EXHIBIT 2 – RATE BASE

2024 Cost of Service

Westario Power Inc.
EB-2023-0058

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2.1. OVERVIEW OF RATE BASE

WPI's methodology of calculating its Rate Base has not changed from its last costs of service applications (2018) and is in line with the OEB's methodology of determining a Rate Base. The net fixed assets used to determine the utility's Rate Base include those distribution assets associated with activities that enable the conveyance of electricity for distribution purposes. WPI does not have non-distribution assets, nor does it conduct non-distribution activities. Controllable expenses include operations and maintenance, billing and collecting, and administration costs discussed in detail in Exhibit 4.

WPI has calculated its' Test Year 2024 Rate Base to be $71,812,384. WPIs rate base is also used to determine the proposed revenue requirement found in Exhibit 6. The table below presents WPI's Rate Base calculations for the Test Year compared to the 2018 Board Approved.

Table 1 – Change in Rate Base from 2018 BA

Particulars	Last Board Approved	2024	Var from 2018
Net Capital Assets in Service:			
Avg Gross Assets	$74,439,550	$86,096,163	$11,656,613
Avg Acc Depr	$28,320,932	$18,547,003	-$9,773,930
Average Balance	$46,118,617	$67,549,160	$21,430,543
Working Capital Allowance	$4,239,831	$4,263,224	$23,393
Total Rate Base	**$50,358,448**	**$71,812,384**	**$21,453,936**
Expenses for Working Capital	**Last Board Approved**	**2024**	
Eligible Distribution Expenses:			
3500-Distribution Expenses - Operation	$580,760	$670,580	$89,820
3550-Distribution Expenses - Maintenance	$1,386,773	$1,879,524	$492,751
3650-Billing and Collecting	$1,132,000	$850,197	-$281,803
3700-Community Relations	$31,000	$35,422	$4,422
3800-Administrative and General Expenses	$2,680,500	$3,535,994	$855,494
6105-Taxes other than Income Taxes	$35,000	$49,008	$14,008
Total Eligible Distribution Expenses	$5,846,033	$7,020,725	$1,174,692
3350-Power Supply Expenses	$50,685,050	$49,822,261	-$862,789
Total Expenses for Working Capital	$56,531,083	$56,842,986	$311,903
Working Capital factor	7.50%	7.50%	0.00%
Total Working Capital	**$4,239,831**	**$4,263,224**	**$23,393**

2.1.1 Rate Base Trend and Cost Drivers

The Rate Base trend table presents WPI's Rate Base calculations for all required years, including the Test Year 2024. Year-over-year variance analysis follows.

Table 2 – Rate Base Trend

Particulars	Last Board Approved	2018	2019	2020	2021	2022	2023	2024
Net Capital Assets in Service:								
Avg Gross Assets	$74,439,550	$54,531,560	$59,263,181	$63,601,846	$68,092,873	$73,247,041	$80,257,757	$86,096,163
Avg Acc Depreciation	$28,320,932	$7,602,068	$9,043,525	$10,637,713	$12,351,534	$14,198,841	$16,251,871	$18,547,003
Average Balance	$46,118,617	$46,929,492	$50,219,657	$52,964,132	$55,741,338	$59,048,200	$64,005,886	$67,549,160
Working Capital Allowance	$4,239,831	$3,727,166	$4,138,333	$4,943,336	$4,482,617	$4,496,279	$4,598,514	$4,313,821
Total Rate Base	**$50,358,448**	**$50,656,657**	**$54,357,989**	**$57,907,468**	**$60,223,955**	**$63,544,479**	**$68,604,400**	**$71,862,982**
Expenses for Working Capital	**Last Board Approved**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Eligible Distribution Expenses:								
3500-Distribution Expenses - Operation	$580,760	$522,033	$655,009	$758,568	$709,495	$620,655	$666,970	$670,580
3550-Distribution Expenses - Maintenance	$1,386,773	$1,427,339	$1,480,065	$1,496,436	$1,346,049	$2,033,085	$1,892,422	$1,879,524
3650-Billing and collecting	$1,132,000	$839,486	$903,280	$672,592	$654,748	$805,438	$821,942	$850,197
3700-Community Relations	$31,000	$29,323	$53,566	$14,104	$25,068	$15,930	$33,760	$35,422
3800-Administrative and General Expenses	$2,680,500	$2,638,752	$2,816,581	$3,088,241	$4,003,714	$4,410,573	$3,282,288	$3,535,994
6105-Taxes other than Income Taxes	$35,000	$34,925	$34,842	$34,827	$30,937	$44,788	$47,256	$49,008
Total Eligible Distribution Expenses	$5,846,033	$5,491,859	$5,943,343	$6,064,769	$6,770,012	$7,930,470	$6,744,638	$7,020,725
3350-Power Supply Expenses	$50,685,050	$44,203,682	$49,234,428	$59,846,378	$52,998,217	$52,019,912	$54,568,879	$50,496,893
Total Expenses for Working Capital	$56,531,083	$49,695,541	$55,177,771	$65,911,147	$59,768,229	$59,950,382	$61,313,517	$57,517,618
Working Capital factor	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Total Working Capital	**$4,239,831**	**$3,727,166**	**$4,138,333**	**$4,943,336**	**$4,482,617**	**$4,496,279**	**$4,598,514**	**$4,313,821**

Particulars	Last Board Approved	2024	Var from 2018BA
Net Capital Assets in Service:			
Avg Gross Assets	$74,439,550	$86,096,163	$11,656,613
Avg Acc Depr	$28,320,932	$18,547,003	-$9,773,930
Average Balance	$46,118,617	$67,549,160	$21,430,543
Working Capital Allowance	$4,239,831	$4,313,821	$73,990
Total Rate Base	**$50,358,448**	**$71,862,982**	**$21,504,533**
Expenses for Working Capital	**Last Board Approved**	**2024**	
Eligible Distribution Expenses:			
3500-Distribution Expenses - Operation	$580,760	$670,580	$89,820
3550-Distribution Expenses - Maintenance	$1,386,773	$1,879,524	$492,751
3650-Billing and collecting	$1,132,000	$850,197	-$281,803
3700-Community Relations	$31,000	$35,422	$4,422
3800-Administrative and General Expenses	$2,680,500	$3,535,994	$855,494
6105-Taxes other than Income Taxes	$35,000	$49,008	$14,008
Total Eligible Distribution Expenses	$5,846,033	$7,020,725	$1,174,692
3350-Power Supply Expenses	$50,685,050	$50,496,893	-$188,157
Total Expenses for Working Capital	$56,531,083	$57,517,618	$986,535
Working Capital factor	7.50%	7.50%	0.00%
Total Working Capital	**$4,239,831**	**$4,313,821**	**$73,990**

WPI notes that it uses “in-service”, “capital additions” and “capital expenditures” interchangeably. WPI confirms that it has not included Work in Progress capital projects in its test year.

