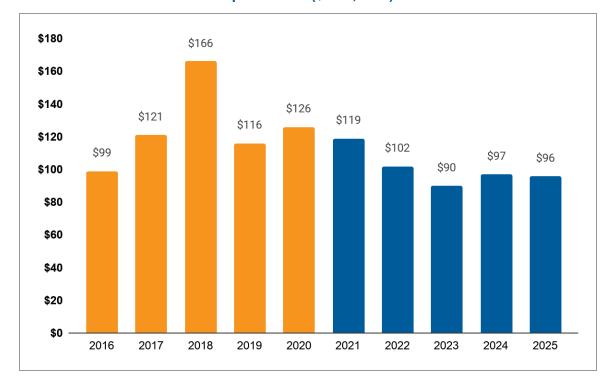
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Figure 1 – UPDATED FOR 2019 ACTUALS – Summary of 2016-2025 Annual Capital Expenditures (\$'000,000s)



5 Figure 1 corroborates the expectation signalled in Hydro Ottawa's previous rebasing application

- that a historically high level of annual capital expenditures "will be sustained, if not increased,
- 7 through the decade from 2020-2030."<sup>2</sup>

Both the 2016-2020 and the 2021-2025 periods contain large generational projects – most

notably, the Facilities Renewal Program in the 2016-2025 period and the Cambrian MTS project

in the 2021-2025 period.<sup>3</sup> The updated version of Figure 2 below shows a summary of capital

12 expenditures excluding these two projects. Of note, the spike in expenditures in 2018 was due,

13 in part, to three major severe weather events, not the least of which were the six tornadoes that

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<sup>&</sup>lt;sup>14</sup> Hydro Ottawa Limited, 2016-2020 Custom Incentive Rate-Setting Distribution Rate Application, EB-2015-0004 (April 15 29, 2015), Exhibit A-2-1, page 10.

<sup>&</sup>lt;sup>16</sup> <sup>3</sup> For additional information on the Facilities Renewal Program, please see UPDATED Attachment 2-1-1(A): New

<sup>17</sup> Administrative Office and Operations Facilities; for Cambrian MTS, please see Attachment 2-4-3(E): Material

<sup>18</sup> Investments.

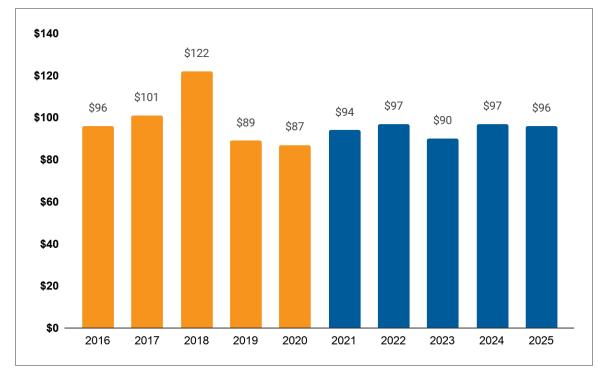


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touched down in the Ottawa area in September of that year. Additional contributing factors for the 2018 increase included the acceleration of dark fibre installation and increased System Access demands, including those associated with projects at the Canada Science and Technology Museum and a new fulfillment centre constructed by Amazon in the eastern outskirts of Ottawa.

Figure 2 – AS ORIGINALLY SUBMITTED – Summary of 2016-2025 Capital Expenditures

Excluding Facilities Renewal Program and Cambrian MTS (\$'000,000s)



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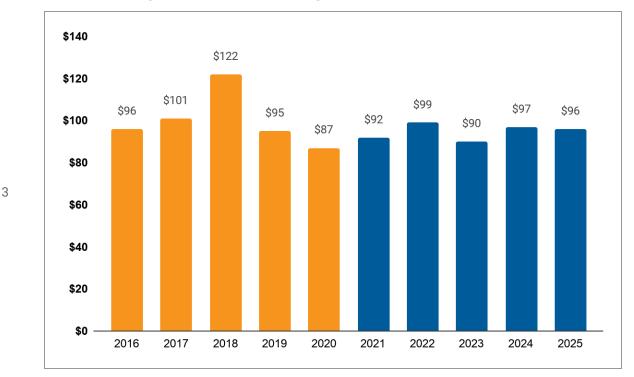
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Figure 2 – UPDATED FOR 2019 ACTUALS – Summary of 2016-2025 Capital Expenditures