The Rate Base for the 2024 Test Year has increased by $21,453,936 over the last board approved. WPI has added $40M in gross assets since 2018. The reason for the increase from the 2018 Cost of Service is mainly attributed to the following:

Major capital cost drivers: 2018

System Access:

- Pole Replacement $ 540,312
- New Subdivision $ 440,572
- New Underground Service $ 251,795
- Service Upgrade $ 57,932
- 3-Phase Customer Connections $ 06,511

System Renewal:

- Decrepit Pole Replacement $ 674,069
- Substation Upgrades $ 1,286,696
- Distribution Transformer Replacement $ 129,205
- Infrastructure Upgrade $ 27,038

System Service:

- Meters $ 224,096

General Plant:

- Vehicle $ 541,414
- Technology $ 117,084

Major capital cost drivers: 2019

System Access:

- Pole Replacement $ 460,555
- New Subdivision $ 454,982
- New Underground Service $ 197,413
- Service Upgrade $ 71,695
- 3-Phase Customer Connections $116,174

System Renewal:

- Decrepit Pole Replacement $ 920,915
- Substation Upgrades $ 1,025,882
- Distribution Transformer Replacement $ 279,729
- Infrastructure Upgrade $ 54,886

System Service:

- Meters $ 155,506

General Plant:

- Vehicle $ 1,970
- Technology $ 16,145

Major capital cost drivers: 2020

System Access:

- Pole Replacement $ 863,087
- New Subdivision $ 235,304
- New Underground Service $ 170,596
- Service Upgrade $ 109,226
- 3-Phase Customer Connections $ 109,226

System Renewal:

- Decrepit Pole Replacement $ 1,086,294
- Substation Upgrades $ 1,063,358

- Distribution Transformer Replacement $ 71,399
- Infrastructure Upgrade $ 319,865

System Service:

- Meters $ 190,236

General Plant:

- Vehicle $ 112,200
- Technology $ 105,749

Major capital cost drivers: 2021

System Access:

- Pole Replacement $ 726,784
- New Subdivision $ 338,635
- New Underground Service $ 196,112
- Service Upgrade $ 135,415
- 3-Phase Customer Connections $ 115,188

System Renewal:

- Decrepit Pole Replacement $ 2,054,299
- Substation Upgrades $ 856,613
- Distribution Transformer Replacement $ 172,108
- Infrastructure Upgrade $ 40,471

System Service:

- Meters $ 14,449

General Plant:

- Vehicle $ 371,220
- Technology $ 30,311

Major capital cost drivers: 2022

System Access:

- Pole Replacement $ 1,608,190
- New Subdivision $ 319,964
- New Underground Service $ 333,144
- Service Upgrade $ 194,400

- 3-Phase Customer Connections $ 312,900

System Renewal:

- Decrepit Pole Replacement $ 1,703,258
- Substation Upgrades $ 1,849,560
- Distribution Transformer Replacement $ 167,703
- Infrastructure Upgrade $ 418,139

System Service:

- Meters $ 109,157

General Plant:

- Vehicle $ 490,809
- Technology $ 21,052

Major capital cost drivers: 2023

System Access:

- Pole Replacement $ 785,955
- New Subdivision $ 419,569
- New Underground Service $ 260,707
- Service Upgrade $ 77,490
- 3-Phase Customer Connections $ 142,495

System Renewal:

- Decrepit Pole Replacement $ 1,350,965
- Substation Upgrades $ 2,073,114
- Kincardine Load Balancing $ 266,693
- Fiberglass Transformer Base Replacement $ 221,221
- Distribution Transformer Replacement $ 266,693
- Infrastructure Upgrade $ 1,264,972

System Service:

- Meters $ 312,757

General Plant:

- Vehicle $ 551,093
- Technology $ 136,000

Major capital cost drivers: 2024

System Access:

- Pole Replacement $810,423
- New Subdivision $436,986
- New Underground Service $268,524
- Service Upgrade $79,985
- 3-Phase Customer Connections $148,218

System Renewal:

- Decrepit Pole Replacement $ 1,652,855
- Substation Upgrades $ 1,294,515
- Kincardine Load Balancing $ 1,090,214
- Fiberglass Transformer Base Replacement $ 230,321
- Distribution Transformer Replacement $ 242,719
- Infrastructure Upgrade $ 136,659

System Service:

- Meters $ 310,494

General Plant:

- Vehicle $ 250,000
- Technology $ 144,282

2.2. FIXED ASSET

2.2.1 Fixed Asset Continuity

WPIs Schedule presents a continuity schedule of its investment in capital assets, the associated accumulated amortization, and the net book value for each Capital USoA account for the 2018 to 2022 Actuals and 2023 Bridge and 2024 Test Years.

WPI attests that the OEB Appendices 2-BA continuity statements presented in Chapter 2 Appendices 2-AB and at Appendix 2C reconcile with the calculated depreciation expenses at section 2.2.3 and presented by asset account. The utility also attests that the net book value balances reported on Appendix 2-BA and balances reconcile with the rate base calculation. The Excel version of the OEB Appendices is filed in conjunction with WPIs application.

Information on year-over-year variance and explanations where variances exceed the materiality threshold is summarized in the previous section 2.1.3 and explained in detail in WPI's 2024 Distribution System Plan.

WPI does not have any asset retirement obligations (AROs) or any associated depreciation or accretion expenses related to an asset retirement obligation.

Accumulated Depreciation

WPI has adopted depreciation rates based on the Kinectrics Asset Depreciation Study, which can be found at the following secure link:

https://www.oeb.ca/oeb/_Documents/EB-2010-0178/Kinetrics-418033-OEB%20Asset%20Amortization-%20Final%20Rep.pdf

The depreciation rates, WPI's capitalization policy, methodology, and depreciation expenses continuity schedules are presented in section 2.2.3.

Below are the Fixed Asset Continuity Schedules for 2018 to 2024.

Table 3 – 2018 Continuity schedule

			Cost				Accumulated Depreciation						
Class [2]	Account [3]	Description [3]	Opening Balance [4]	Additions [4]	Disposals [4]	Closing Balance	Opening Balance [4]	Additions	Disposals [4]	Closing Balance	Net Book Value	Avg Gross Balance	Avg Acc Dep
	1609	Capital Contributions Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$693,578	$79,438	$0	$773,016	$394,852	$146,659	$0	$541,511	$231,505	$733,297	$468,182
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$227,769	$13,950	$0	$241,719	$0	$0	$0	$0	$241,719	$234,744	$0
47	1808	Buildings	$2,298,336	$43,732	$0	$2,342,068	$0	$46,404	$0	$46,404	$2,295,664	$2,320,202	$23,202
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$9,111,781	$1,364,887	$0	$10,476,668	$1,154,481	$217,649	$0	$1,372,131	$9,104,537	$9,794,224	$1,263,306
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$3,453,817	$1,084,505	-$31,347	$4,506,975	$590,867	$80,548	-$2,781	$668,634	$3,838,341	$3,980,396	$629,751
47	1830	Poles, Towers & Fixtures - Steel	$5,042,278	$1,617	-$9,231	$5,034,664	$675,383	$63,154	-$654	$737,883	$4,296,782	$5,038,471	$706,633
47	1835	Overhead Conductors & Devices	$11,200,640	$688,312	-$43,053	$11,845,899	$122,027	$178,275	-$5,342	$294,960	$11,550,939	$11,523,270	$208,494
47	1840	Underground Conduit	$2,386,212	$325,741	$0	$2,711,953	$873,008	$29,989	$0	$902,997	$1,808,956	$2,549,082	$888,003
47	1845	Underground Conductors & Devices	$8,255,950	$643,042	-$20,620	$8,878,372	$814,198	$143,302	-$10,990	$946,510	$7,931,862	$8,567,161	$880,354
47	1850	Line Transformers - Overhead & Underground	$6,399,592	$518,093	-$112,379	$6,805,306	$389,800	$169,275	-$23,847	$535,229	$6,270,078	$6,602,449	$462,514
47	1855	Services -Overhead	$2,137,054	$92,344	$0	$2,229,397	$1,209,263	$33,588	$0	$1,242,851	$986,546	$2,183,225	$1,226,057
47	1855	Services - Underground	$2,275,319	$182,469	$0	$2,457,788	$0	$52,590	$0	$52,590	$2,405,198	$2,366,554	$26,295
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$638,761	$40,036	$0	$678,797	$0	$18,822	$0	$18,822	$659,974	$658,779	$9,411
47	1860	Meters - Wholesale	$876,160	$40,050	$0	$916,210	$0	$35,847	$0	$35,847	$880,362	$896,185	$17,924
47	1860	Meters (Smart Meters)	$3,286,145	$221,296	-$87,971	$3,419,470	$0	$232,318	-$31,052	$201,266	$3,218,204	$3,352,808	$100,633
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$140,571	$19,649	$0	$160,220	$61,457	$15,040	$0	$76,497	$83,723	$150,396	$68,977
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$296,350	$37,647	-$36,491	$297,506	$231,696	$70,333	-$36,491	$265,537	$31,968	$296,928	$248,616
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$157,738	$95,840	-$33,850	$219,728	$227,213	$23,951	-$33,850	$217,314	$2,414	$188,733	$222,263
10	1930	Transportation Equipment - 3 Tons & Over	$1,317,390	$445,574	-$27,954	$1,735,011	$818,464	$104,542	-$13,343	$909,663	$825,348	$1,526,200	$864,063
8	1935	Stores Equipment	$49,259	$0	$0	$49,259	$40,936	$4,926	$0	$45,862	$3,397	$49,259	$43,399
8	1940	Tools, Shop & Garage Equipment	$294,982	$15,694	$0	$310,677	$24,819	$30,283	$0	$55,102	$255,575	$302,830	$39,960
8	1945	Measurement & Testing Equipment	$32,767	$0	$0	$32,767	$30,464	$3,277	$0	$33,740	-$973	$32,767	$32,102
8	1950	Power Operated Equipment	$41,017	$0	$0	$41,017	$36,851	$4,102	$0	$40,952	$65	$41,017	$38,901
8	1955	Communications Equipment	$0	$0	$0	$0	$0	$0	-$34,260	-$34,260	$34,260	$0	-$17,130
8	1955	Communication Equipment (Smart Meters)	$73,316	$18,973	-$51,163	$41,126	$41,126	$0		$41,126	$0	$57,221	$41,126
8	1960	Miscellaneous Equipment	$184,538	$61,782	-$3,325	$242,995	$0	$21,875	-$1,476	$20,399	$222,595	$213,766	$10,200
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$0	$212,572	$0	$212,572	$0	$7,086	$0	$7,085	$205,486	$106,286	$3,543
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,403,109	$1,225	-$121,737	-$7,523,621	-$729,514	-$145,615	$0	-$875,129	-$6,648,491	-$7,463,365	-$802,322
	2440	Deferred Revenue	-$1,849,336	-$465,133	$0	-$2,314,468	-$81,569	-$41,638	$0	-$123,207	-$2,191,261	-$2,081,902	-$102,388
	2005	Property Under Finance Lease	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	2055	WIP	$308,942	$0	$0	$308,942	$0	$0	$0	$0	$308,942	$308,942	$0
		Sub-Total	**$51,929,453**	**$5,783,334**	**-$579,120**	**$57,133,667**	**$6,925,820**	**$1,546,582**	**-$194,085**	**$8,278,316**	**$48,855,351**	**$54,531,560**	**$7,602,068**
		Less Socialized Renewable Energy Generation Investments (input as negative)				$0				$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)								$0	$0		$0
		Total PP&E	**$51,929,453**	**$5,783,334**	**-$579,120**	**$57,133,667**	**$6,925,820**	**$1,546,582**	**-$194,085**	**$8,278,316**	**$48,855,351**	$54,531,560	$7,602,068
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [6]											$46,929,492
		Total						$1,546,582					