Excluding Facilities Renewal Program and Cambrian MTS (\$'000,000s)



#### 5 2. RATIONALIZATION PROCESS

6 Hydro Ottawa undertook an extensive rationalization process as a prerequisite to formulating 7 the 2021-2025 capital expenditure levels that are summarized in this Schedule.

9 The first step in this process was the development of an asset needs forecast. This forecast

- 0 identified investment levels that were deemed to be necessary from an engineering point of
- view, taking into account asset age, safety, and reliability considerations.
- 13 Thereafter, a more comprehensive review was performed that assessed the following factors:
- 14 asset needs; safety; reliability; customer growth; resource constraints; expected rate impacts;
- 15 customer input; financial considerations; and resourcing considerations.



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1 This review resulted in a reduction in the capital expenditure forecast of approximately \$50M per 2 year. The expenditure levels presented in this Application represent the end product of this 3 assessment and rationalization process, and are consistent with OEB-approved levels from the 2016-2020 period. The resulting "average run rate" of approximately \$100.7M per year 5 represents the expenditure levels required to ensure the safety and reliability of the system, and to address challenges associated with aging infrastructure and customer growth. After adjusting 7 for 2019 actual capital expenditures and updates to the MiGen project as described in the updated version of section 2.3.3 of Attachment 2-4-3(E): Material Investments, the resulting "average run rate" has been updated to \$100.8M per year.

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#### 2021-2025 CAPITAL EXPENDITURES SUMMARY 3. 11

Detailed justification for the projects and programs that comprise Hydro Ottawa's overall capital investment plan for 2021-2025 are outlined in Exhibit 2-4-2: Capital Expenditure Details and Exhibit 2-4-3: Distribution System Plan.

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16 As mentioned above, capital expenditures in this period include the construction of Cambrian MTS. This project consists of two distinct components: (1) the new MTS set to be constructed by Hydro Ottawa; and (2) upgrades to existing transmission facilities, as well as construction of a segment of new transmission line, by HONI. These facilities are required to accommodate customer load growth and increase supply capacity in the South Nepean area of Ottawa, which has already reached the limits of local transformation capacity. Seeing as this project is driven by the needs of Hydro Ottawa and its customers, the bulk of the costs are being apportioned to Hydro Ottawa. In October 2019, the OEB granted formal approval to HONI and Hydro Ottawa to proceed with construction of their respective segments of this project. The utilities had applied 25 for leave to construct ("LTC") authorization, pursuant to Section 92 of the Ontario Energy Board 26 Act, 1998 in May 2019.<sup>4</sup> The project is set to be energized in Q2 2022.

<sup>&</sup>lt;sup>27</sup> The case number of the proceeding in which the OEB adjudicated HONI and Hydro Ottawa's joint application is 28 EB-2019-0077.



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- 1 The sizeable Connection Cost Recovery Agreement ("CCRA") payments associated with this
- 2 project will exert significant influence on the overall capital spending envelope for 2021-2025.
- 3 Projects of this magnitude are not undertaken on a regular basis, and as such, the larger capital
- 4 expenditures in the 2021-2022 period are something of an anomaly.

6 Similar to Figure 2 above, Table 2 shows the planned capital expenditures for 2021-2025 with 7 and without the Cambrian MTS project. In the absence of this project, annual average 8 expenditures for the five-year rate term are \$94.7M. This figure is more representative of typical 9 capital expenditure requirements for a period of this length. After adjusting for 2019 actual 10 capital expenditures and updates to the MiGen project as described in updates to section 2.3.3 11 of Attachment 2-4-3(E): Material Investments, the annual average expenditures for the five-year 12 rate term is determined to be \$94.8M.

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Table 2 – AS ORIGINALLY SUBMITTED – 2021-2025 Capital Expenditures without Cambrian MTS (\$'000,000s)

Capital Expenditures			Forecast			Average
(Net)	2021	2022	2023	2024	2025	2021-2025
Total (Table 1)	\$121.8	\$98.9	\$89.6	\$97.2	\$96.0	\$100.7
Cambrian MTS	\$27.9	\$2.2	\$0.0	\$0.0	\$0.0	\$6.0
TOTAL WITHOUT CAMBRIAN	\$93.8	\$96.7	\$89.6	\$97.2	\$96.0	\$94.7

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### Table 2 – UPDATED FOR 2019 ACTUALS – 2021-2025 Capital Expenditures without Cambrian MTS (\$'000,000s)

Capital Expenditures			Forecast			Average
(Net)	2021	2022	2023	2024	2025	2021-2025
Total (Table 1)	\$119.5	\$101.6	\$89.6	\$97.2	\$96.0	\$100.8
Cambrian MTS	\$27.9	\$2.2	\$0.0	\$0.0	\$0.0	\$6.0
TOTAL WITHOUT CAMBRIAN	\$91.6	\$99.3	\$89.6	\$97.2	\$96.0	\$94.8



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With regards to productivity and continuous improvement, it should be noted that these remain firmly embedded in Hydro Ottawa's capital expenditure program. As an example, the utility has committed to adopt the ISO 55000 Asset Management Standard as part of continual improvement in asset management practices. This asset management framework strengthens the strategic asset decision-making processes by striving to do the following: balance the weighting of cost, risk, and asset performance that meet or exceed service level expectations of customers; comply with the terms of applicable acts, licences, and codes; improve asset value and resource efficiency; and minimize health, safety, and environmental impacts. Other planned productivity initiatives for the 2021-2025 period include performing detailed analysis of field crew wrench time and identifying opportunities for further optimization, implementing seasonal construction shifts, and rationalizing fleet assets. Additional information on these and other activities is available in Exhibit 1-1-13: Productivity and Continuous Improvement Initiatives.

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#### 14 4. 2021-2025 CAPITAL ADDITIONS SUMMARY

Hydro Ottawa's Capital Additions over the 2021-2025 period are summarized in Table 3 below.
Consistent with the arrangement set forth in the Approved Settlement Agreement governing the utility's 2016-2020 rate plan, Hydro Ottawa proposes to track capital additions in the following

three categories: System Access; System Renewal and System Service, and General Plant.<sup>5</sup>

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In addition, Hydro Ottawa is requesting to continue the separate deferral account for the revenue requirement related to CCRA payments. This account would include both new facilities as well as true-up payments required by HONI for existing facilities. Hydro Ottawa is also requesting to maintain the variance account (with some modifications) to record the revenue requirement impact associated with any underspending between actual and forecasted cumulative capital additions. For more information on these accounts, please see Exhibit 9-2-1: New Deferral and Variance Accounts. The updated version of Table 3 below reflects 2019 actuals and updates to the MiGen project, as described in the updated version of section 2.3.3

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<sup>&</sup>lt;sup>28</sup> <sup>5</sup> The System Renewal and System Service categories have been merged into one category to reflect Hydro

Ottawa's standard operating practice to shift funds between the two categories, as warranted by customer and operational requirements.



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- of Attachment 2-4-3(E): Material Investments. In addition, revisions have been made to Table 3
- 2 to correspond with the originally submitted versions of 2021-2025 Appendix 2-BA: Fixed Asset
- 3 Continuity Schedule, filed as Attachments 2-2-1(F)-(J), respectively.