Table 4 –2019 Continuity schedule

Year 2019

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [4]	Additions [4]	Disposals [4]	Closing Balance	Opening Balance [4]	Additions	Disposals [4]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0		$0	$0	$0		$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$773,016	$0	$0	$773,016	$541,511	$154,603	$0	$696,115	$76,901	$773,016	$618,813
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$241,719	$0	$0	$241,719	$0	$0	$0	$0	$241,719	$241,719	$0
47	1808	Buildings	$2,342,068	$17,320	$0	$2,359,388	$46,404	$47,015	$0	$93,419	$2,265,970	$2,350,728	$69,911
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$10,476,668	$1,124,971	-$112,772	$11,488,867	$1,372,131	$247,821	-$18,266	$1,601,685	$9,887,182	$10,982,767	$1,486,908
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$4,506,975	$945,435	-$43,326	$5,409,084	$668,634	$100,460	-$5,064	$764,031	$4,645,053	$4,958,030	$716,333
47	1830	Poles, Towers & Fixtures - Steel	$5,034,664	$3,751	-$3,751	$5,034,665	$737,883	$63,004	-$304	$800,582	$4,234,083	$5,034,665	$769,232
47	1835	Overhead Conductors & Devices	$11,845,899	$675,093	$254,686	$12,775,678	$294,960	$183,519	$20,900	$499,379	$12,276,299	$12,310,789	$397,170
47	1840	Underground Conduit	$2,711,953	$342,805	$0	$3,054,758	$902,397	$33,922	$0	$936,319	$2,117,839	$2,883,356	$919,958
47	1845	Underground Conductors & Devices	$8,878,372	$710,484	-$26,111	$9,562,745	$946,510	$154,329	-$17,097	$1,083,742	$8,479,003	$9,220,558	$1,015,126
47	1850	Line Transformers - Overhead & Underground	$6,805,306	$446,907	-$39,148	$7,213,065	$535,229	$176,638	-$12,357	$699,569	$6,513,496	$7,009,186	$617,399
47	1855	Services -Overhead	$2,229,397	$52,346	$0	$2,281,743	$1,242,851	$34,701	$0	$1,277,552	$1,004,191	$2,255,570	$1,260,202
47	1855	Services - Underground	$2,457,788	$213,669	$0	$2,671,457	$52,590	$56,992	$0	$109,582	$2,561,875	$2,564,623	$81,086
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$678,797	$79,801	$36,578	$795,176	$18,822	$19,489	$5,716	$44,027	$751,149	$736,986	$31,425
47	1860	Meters - Wholesale	$916,210	$0	$0	$916,210	$35,847	$36,648	$0	$72,496	$843,714	$916,210	$54,172
47	1860	Meters (Smart Meters)	$3,419,470	$102,988	-$102,988	$3,419,471	$201,266	$238,263	-$44,852	$394,678	$3,024,793	$3,419,470	$297,372
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$160,220	$8,504	$0	$168,724	$76,497	$16,447	$0	$92,944	$75,780	$164,472	$84,720
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$297,506	$17,765	$0	$315,270	$265,537	$61,278	$0	$326,815	-$11,544	$306,388	$296,176
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$219,728	$1,970	$0	$221,698	$217,314	$22,071	$0	$239,385	-$17,687	$220,713	$228,349
10	1930	Transportation Equipment - 3 Tons & Over	$1,735,011	$0	$0	$1,735,011	$909,663	$115,667	$0	$1,025,330	$709,681	$1,735,011	$967,496
8	1935	Stores Equipment	$49,259	$118,500	-$39,260	$128,499	$45,862	$14,777	-$39,260	$21,379	$107,120	$88,879	$33,621
8	1940	Tools, Shop & Garage Equipment	$310,677	$36,275	$0	$346,952	$55,102	$32,881	-$50	$87,933	$259,018	$328,814	$71,518
8	1945	Measurement & Testing Equipment	$32,767	$8,124	$0	$40,891	$33,740	$3,683	$0	$37,423	$3,468	$36,829	$35,582
8	1950	Power Operated Equipment	$41,017	$0	$0	$41,017	$40,952	$4,102	$0	$45,054	-$4,037	$41,017	$43,003
8	1955	Communications Equipment	$0	$0	$0	$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0	$0	$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$242,995	$9,699	-$2,361	$250,333	$20,399	$25,020	-$2,361	$43,059	$207,274	$246,664	$31,729
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,572	$363	$0	$212,935	$7,085	$14,184	$0	$21,269	$191,666	$212,753	$14,177
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,523,621	-$44,741	-$140,880	-$7,709,242	-$875,129	-$148,102	-$15,364	-$1,038,596	-$6,670,646	-$7,616,431	-$956,863
0	2440	Deferred Revenue	-$2,314,468	-$440,240	-$3,522	-$2,758,230	-$123,207	-$50,621	-$75	-$173,903	-$2,584,327	-$2,536,349	-$148,555
0	2005	Property Under Finance Lease	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
0	2055	WIP	$308,942	$50,095		$359,037	$0	$0		$0	$359,037	$333,990	$0
		Sub-Total	**$57,133,667**	**$4,481,883**	**-$222,855**	**$61,392,696**	**$8,278,316**	**$1,658,851**	**-$128,434**	**$9,808,733**	**$51,583,963**	**$59,263,181**	**$9,043,525**
		Less Socialized Renewable Energy Generation Investments (input as negative)				$0				$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)				$0				$0	$0	$0	$0
		Total PP&E	**$57,133,667**	**$4,481,883**	**-$222,855**	**$61,392,696**	**$8,278,316**	**$1,658,851**	**-$128,434**	**$9,808,733**	**$51,583,963**	$59,263,181	$9,043,525
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [6]											$50,219,657
		Total						**$1,658,851**					