## Table 3 – AS ORIGINALLY SUBMITTED – 2021-2025 Summary of Capital Additions (\$'000s)

Category	2021	2022	2023	2024	2025
System Access (net of contribution)	\$17,820	\$17,879	\$17,720	\$15,626	\$15,255
System Renewal and Service	\$71,138	\$92,858	\$50,671	\$59,601	\$82,071
General Plant excluding CCRAs	\$14,198	\$12,343	\$6,513	\$5,822	\$18,043
TOTAL CAPITAL ADDITIONS	\$103,156	\$123,080	\$74,905	\$81,049	\$115,369

### Table 3 – AS REVISED – 2021-2025 Summary of Capital Additions (\$'000s)

Category	2021	2022	2023	2024	2025
System Access (net of contribution)	\$17,952	\$17,922	\$17,620	\$15,630	\$15,312
System Renewal and Service	\$67,766	\$90,299	\$54,420	\$59,767	\$81,904
General Plant excluding CCRAs	\$14,198	\$12,343	\$6,513	\$5,822	\$18,043
TOTAL CAPITAL ADDITIONS	\$99,916	\$120,564	\$78,554	\$81,218	\$115,259

# Table 3 – UPDATED FOR 2019 ACTUALS – 2021-2025 Summary of Capital Additions (\$'000s)

Category	2021	2022	2023	2024	2025
System Access (net of contribution)	\$17,952	\$17,922	\$17,620	\$15,630	\$15,312
System Renewal and Service	\$63,004	\$94,210	\$54,420	\$59,767	\$81,904
General Plant excluding CCRAs	\$14,198	\$12,343	\$6,513	\$5,822	\$18,043
TOTAL CAPITAL ADDITIONS	\$95,155	\$124,475	\$78,554	\$81,218	\$115,259

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#### 1 5. 2016-2020 CAPITAL ADDITIONS SUMMARY

- 2 For the 2016-2020 period, Hydro Ottawa is set to maintain in-service addition levels somewhat
- 3 above the levels approved by the OEB. As shown in Table 4 below, the in-service additions in all
- 4 three investment categories are set to exceed approved amounts. For 2016-2020, Hydro
- 5 Ottawa is projecting Capital Additions to exceed the overall envelope by \$54.1M. After adjusting
- 6 for 2019 actual Capital Additions, the utility is projecting Capital Additions to exceed the overall
- 7 envelope by \$70.4M.



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### Table 4 - AS ORIGINALLY SUBMITTED - 2016-2020 Capital Additions vs. OEB-Approved **Amounts (\$'000s)**

CATEGORY	2016	2017	2018	2019	2020	Total	% Variance	
OEB-Approved (Net of Contribution)								
System Access	\$12,628	\$11,798	\$12,034	\$12,274	\$12,520	\$61,254		
System Renewal and System Service	\$52,744	\$53,389	\$70,133	\$43,710	\$81,123	\$301,099		
General Plant <sup>6</sup>	\$8,434	\$16,703	\$7,059	\$7,630	\$15,019	\$54,845		
TOTAL OEB-APPROVED CAPITAL ADDITIONS	\$73,806	\$81,889	\$89,226	\$63,614	\$108,662	\$417,198		
Historical / Bridge (Net of Co	ntribution)							
System Access	\$14,065	\$18,051	\$23,084	\$14,295	\$20,970	\$90,464		
System Renewal and System Service	\$55,336	\$60,632	\$67,867	\$84,738	\$45,956	\$314,529		
General Plant <sup>7</sup>	\$12,229	\$18,295	\$6,510	\$13,420	\$15,845	\$66,300		
TOTAL HISTORICAL / BRIDGE CAPITAL ADDITIONS	\$81,630	\$96,977	\$97,462	\$112,453	\$82,771	\$471,293		
Variance								
System Access (Net)	\$1,437	\$6,253	\$11,050	\$2,020	\$8,450	\$29,210	48%	
System Renewal and System Service	\$2,592	\$7,243	\$(2,266)	\$41,028	\$(35,167)	\$13,430	4%	
General Plant <sup>8</sup>	\$3,795	\$1,592	\$(549)	\$5,790	\$826	\$11,455	21%	
TOTAL CAPITAL ADDITIONS VARIANCE	\$7,824	\$15,088	\$8,236	\$48,838	\$(25,890)	\$54,095		

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 $<sup>^{4}\,</sup>$  The Facilities Renewal Program and new CCRAs are excluded, as per the Approved Settlement Agreement, 5 EB-2015-0004 (December 7, 2015). 6 *7 Ibid*.