Table 5 – 2020 Continuity schedule

Year 2020

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [4]	Additions [4]	Disposals [4]	Closing Balance	Opening Balance [4]	Additions	Disposals [4]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0		$0	$0	$0		$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$773,016	$37,700	$0	$810,716	$696,115	$158,373	$0	$854,488	-$43,772	$791,866	$775,301
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$241,719	$0	$0	$241,719	$0	$0	$0	$0	$241,719	$241,719	$0
47	1808	Buildings	$2,359,388	$161,261	$0	$2,520,649	$93,419	$48,800	$0	$142,219	$2,378,430	$2,440,019	$117,819
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$11,488,867	$1,060,458	$0	$12,549,325	$1,601,685	$267,091	$0	$1,868,776	$10,680,549	$12,019,096	$1,735,231
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$5,409,084	$1,097,090	-$17,318	$6,488,857	$764,031	$119,499	-$2,204	$881,326	$5,607,530	$5,948,970	$822,679
47	1830	Poles, Towers & Fixtures - Steel	$5,034,665	$0	-$3,754	$5,030,911	$800,582	$62,980	-$384	$863,178	$4,167,733	$5,032,788	$831,880
47	1835	Overhead Conductors & Devices	$12,775,678	$900,589	-$6,794	$13,669,473	$499,379	$203,581	-$1,411	$701,549	$12,967,924	$13,222,576	$600,464
47	1840	Underground Conduit	$3,054,758	$78,403	$0	$3,133,161	$936,919	$36,400	$0	$973,319	$2,159,842	$3,093,960	$955,119
47	1845	Underground Conductors & Devices	$9,562,745	$499,990	-$1,090	$10,061,644	$1,083,742	$163,564	-$745	$1,246,561	$8,815,084	$9,812,195	$1,165,151
47	1850	Line Transformers - Overhead & Underground	$7,213,065	$415,163	-$33,419	$7,594,810	$699,569	$186,352	-$10,227	$875,694	$6,719,116	$7,403,938	$787,631
47	1855	Services -Overhead	$2,281,743	$65,138	$0	$2,346,881	$1,277,552	$35,605	$0	$1,313,157	$1,033,724	$2,314,312	$1,295,354
47	1855	Services - Underground	$2,671,457	$311,837	$0	$2,983,294	$109,582	$62,831	$0	$172,413	$2,810,881	$2,827,376	$140,997
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$795,176	$60,066	-$3,815	$851,427	$44,027	$23,686	-$756	$66,958	$784,469	$823,301	$55,493
47	1860	Meters - Wholesale	$916,210	$210,532	-$22,916	$1,103,825	$72,496	$41,776	-$8,051	$106,221	$997,605	$1,010,018	$89,358
47	1860	Meters (Smart Meters)	$3,419,471	$159,002	-$87,574	$3,490,898	$394,678	$239,103	-$45,108	$588,673	$2,902,226	$3,455,184	$491,675
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$168,724	$0	$0	$168,724	$92,944	$16,872	$0	$109,816	$58,908	$168,724	$101,380
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$315,270	$68,049	$0	$383,319	$326,815	$69,859	$0	$396,674	-$13,354	$349,295	$361,744
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$221,698	$0	-$16,250	$205,448	$239,385	$23,795	-$16,166	$247,014	-$41,566	$213,573	$243,199
10	1930	Transportation Equipment - 3 Tons & Over	$1,735,011	$95,950	$0	$1,830,961	$1,025,330	$118,866	$0	$1,144,196	$686,765	$1,782,986	$1,084,763
8	1935	Stores Equipment	$128,499	$0	$0	$128,499	$21,379	$12,850	$0	$34,229	$94,270	$128,499	$27,804
8	1940	Tools, Shop & Garage Equipment	$346,952	$0	$0	$346,952	$87,933	$34,695	$0	$122,628	$224,323	$346,952	$105,281
8	1945	Measurement & Testing Equipment	$40,891	$0	$0	$40,891	$37,423	$4,089	$0	$41,512	-$621	$40,891	$39,468
8	1950	Power Operated Equipment	$41,017	$0	-$19,399	$21,618	$45,054	$6,042	-$19,399	$31,697	-$10,078	$31,318	$38,375
8	1955	Communications Equipment	$0	$0	$0	$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0	$0	$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$250,333	$0	$0	$250,333	$43,059	$25,033	$0	$68,092	$182,241	$250,333	$55,575
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,935	$0	$0	$212,935	$21,269	$14,196	$0	$35,465	$177,470	$212,935	$28,367
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,709,242	$0	$0	-$7,709,242	-$1,038,596	-$154,185	$0	-$1,192,780	-$6,516,461	-$7,709,242	-$1,115,688
0	2440	Deferred Revenue	-$2,758,230	-$417,673	$0	-$3,175,903	-$173,903	-$59,341	$0	-$233,245	-$2,942,658	-$2,967,067	-$203,574
0	2005	Property Under Finance Lease	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
0	2055	WIP	$359,037	-$172,927	$0	$186,110	$0	$0		$0	$186,110	$272,574	$0
		Sub-Total	**$61,392,696**	**$4,630,628**	**-$212,328**	**$65,810,995**	**$9,808,733**	**$1,762,411**	**-$104,451**	**$11,466,693**	**$54,344,302**	**$63,601,846**	**$10,637,713**
		Less Socialized Renewable Energy Generation Investments (input as negative)		$0	$0	$0				$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)		$0	$0	$0				$0	$0	$0	$0
		Total PP&E	**$61,392,696**	**$4,630,628**		**$65,810,995**	**$9,808,733**	**$1,762,411**	**-$104,451**	**$11,466,693**	**$54,344,302**	$63,601,846	$10,637,713
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [4]											$52,964,132
		Total						**$1,762,411**					