<sup>7 8</sup> *Ibid*.



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### Table 4 – UPDATED FOR 2019 ACTUALS – 2016-2020 Capital Additions vs.

#### **OEB-Approved Amounts (\$'000s)**

CATEGORY	2016	2017	2018	2019	2020	Total	% Variance	
OEB-Approved (Net of Contribution)								
System Access	\$12,628	\$11,798	\$12,034	\$12,274	\$12,520	\$61,254		
System Renewal and System Service	\$52,744	\$53,389	\$70,133	\$43,710	\$81,123	\$301,099		
General Plant <sup>9</sup>	\$8,434	\$16,703	\$7,059	\$7,630	\$15,019	\$54,845		
TOTAL OEB-APPROVED CAPITAL ADDITIONS	\$73,806	\$81,889	\$89,226	\$63,614	\$108,662	\$417,198		
Historical / Bridge (Net of Co	ntribution)							
System Access	\$14,065	\$18,051	\$23,084	\$24,285	\$20,970	\$100,455		
System Renewal and System Service	\$55,336	\$60,632	\$67,867	\$86,603	\$47,785	\$318,223		
General Plant <sup>10</sup>	\$12,229	\$18,295	\$6,510	\$15,682	\$15,845	\$68,968		
TOTAL HISTORICAL / BRIDGE CAPITAL ADDITIONS	\$81,630	\$96,977	\$97,462	\$126,570	\$84,601	\$487,646		
Variance								
System Access (Net)	\$1,437	\$6,253	\$11,050	\$12,011	\$8,450	\$39,201	64%	
System Renewal and System Service	\$2,592	\$7,243	\$(2,266)	\$42,893	\$(33,338)	\$17,124	6%	
General Plant <sup>11</sup>	\$3,795	\$1,592	\$(549)	\$8,052	\$826	\$14,123	26%	
TOTAL CAPITAL ADDITIONS VARIANCE	\$7,824	\$15,088	\$8,236	\$62,956	\$(24,061)	\$70,448		

4 System Access has the largest variance, with the level of third-party demand exceeding

5 projections, including from such projects as the City of Ottawa's Light Rail Transit, the Canada

6 Science and Technology Museum, Elgin Street Renewal, and construction of an Amazon

11

The Facilities Renewal Program and new CCRAs are excluded, as per the Approved Settlement Agreement,
 EB-2015-0004 (December 7, 2015).

<sup>8</sup> EB-201 9 <sup>10</sup> *Ibid*.

<sup>10 &</sup>lt;sup>11</sup> *Ibid*.



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1 distribution warehouse. The mix of the programs also changed from the original forecast.

2 System Expansion and Infill, which in general have lower contributions, exceeded the budget

3 expectation. This explains the capital contributions which were lower than budgeted. All of these

projects were third-party driven and were therefore ones which Hydro Ottawa had an obligation

5 to complete.

6

As submitted in the utility's original Application, System Renewal and System Service are set to exceed approved levels by 4% mainly on account of Emergency Renewal spending (both emergency and storm restoration capital and critical renewals). After adjusting for 2019 actual spending, System Renewal and System Service are set to exceed approved levels by 6%. The Ottawa area experienced multiple extreme weather events of significance during the 2016-2020 timeframe, especially in 2018 which featured an ice storm in April, a wind storm in May, and six tornadoes in September. All of these events resulted in the utility incurring a large amount of unbudgeted capital replacement costs.

15

With respect to critical renewals, over the past few years Hydro Ottawa has increased asset inspections as part of its reliability improvement program. Increased inspections have led to more assets being identified as being in a "critical state." "Critical state" means that the assets have been identified as having "functionally" failed, but have not yet caused an outage (e.g. poles that have been deemed to have deteriorated to a point where they no longer meet their designed strength requirements). Critical renewal is more cost-effective than emergency renewal when there is a power outage, as critical renewals can be performed in a planned manner with no accompanying need to incur overtime costs.

24

The amount for General Plant Capital Additions, as shown in Table 4 above, is in accordance with the Approved Settlement Agreement governing Hydro Ottawa's 2016-2020 rate plan. Both the Facilities Renewal Program and new CCRAs are removed for purposes of the Capital Variance Account, as they are recorded in separate Deferral and Variance Accounts. General Plant is set to exceed approved levels largely on account of the following: (i) true-up CCRA



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- 1 payments to HONI<sup>12</sup>; and (ii) scope change in several projects, including the Enterprise
- 2 Resource Planning ("ERP") upgrade. A new Human Resources software module (Workday) was
- 3 added to the ERP JDE 9.2 upgrade project. This module has helped lead to reduced processes,
- 4 increased employee self-service capabilities, and enhanced productivity.

5

#### 6 6. 2016-2020 CAPITAL EXPENDITURES SUMMARY

- 7 Similar to section 5 above, for the 2016-2020 period Hydro Ottawa's capital expenditures in all
- 8 three investment categories are set to exceed the budget plan. As <mark>submitted in the utility's</mark>
- 9 original Application, as shown in Table 5, the utility is projecting an overall variance of \$83.4M.
- 10 After adjusting for 2019 actual capital expenditures, Hydro Ottawa is projecting an overall
- 11 variance of \$89.6M.

\_

<sup>12</sup> As per the Approved Settlement Agreement, the separate deferral account for CCRA payments is intended to

<sup>13</sup> facilitate recovery of costs from customers for the annual revenue requirement impact of CCRA payments paid to

<sup>14</sup> HONI, commencing in the year in which the facilities to which each CCRA payment relates provide services to Hydro

<sup>15</sup> Ottawa customers.



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# Table 5 – AS ORIGINALLY SUBMITTED – 2016-2020 Capital Expenditures vs. Approved (\$'000s)

CATEGORY	2016	2017	2018	2019	2020	Total	% Variance	
Approved <sup>13</sup> (Net of Contribution)								
System Access	\$15,300	\$11,966	\$12,205	\$12,450	\$12,699	\$64,620		
System Renewal and System Service	\$60,594	\$65,780	\$66,010	\$66,452	\$69,032	\$327,868		
General Plant	\$45,899	\$48,138	\$18,276	\$18,695	\$13,954	\$144,962		
TOTAL CAPITAL EXPENDITURES	\$121,794	\$125,883	\$96,491	\$97,597	\$95,685	\$537,450		
Historical / Bridge (Net of Co	ntribution)							
System Access	\$18,316	\$13,597	\$24,147	\$18,847	\$20,387	\$95,294		
System Renewal and System Service	\$60,320	\$68,655	\$84,702	\$56,955	\$63,731	\$334,363		
General Plant	\$20,423	\$38,300	\$56,738	\$33,586	\$42,170	\$191,217		
TOTAL HISTORICAL / BRIDGE CAPITAL EXPENDITURES	\$99,058	\$120,552	\$165,587	\$109,388	\$126,288	\$620,874		
Variance								
System Access (Net)	\$3,015	\$1,631	\$11,942	\$6,397	\$7,688	\$30,674	47%	
System Renewal and System Service	\$(274)	\$2,876	\$18,692	\$(9,498)	\$(5,301)	\$6,796	2%	
General Plant	\$(25,476)	\$(9,838)	\$38,462	\$14,892	\$28,216	\$46,255	32%	
TOTAL CAPITAL EXPENDITURES VARIANCE	\$(22,735)	\$(5,331)	\$69,096	\$11,792	\$30,603	\$83,425		

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 $<sup>^{4}</sup>$   $^{13}$  Approved capital expenditures for 2016-2020 equate to those submitted, the \$10M settlement reduction was