Table 6 – 2021 Continuity schedule

Year 2021

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [4]	Additions [4]	Disposals [4]	Closing Balance	Opening Balance [4]	Additions	Disposals [4]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0		$0	$0	$0		$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$810,716	$17,000	$0	$827,716	$854,488	$163,843	$0	$1,018,331	-$190,615	$819,216	$936,409
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$241,719	$3,881	$0	$245,600	$0	$0	$0	$0	$245,600	$243,659	$0
47	1808	Buildings	$2,520,649	$6,513	$0	$2,527,162	$142,219	$50,478		$192,697	$2,334,465	$2,523,906	$167,458
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0		$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$12,549,325	$40,013	$0	$12,589,338	$1,868,776	$279,318	$0	$2,148,095	$10,441,243	$12,569,331	$2,008,435
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$6,488,857	$1,252,305	$0	$7,741,161	$881,326	$142,300	-$2,657	$1,020,970	$6,720,192	$7,115,009	$951,148
47	1830	Poles, Towers & Fixtures - Steel	$5,030,911	$0	-$21,826	$5,009,085	$863,178	$63,159	-$3,295	$923,042	$4,086,043	$5,019,998	$893,110
47	1835	Overhead Conductors & Devices	$13,669,473	$736,278	-$4,460	$14,401,290	$701,549	$216,032	-$1,035	$916,546	$13,484,744	$14,035,382	$809,048
47	1840	Underground Conduit	$3,133,161	$30,713	$0	$3,163,874	$973,319	$37,041	$0	$1,010,360	$2,153,514	$3,148,517	$991,839
47	1845	Underground Conductors & Devices	$10,061,644	$333,096	$0	$10,394,741	$1,246,561	$170,470	$0	$1,417,030	$8,977,710	$10,228,192	$1,331,795
47	1850	Line Transformers - Overhead & Underground	$7,594,810	$267,489	-$24,618	$7,837,681	$875,694	$193,829	-$7,270	$1,062,253	$6,775,428	$7,716,246	$968,973
47	1855	Services -Overhead	$2,346,881	$59,798	$0	$2,406,679	$1,313,157	$36,566	$0	$1,349,723	$1,056,956	$2,376,780	$1,331,440
47	1855	Services - Underground	$2,983,294	$262,864	$0	$3,246,158	$172,413	$69,216	$0	$241,629	$3,004,530	$3,114,726	$207,021
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$851,427	$21,783	$0	$873,210	$66,958	$24,638	$0	$91,596	$781,614	$862,318	$79,277
47	1860	Meters - Wholesale	$1,103,825	$0	-$46,665	$1,057,160	$106,221	$46,020	-$18,913	$133,327	$923,833	$1,080,493	$119,774
47	1860	Meters (Smart Meters)	$3,490,898	$70,451	-$85,220	$3,476,129	$588,673	$240,756	-$49,140	$780,289	$2,695,841	$3,483,514	$684,481
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$168,724	$38,521	-$7,678	$199,566	$109,816	$19,566	-$6,937	$122,445	$77,121	$184,145	$116,131
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$383,319	$17,301	$0	$400,621	$396,674	$78,394	$0	$475,068	-$74,447	$391,970	$435,871
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$205,448	$41,594	$0	$247,042	$247,014	$22,624	$0	$269,638	-$22,596	$226,245	$258,326
10	1930	Transportation Equipment - 3 Tons & Over	$1,830,961	$329,626	$0	$2,160,587	$1,144,196	$133,052	$0	$1,277,247	$883,339	$1,995,774	$1,210,722
8	1935	Stores Equipment	$128,499	$22,044	$0	$150,543	$34,229	$13,952	$0	$48,181	$102,362	$139,521	$41,205
8	1940	Tools, Shop & Garage Equipment	$346,952	$0	$0	$346,952	$122,628	$34,695	$0	$157,324	$189,628	$346,952	$139,976
8	1945	Measurement & Testing Equipment	$40,891	$0	$0	$40,891	$41,512	$4,089	$0	$45,601	-$4,711	$40,891	$43,557
8	1950	Power Operated Equipment	$21,618	$0	$0	$21,618	$31,697	$2,162	$0	$33,859	-$12,240	$21,618	$32,778
8	1955	Communications Equipment	$0	$0	$0	$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0	$0	$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$250,333	$0	$0	$250,333	$68,092	$25,033	$0	$93,125	$157,207	$250,333	$80,609
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,935	$0	$0	$212,935	$35,465	$14,196	$0	$49,660	$163,274	$212,935	$42,562
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,709,242	$0	$0	-$7,709,242	-$1,192,780	-$154,185	$0	-$1,346,965	-$6,362,276	-$7,709,242	-$1,269,873
0	2440	Deferred Revenue	-$3,175,903	-$479,847	$0	-$3,655,750	-$233,245	-$68,317	$0	-$301,561	-$3,354,188	-$3,415,826	-$267,403
0	2005	Property Under Finance Lease	$0			$0	$0	$0		$0	$0	$0	$0
0	2055	WIP	$186,110	$1,682,799		$1,868,909	$0	$0		$0	$1,868,909	$1,027,510	$0
		Sub-Total	**$65,810,995**	**$4,754,223**	**-$190,468**	**$70,374,750**	**$11,466,693**	**$1,858,929**	**-$89,247**	**$13,236,375**	**$57,138,375**	**$68,092,873**	**$12,351,534**
		Less Socialized Renewable Energy Generation Investments (input as negative)				$0	$0			$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)				$0	$0			$0	$0	$0	$0
		Total PP&E	**$65,810,995**	**$4,754,223**	**-$190,468**	**$70,374,750**	**$11,466,693**	**$1,858,929**	**-$89,247**	**$13,236,375**	**$57,138,375**	$68,092,873	$12,351,534
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [6]											$55,741,338
		Total						**$1,858,929**					

Table 7 – 2022 Continuity schedule

Year 2022

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [5]	Additions [4]	Disposals [6]	Closing Balance	Opening Balance [5]	Additions	Disposals [6]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0		$0	$0	$0		$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$827,716	$54,123	$0	$881,839	$1,018,331	$170,956	$0	$1,189,287	-$307,448	$854,778	$1,103,809
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$245,600	$0		$245,600	$0	$0	$0	$0	$245,600	$245,600	$0
47	1808	Buildings	$2,527,162	$0		$2,527,162	$192,697	$50,543	$0	$243,240	$2,283,922	$2,527,162	$217,969
13	1810	Leasehold Improvements	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$12,589,338	$1,167,418		$13,756,755	$2,148,095	$292,734	$0	$2,440,829	$11,315,926	$13,173,046	$2,294,462
47	1825	Storage Battery Equipment	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$7,741,161	$2,221,294	-$11,970	$9,950,485	$1,020,970	$177,276	-$2,444	$1,195,802	$8,754,684	$8,845,823	$1,108,386
47	1830	Poles, Towers & Fixtures - Steel	$5,009,085	$0	-$2,183	$5,006,902	$923,042	$62,641	-$271	$985,412	$4,021,490	$5,007,993	$954,227
47	1835	Overhead Conductors & Devices	$14,401,290	$1,051,346	-$4,410	$15,448,227	$916,546	$229,713	-$1,131	$1,145,129	$14,303,098	$14,924,759	$1,030,838
47	1840	Underground Conduit	$3,163,874	$30,316	$0	$3,194,190	$1,010,360	$37,400	$0	$1,047,761	$2,146,430	$3,179,032	$1,029,060
47	1845	Underground Conductors & Devices	$10,394,741	$391,823	-$2,598	$10,783,965	$1,417,030	$176,554	-$1,924	$1,591,660	$9,192,305	$10,589,353	$1,504,345
47	1850	Line Transformers - Overhead & Underground	$7,837,681	$372,946	-$40,308	$8,170,320	$1,062,253	$201,612	-$10,409	$1,253,456	$6,916,864	$8,004,001	$1,157,854
47	1855	Services -Overhead	$2,406,679	$82,150	$0	$2,488,829	$1,349,723	$37,658	$0	$1,387,380	$1,101,449	$2,447,754	$1,368,552
47	1855	Services - Underground	$3,246,158	$487,807	$0	$3,733,966	$241,629	$77,557	$0	$319,186	$3,414,780	$3,490,062	$280,407
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$873,210	$27,550	$0	$900,760	$91,596	$25,342	$0	$116,938	$783,822	$886,985	$104,267
47	1860	Meters - Wholesale	$1,057,160	$0	$0	$1,057,160	$133,327	$42,286	$0	$175,614	$881,547	$1,057,160	$154,471
47	1860	Meters (Smart Meters)	$3,476,129	$110,203	-$56,117	$3,530,215	$780,289	$239,157	-$35,013	$984,432	$2,545,783	$3,503,172	$882,360
N/A	1905	Land	$1,635	$0		$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$199,566	$0		$199,566	$122,445	$19,957	$0	$142,402	$57,164	$199,566	$132,424
8	1915	Office Furniture & Equipment (5 years)	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$400,621	$38,707		$439,328	$475,068	$83,995	$0	$559,063	-$119,735	$419,974	$517,065
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$247,042	$65,447		$312,489	$269,638	$27,977	$0	$297,615	$14,875	$279,766	$283,626
10	1930	Transportation Equipment - 3 Tons & Over	$2,160,587	$425,362		$2,585,948	$1,277,247	$158,218	$0	$1,435,465	$1,150,483	$2,373,267	$1,356,356
8	1935	Stores Equipment	$150,543	$0		$150,543	$48,181	$15,054	$0	$63,235	$87,308	$150,543	$55,708
8	1940	Tools, Shop & Garage Equipment	$346,952	$19,638		$366,590	$157,324	$35,677	$0	$193,001	$173,589	$356,771	$175,162
8	1945	Measurement & Testing Equipment	$40,891	$11,950		$52,841	$45,601	$4,687	$0	$50,288	$2,553	$46,866	$47,945
8	1950	Power Operated Equipment	$21,618	$0		$21,618	$33,859	$2,162	$0	$36,021	-$14,402	$21,618	$34,340
8	1955	Communications Equipment	$0	$0		$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0		$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$250,333	$0		$250,333	$93,125	$25,033	$0	$118,159	$132,174	$250,333	$105,642
47	1970	Load Management Controls Customer Premises	$0	$0		$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,935	$0		$212,935	$49,660	$14,196	$0	$63,856	$149,079	$212,935	$56,758
47	1985	Miscellaneous Fixed Assets	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,709,242	$0		-$7,709,242	-$1,346,965	-$154,185	$0	-$1,501,150	-$6,208,091	-$7,709,242	-$1,424,058
0	2440	Deferred Revenue	-$3,655,750	-$496,170		-$4,151,920	-$301,561	-$78,077	$0	-$379,638	-$3,772,282	-$3,903,835	-$340,599
0	2005	Property Under Finance Lease	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0
0	2055	WIP	$1,868,909	-$199,742		$1,669,167	$0	$0	$0	$0	$1,669,167	$1,769,038	$0
		Sub-Total	**$70,374,750**	**$5,862,169**	**-$117,587**	**$76,119,333**	**$13,236,375**	**$1,976,122**	**-$51,191**	**$15,161,306**	**$60,958,026**	**$73,247,041**	**$14,198,841**
		Less Socialized Renewable Energy Generation Investments (input as negative)				$0				$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)				$0				$0	$0	$0	$0
		Total PP&E	**$70,374,750**	**$5,862,169**	**-$117,587**	**$76,119,333**	**$13,236,375**	**$1,976,122**	**-$51,191**	**$15,161,306**	**$60,958,026**	$73,247,041	$14,198,841
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [6]											$59,048,200
		Total						**$1,976,122**					