<sup>5</sup> applied to capital assets only



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## Table 5 – UPDATED FOR 2019 ACTUALS – 2016-2020 Capital Expenditures vs. Approved (\$'000s)

CATEGORY	2016	2017	2018	2019	2020	Total	% Variance	
Approved <sup>14</sup> (Net of Contribution)								
System Access	\$15,300	\$11,966	\$12,205	\$12,450	\$12,699	\$64,620		
System Renewal and System Service	\$60,594	\$65,780	\$66,010	\$66,452	\$69,032	\$327,868		
General Plant	\$45,899	\$48,138	\$18,276	\$18,695	\$13,954	\$144,962		
TOTAL CAPITAL EXPENDITURES	\$121,794	\$125,883	\$96,491	\$97,597	\$95,685	\$537,450		
Historical / Bridge (Net of Co	ntribution)							
System Access	\$18,316	\$13,597	\$24,147	\$25,368	\$20,387	\$101,815		
System Renewal and System Service	\$60,320	\$68,655	\$84,702	\$56,328	\$63,426	\$333,432		
General Plant	\$20,423	\$38,300	\$56,738	\$34,158	\$42,170	\$191,789		
TOTAL HISTORICAL / BRIDGE CAPITAL EXPENDITURES	\$99,058	\$120,552	\$165,587	\$115,854	\$125,983	\$627,035		
Variance								
System Access (Net)	\$3,015	\$1,631	\$11,942	\$12,919	\$7,688	\$37,195	58%	
System Renewal and System Service	\$(274)	\$2,876	\$18,692	\$(10,124)	\$(5,606)	\$5,564	2%	
General Plant	\$(25,476)	\$(9,838)	\$38,462	\$15,463	\$28,216	\$46,827	32%	
TOTAL CAPITAL EXPENDITURES VARIANCE	\$(22,735)	\$(5,331)	\$69,096	\$18,257	\$30,298	\$89,585		

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<sup>&</sup>lt;sup>1</sup> The projected System Access capital expenditure variance <mark>(as submitted in the utility's original</mark>

<sup>5</sup> Application) of \$30.7M over the five years is in line with the capital additions variance of \$29.2M

<sup>6</sup> under section 5 above. After adjusting for 2019 actual System Access capital expenditures, the

<sup>7</sup> variance of \$37.2M over the five years is in line with the capital additions variance of \$39.2M

<sup>8</sup> under section 5 above. The variance is explained by increased third-party demand and lower

<sup>9</sup> capital contributions due to the mix of projects.

<sup>10 &</sup>lt;sup>14</sup> Approved capital expenditures for 2016-2020 equate to those submitted, the \$10M settlement reduction was

<sup>11</sup> applied to capital assets only



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1 System Renewal and System Service capital expenditures are projected to only exceed budget 2 by 2%, largely on account of higher Emergency Renewal than planned and historical levels

3 associated with the 2018 extreme weather events.

4

The projected variance for General Plant capital expenditures is \$46.3M. After adjusting for 2019 actual General Plant capital expenditures, this variance has been updated to \$46.8M. This is larger than the capital addition variance of \$11.5M (updated to \$14.1M for 2019 actual capital additions) in Table 4 above primarily because the Facilities Renewal Program and HONI CCRA payments are not displayed in Table 4, in accordance with the Capital Variance Account that was approved for use as per the Decision rendered by the OEB on Hydro Ottawa's 2016-2020 rate application. Total CCRAs for new service and true-up payments are projecting \$50.4M over 2016-2020, as originally submitted. After adjusting for 2019 actuals, total CCRAs for new service and true-up payment associated with Cambrian MTS. The CCRAs are significantly higher than historical spending and are set to exceed the budget of \$24.6M by \$25.8M. After accounting for 2019 actuals, CCRAs are set to exceed the budget of \$24.6M by \$25.1M.