Table 8 – 2023 Continuity schedule

Year 2023

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [5]	Additions [4]	Disposals [6]	Closing Balance	Opening Balance [5]	Additions	Disposals [6]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$881,839	$76,000	$0	$957,839	$1,189,287	$183,968	$0	$1,373,254	-$415,415	$919,839	$1,281,270
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$245,600	$0	$0	$245,600	$0	$0	$0	$0	$245,600	$245,600	$0
47	1808	Buildings	$2,527,162	$195,000	$0	$2,722,162	$243,240	$52,493	$0	$295,734	$2,426,429	$2,624,662	$269,487
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$13,756,755	$2,423,114	$0	$16,179,869	$2,440,829	$332,629	$0	$2,773,458	$13,406,411	$14,968,312	$2,607,144
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$9,950,485	$1,145,592	$0	$11,096,077	$1,195,802	$210,466	$0	$1,406,267	$9,689,810	$10,523,281	$1,301,034
47	1830	Poles, Towers & Fixtures - Steel	$5,006,902	$0	$0	$5,006,902	$985,412	$62,586	$0	$1,047,999	$3,958,903	$5,006,902	$1,016,705
47	1835	Overhead Conductors & Devices	$15,448,227	$1,347,478	$0	$16,795,705	$1,145,129	$248,030	$0	$1,393,159	$15,402,545	$16,121,966	$1,269,144
47	1840	Underground Conduit	$3,194,190	$184,344	$0	$3,378,534	$1,047,761	$38,663	$0	$1,086,424	$2,292,111	$3,286,362	$1,067,092
47	1845	Underground Conductors & Devices	$10,783,965	$1,207,254	$0	$11,991,219	$1,591,660	$189,793	$0	$1,781,454	$10,209,765	$11,387,592	$1,686,557
47	1850	Line Transformers - Overhead & Underground	$8,170,320	$685,907	$0	$8,856,227	$1,253,456	$212,832	$0	$1,466,288	$7,389,939	$8,513,274	$1,359,872
47	1855	Services -Overhead	$2,488,829	$11,986	$0	$2,500,815	$1,387,380	$38,382	$0	$1,425,762	$1,075,052	$2,494,822	$1,406,571
47	1855	Services - Underground	$3,733,966	$620,561	$0	$4,354,527	$319,186	$89,872	$0	$409,058	$3,945,469	$4,044,246	$364,122
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$900,760	$0	$0	$900,760	$116,938	$25,736	$0	$142,674	$758,086	$900,760	$129,806
47	1860	Meters - Wholesale	$1,057,160	$16,319	$0	$1,073,479	$175,614	$42,613	$0	$218,227	$855,253	$1,065,320	$196,920
47	1860	Meters (Smart Meters)	$3,530,215	$341,677	$0	$3,871,892	$984,432	$246,737	$0	$1,231,169	$2,640,723	$3,701,054	$1,107,801
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$199,566	$10,000	$0	$209,566	$142,402	$20,457	$0	$162,859	$46,708	$204,566	$152,630
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$439,328	$136,000	$0	$575,328	$559,063	$101,466	$0	$660,528	-$85,200	$507,328	$609,795
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$312,489	$166,856	$0	$479,345	$297,615	$39,592	$0	$337,207	$142,139	$395,917	$317,411
10	1930	Transportation Equipment - 3 Tons & Over	$2,585,948	$504,237	$0	$3,090,185	$1,435,465	$189,204	$0	$1,624,670	$1,465,516	$2,838,067	$1,530,067
8	1935	Stores Equipment	$150,543	$0	$0	$150,543	$63,235	$15,054	$0	$78,290	$72,253	$150,543	$70,762
8	1940	Tools, Shop & Garage Equipment	$366,590	$60,000	$0	$426,590	$193,001	$39,659	$0	$232,660	$193,930	$396,590	$212,830
8	1945	Measurement & Testing Equipment	$52,841	$0	$0	$52,841	$50,288	$5,284	$0	$55,572	-$2,731	$52,841	$52,930
8	1950	Power Operated Equipment	$21,618	$0	$0	$21,618	$36,021	$2,162	$0	$38,182	-$16,564	$21,618	$37,101
8	1955	Communications Equipment	$0	$0	$0	$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0	$0	$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$250,333	$0	$0	$250,333	$118,159	$25,033	$0	$143,192	$107,141	$250,333	$130,675
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,935	$0	$0	$212,935	$63,856	$14,196	$0	$78,051	$134,883	$212,935	$70,954
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,709,242	$0	$0	-$7,709,242	-$1,501,150	-$154,185	$0	-$1,655,335	-$6,053,907	-$7,709,242	-$1,578,243
0	2440	Deferred Revenue	-$4,151,920	-$855,476	$0	-$5,007,396	-$379,638	-$91,593	$0	-$471,231	-$4,536,165	-$4,579,658	-$425,434
0	2005	Property Under Finance Lease	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
0	2055	WIP	$1,669,167	$0	$0	$1,669,167	$0	$0	$0	$0	$1,669,167	$1,669,167	$0
		Sub-Total	**$76,119,333**	**$8,276,849**	**$0**	**$84,396,182**	**$15,161,306**	**$2,181,129**	**$0**	**$17,342,435**	**$67,053,747**	**$80,257,757**	**$16,251,871**
		Less Socialized Renewable Energy Generation Investments (input as negative)		$0		$0				$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)		$0		$0				$0	$0	$0	$0
		Total PP&E	**$76,119,333**	**$8,276,849**	**$0**	**$84,396,182**	**$15,161,306**	**$2,181,129**	**$0**	**$17,342,435**	**$67,053,747**	$80,257,757	$16,251,871
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable [6]											$64,005,886
		Total						**$2,181,129**					

Table 9 – 2024 Continuity schedule

Year 2024

Class [2]	Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value	Avg Gross Balance	Avg Acc Dep
			Opening Balance [4]	Additions [4]	Disposals [4]	Closing Balance	Opening Balance [4]	Additions	Disposals [4]	Closing Balance			
0	1609	Capital Contributions Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	1611	Computer Software (Formally known as Account 1925)	$957,839	$0	$0	$957,839	$1,373,254	$191,568	$0	$1,564,822	-$606,983	$957,839	$1,469,038
CEC	1612	Land Rights (Formally known as Account 1906 and 1806)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N/A	1805	Land	$245,600	$0	$0	$245,600	$0	$0	$0	$0	$245,600	$245,600	$0
47	1808	Buildings	$2,722,162	$20,000	$0	$2,742,162	$295,734	$54,643	$0	$350,377	$2,391,786	$2,732,162	$323,055
13	1810	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1820	Distribution Station Equipment <50 kV	$16,179,869	$1,294,515	$0	$17,474,384	$2,773,458	$373,936	$0	$3,147,394	$14,326,990	$16,827,127	$2,960,426
47	1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1830	Poles, Towers & Fixtures -Wood	$11,096,077	$1,295,868	$0	$12,391,945	$1,406,267	$234,880	$0	$1,641,147	$10,750,798	$11,744,011	$1,523,707
47	1830	Poles, Towers & Fixtures - Steel	$5,006,902	$0	$0	$5,006,902	$1,047,399	$62,586	$0	$1,110,585	$3,896,317	$5,006,902	$1,079,292
47	1835	Overhead Conductors & Devices	$16,795,705	$1,344,980	$0	$18,140,684	$1,393,159	$268,741	$0	$1,661,901	$16,478,784	$17,468,194	$1,527,530
47	1840	Underground Conduit	$3,378,534	$344,689	$0	$3,723,223	$1,086,424	$41,775	$0	$1,128,199	$2,595,024	$3,550,879	$1,107,311
47	1845	Underground Conductors & Devices	$11,991,219	$884,431	$0	$12,875,649	$1,781,454	$207,224	$0	$1,988,677	$10,886,972	$12,433,434	$1,885,066
47	1850	Line Transformers - Overhead & Underground	$8,856,227	$1,034,543	$0	$9,890,770	$1,466,288	$234,337	$0	$1,700,625	$8,190,145	$9,373,499	$1,583,456
47	1855	Services -Overhead	$2,500,815	$24,624	$0	$2,525,439	$1,425,762	$38,663	$0	$1,464,426	$1,061,013	$2,513,127	$1,445,094
47	1855	Services - Underground	$4,354,527	$510,984	$0	$4,865,511	$409,058	$102,445	$0	$511,503	$4,354,008	$4,610,019	$460,280
47	1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$900,760	$0	$0	$900,760	$142,674	$25,736	$0	$168,410	$732,350	$900,760	$155,542
47	1860	Meters - Wholesale	$1,073,479	$16,878	$0	$1,090,357	$218,227	$43,277	$0	$261,503	$828,854	$1,081,918	$239,865
47	1860	Meters (Smart Meters)	$3,871,892	$377,643	$0	$4,249,535	$1,231,169	$270,714	$0	$1,501,883	$2,747,652	$4,060,714	$1,366,526
N/A	1905	Land	$1,635	$0	$0	$1,635	$0	$0	$0	$0	$1,635	$1,635	$0
47	1908	Buildings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	1915	Office Furniture & Equipment (10 years)	$209,566	$15,000	$0	$224,566	$162,859	$21,707	$0	$184,565	$40,001	$217,066	$173,712
8	1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1920	Computer Equipment - Hardware	$575,328	$144,282	$0	$719,610	$660,528	$129,494	$0	$790,022	-$70,412	$647,469	$725,275
45	1920	Computer Equip.-Hardware(Post Mar. 22/04)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
45.1	1920	Computer Equip.-Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	1930	Transportation Equipment - under 3 Tons	$479,345	$50,000	$0	$529,345	$337,207	$50,435	$0	$387,641	$141,704	$504,345	$362,424
10	1930	Transportation Equipment - 3 Tons & Over	$3,090,185	$200,000	$0	$3,290,185	$1,624,670	$212,679	$0	$1,837,349	$1,452,837	$3,190,185	$1,731,009
8	1935	Stores Equipment	$150,543	$0	$0	$150,543	$78,290	$15,054	$0	$93,344	$57,199	$150,543	$85,817
8	1940	Tools, Shop & Garage Equipment	$426,590	$61,000	$0	$487,590	$232,660	$45,709	$0	$278,369	$209,221	$457,090	$255,514
8	1945	Measurement & Testing Equipment	$52,841	$0	$0	$52,841	$55,572	$5,284	$0	$60,856	-$8,015	$52,841	$58,214
8	1950	Power Operated Equipment	$21,618	$0	$0	$21,618	$38,182	$2,162	$0	$40,344	-$18,726	$21,618	$39,263
8	1955	Communications Equipment	$0	$0	$0	$0	-$34,260	$0	$0	-$34,260	$34,260	$0	-$34,260
8	1955	Communication Equipment (Smart Meters)	$41,126	$0	$0	$41,126	$41,126	$0	$0	$41,126	$0	$41,126	$41,126
8	1960	Miscellaneous Equipment	$250,333	$0	$0	$250,333	$143,192	$25,033	$0	$168,225	$82,108	$250,333	$155,709
47	1970	Load Management Controls Customer Premises	$0	$0	$0	$0	-$1	$0	$0	-$1	$1	$0	-$1
47	1975	Load Management Controls Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1980	System Supervisor Equipment	$212,935	$0	$0	$212,935	$78,051	$14,196	$0	$92,247	$120,687	$212,935	$85,149
47	1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
47	1995	Contributions & Grants	-$7,709,242	$0	$0	-$7,709,242	-$1,655,335	-$154,185	$0	-$1,809,520	-$5,899,722	-$7,709,242	-$1,732,427
0	2440	Deferred Revenue	-$5,007,396	-$881,140	$0	-$5,888,536	-$471,231	-$108,959	$0	-$580,190	-$5,308,346	-$5,447,966	-$525,711
0	2005	Property Under Finance Lease	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
0	2055	WIP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Sub-Total	**$82,727,015**	**$6,738,296**	**$0**	**$89,465,311**	**$17,342,435**	**$2,409,135**	**$0**	**$19,751,570**	**$69,713,741**	**$86,096,163**	**$18,547,003**
		Less Socialized Renewable Energy Generation Investments (input as negative)				$0		$0		$0	$0	$0	$0
		Less Other Non Rate-Regulated Utility Assets (input as negative)				$0		$0		$0	$0	$0	$0
		Total PP&E	**$82,727,015**	**$6,738,296**	**$0**	**$89,465,311**	**$17,342,435**	**$2,409,135**	**$0**	**$19,751,570**	**$69,713,741**	$86,096,163	$18,547,003
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable[6]											$67,549,160
		Total						**$2,409,135**					

2.2.2 Depreciation Expenses

In accordance with the July 17, 2012, letter from the Board on Regulatory accounting policy direction regarding changes to depreciation expense and capitalization policies and as such, WPI has adopted the Kinetrics proposed useful lives and componentization on January 1, 2013. The revised methodology was included in WPI's 2018 Cost of Service rate application.

Continuity Statements of the historical and forecasted depreciation expenses are presented on the next page and are filed in Excel format along with WPIs application.

WPI confirms that it has applied the half-year rule to compute the net book value of Property, Plant and Equipment, and General Plant in the rate base.[1] Under the half-year rule, acquisitions and investments made during the year are amortized, assuming they entered service at the year's mid-point.
WPI's Depreciation rates and Capitalization Policy are presented below.