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The projects that led to these overages were carefully monitored by Hydro Ottawa. It was determined that proceeding with these projects was a sound business decision and was in the best interests of customers. Other projects in the utility's portfolio were delayed in an attempt to ameliorate these overages and lessen their impact. For example, some work at Riverdale TS, Overbrook TS, Bayswater DS, and Bells Corners DS was delayed.

23

Hydro Ottawa's new operations and administrative facilities were completed in 2019. As part of its Decision and Order on Hydro Ottawa's 2016-2020 rate application, the OEB concluded that the need for the facilities had been established. During the settlement process for that application, all intervenors and OEB staff accepted the proposed project cost of \$92.5M identified by Hydro Ottawa. Ultimately, the OEB approved \$66.0M in "provisional funding" for the

<sup>29 15</sup> Ontario Energy Board, *Decision and Order*, EB-2015-0004 (December 22, 2015).



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- 1 facilities, with any additional amounts being subject to a prudency review at the utility's next
- 2 rebasing.<sup>17</sup> Hydro Ottawa has filed evidence in this Application to support its expenditures on
- 3 these new facilities (UPDATED Attachment 2-1-1(A): New Administrative Office and Operations
- 4 Facilities).

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#### 6 7. APPENDICES AND SPECIAL STUDIES

- 7 Attached to Exhibit 2-4-3: Distribution System Plan are the capital expenditure-related
- 8 appendices that electricity distributors must submit, pursuant to the Chapter 2 and Chapter 5
- 9 Filing Requirements for Electricity Distribution Rate Applications, as updated on July 12, 2018
- 10 and addended on July 15, 2019. In addition, a number of special studies to support Hydro
- 11 Ottawa's proposed capital expenditure plan and rate base levels for the 2021-2025 period are
- 12 likewise attached.

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14 These appendices and special studies are as follows:

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- UPDATED Attachment 2-4-3(A): OEB Appendix 2-AA Capital Programs Table
- **UPDATED** Attachment 2-4-3(B): OEB Appendix 2-AB Capital Expenditure Summary
- Attachment 2-4-3(C): OEB Appendix 5-A: Chapter 5 Appendix
- Attachment 2-4-3(D): Independent Assessment of Hydro Ottawa's Distribution System
  20 Plan
- Attachment 2-4-3(E): Material Investments (section 2.3.3 of which has been updated)
- Attachment 2-4-3(F): Fleet Replacement Program
- Attachment 2-4-3(G): Strategic Asset Management Plan
- Attachment 2-4-3(H): Distribution System Climate Risk and Vulnerability Assessment
- Attachment 2-4-3(I): Hydro Ottawa Climate Change Adaptation Plan
- Attachment 2-4-3(J): ISO 55000 Gap Analysis
- Attachment 2-4-3(K): Local Achievable Potential Study
- Attachment 2-4-3(L): Metering Roadmap

<sup>29</sup> <sup>17</sup> *Ibid*, page 6.



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Attachment 2-4-3(M): Asset Condition Assessment - Third Party Review



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#### **CAPITAL EXPENDITURES DETAILS**

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In accordance with the *Chapter 2* and *Chapter 5 Filing Requirements for Electricity Distribution Rate Applications*, as updated on July 12, 2018 and addended on July 15, 2019, Hydro Ottawa has filed a consolidated Distribution System Plan ("DSP") as Exhibit 2-4-3. The Capital Expenditure plan in section 8.0 of the DSP and Attachment 2-4-3(E): Material Investments both detail the system investment decisions which are made through the asset management and capital expenditure planning processes. The DSP further details investments by investment categories. Capital Programs and Budget Programs are included for the Historical Years of 2016-2018, the Bridge Years of 2019 and 2020, and the Test Years of 2021-2025.

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Please see Attachment 2-4-3(A): OEB Appendix 2-AA - Capital Programs Table and Attachment 2-4-3(B): OEB Appendix 2-AB - Capital Expenditure Summary for an overview of Hydro Ottawa's capital projects and expenditures. For comprehensive explanatory notes and variance analyses of Hydro Ottawa's capital expenditures, please refer to Section 8.0 of the DSP (Exhibit 2-4-3).