Capitalization Policy

WPI's capitalization policy has not changed since its last Cost of Service in 2013/2018 other than it now records capital assets at cost in accordance with MIFRS accounting principles as well as guidelines set out by the Ontario Energy Board, where applicable.
All expenditures by the Corporation are classified as either capital or operating expenditures. The intention of these classifications is to allocate costs across accounting periods in a manner that appropriately matches those costs with the related current and future economic benefits. The amount to be capitalized is the cost to acquire or construct a capital asset, including any ancillary costs incurred to place a capital asset into its intended state of operation. WPI does not currently capitalize interest on funds used for construction.
WPI's adherence to the capitalization policy can be described as follows.

- Assets that are intended to be used on an on-going basis and are expected to provide future economic benefit (generally considered to be greater than one year) will be capitalized.
- General Plant items with an estimated useful life greater than one year and valued at greater than $1000 will be capitalized.
- Expenditures that create a physical betterment or improvement of the asset (i.e. there is a significant increase in the physical output or service capacity, or the useful life of the capital asset is extended) will be capitalized.
- Maintenance services are contracted out.

Indirect overhead costs, such as general and administration costs that are not directly attributable to an asset, are not, nor have they ever been capitalized.

[1] MFR – Identification of historical depreciation practice and proposal for test year. Variances from half- year rule.

Table 10 - Depreciation Rates

Account	Description	As of
1611	Computer Software (Formally known as Account 1925)	5
1820	Distribution Station Equipment <50 kV	55
1830	Poles, Towers & Fixtures	40
1835	Overhead Conductors & Devices	60
1845	Underground Conductors & Devices	35
1850	Line Transformers	40
1855	Services (Overhead & Underground)	40
1860	Meters	25
1860	Meters (Smart Meters)	15
1915	Office Furniture & Equipment (10 years)	10
1920	Computer Equipment - Hardware	5
1935	Stores Equipment	10
1940	Tools, Shop & Garage Equipment	10
1945	Measurement & Testing Equipment	10
1995	Contributions & Grants	40

Burden Rates

The burden rate is forecasted for each operational area at the start of each fiscal year. Included in WPI's total vehicle rates are all vehicle related costs such as fuel, repairs, parts, insurance, licensing, depreciation, and all other items of expense necessary to keep the fleet in service. Also included in burden rates are Engineering and Billing rates. The table below presents the 2023 Burden Rates.

Table 11 – Burden Rates

2023 Burden Rates						
Productive Hours Calculation						
Number of Linemen/Lead hands/Foremen	12.5	Per 2023 Budget				
Chargeable OM&A Hours	6,324	Per 2023 Budget				
Non-Chargeable Hours	10,128	Per 2023 Budget				
Capital Budget Hours	10,754	Per 2023 Budget				
Total Budgeted Linemen Hours	27,206					
Total Chargeable Hours	17,078					
Regular Time Hours	26,000	2,080 hours per linemen x 12.5 linemen				
OT Hours Budgeted	1,206					
			Billable Rates		**IFRS Capitalization Rates**	
Labour Rate			103.41	152.47	103.41	152.47
Truck Burden			25.05	25.05	25.61	25.05
Eng Burden %			70%	47%	121%	46%
Billing Burden %			18%	14%	0%	0%

Table 12 – Depreciation Expenses 2018 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E at Jan 1, 201	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2018 Depreciation Expense	2010 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)	(i)	(m) = (h) - (i)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 693,578	$ -	$ 693,578	$ 79,438	$ 733,297	5	20.00%	$ 146,659	$ 146,659	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 227,769	$ -	$ 227,769	$ 13,950	$ 234,744			$ -	$ -	$ -
1808	Buildings	$ 2,298,336	$ -	$ 2,298,336	$ 43,732	$ 2,320,202	50	2.00%	$ 46,404	$ 46,404	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 9,111,781	$ -	$ 9,111,781	$ 1,364,887	$ 9,794,224	45	2.22%	$ 217,649	$ 217,649	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 3,453,817	$ (31,347)	$ 3,485,165	$ 1,084,505	$ 4,027,417	50	2.00%	$ 80,548	$ 80,548	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,042,278	$ (9,231)	$ 5,051,510	$ 1,617	$ 5,052,318	80	1.25%	$ 63,154	$ 63,154	$ -
1835	Overhead Conductors & Devices	$ 11,200,640	$ (43,053)	$ 11,243,693	$ 688,312	$ 11,587,849	65	1.54%	$ 178,275	$ 178,275	$ -
1840	Underground Conduit	$ 2,386,212	$ -	$ 2,386,212	$ 325,741	$ 2,549,082	85	1.18%	$ 29,989	$ 29,989	$ -
1845	Underground Conductors & Devices	$ 8,255,950	$ (20,620)	$ 8,276,571	$ 643,042	$ 8,598,092	60	1.67%	$ 143,302	$ 143,302	$ -
1850	Line Transformers - Overhead & Underground	$ 6,399,592	$ (112,379)	$ 6,511,971	$ 518,093	$ 6,771,017	40	2.50%	$ 169,275	$ 169,275	$ -
1855	Services -Overhead	$ 2,137,054	$ -	$ 2,137,054	$ 92,344	$ 2,183,225	65	1.54%	$ 33,588	$ 33,588	$ -
1855	Services - Underground	$ 2,275,319	$ -	$ 2,275,319	$ 182,469	$ 2,366,554	45	2.22%	$ 52,590	$ 52,590	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 638,761	$ -	$ 638,761	$ 40,036	$ 658,779	35	2.86%	$ 18,822	$ 18,822	$ -
1860	Meters - Wholesale	$ 876,160	$ -	$ 876,160	$ 40,050	$ 896,185	25	4.00%	$ 35,847	$ 35,847	$ -
1860	Meters (Smart Meters)	$ 3,286,145	$ (87,971)	$ 3,374,116	$ 221,296	$ 3,484,764	15	6.67%	$ 232,318	$ 232,318	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 140,571	$ -	$ 140,571	$ 19,649	$ 150,396	10	10.00%	$ 15,040	$ 15,040	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 296,350	$ (36,491)	$ 332,842	$ 37,647	$ 351,665	5	20.00%	$ 70,333	$ 70,333	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 157,738	$ (33,850)	$ 191,588	$ 95,840	$ 239,508	10	10.00%	$ 23,951	$ 23,951	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 1,317,390	$ (27,954)	$ 1,345,344	$ 445,574	$ 1,568,131	15	6.67%	$ 104,542	$ 104,542	$ -
1935	Stores Equipment	$ 49,259	$ -	$ 49,259	$ -	$ 49,259	10	10.00%	$ 4,926	$ 4,926	$ -
1940	Tools, Shop & Garage Equipment	$ 294,982	$ -	$ 294,982	$ 15,694	$ 302,830	10	10.00%	$ 30,283	$ 30,283	$ -
1945	Measurement & Testing Equipment	$ 32,767	$ -	$ 32,767	$ -	$ 32,767	10	10.00%	$ 3,277	$ 3,277	$ -
1950	Power Operated Equipment	$ 41,017	$ -	$ 41,017	$ -	$ 41,017	10	10.00%	$ 4,102	$ 4,102	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 73,316	$ (51,163)	$ 124,479	$ 18,973	$ 133,965			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 184,538	$ (3,325)	$ 187,863	$ 61,782	$ 218,754	10	10.00%	$ 21,875	$ 21,875	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ -	$ -	$ -	$ 212,572	$ 106,286	15	6.67%	$ 7,086	$ 7,086	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,403,109)	$ (121,737)	$ (7,281,372)	$ 1,225	$ (7,280,759)	50	2.00%	$ (145,615)	$ (145,615)	$ -
2440	Deferred Revenue	$ (1,849,336)	$ -	$ (1,849,336)	$ (465,133)	$ (2,081,902)	50	2.00%	$ (41,638)	$ (41,638)	$ -
2005	Property Under Finance Lease	$ -	$ -		$ -	$ -	4	25.00%	$ -	$ -	$ -
2055	WIP	$ 308,942	$ -		$ -	$ -			$ -	$ -	$ -
	Total	$ 51,929,453	$ (579,120)	$ 52,199,632	$ 5,783,334	$ 55,091,299			$ 1,546,582	$ 1,546,582	$ -

Table 13 – Depreciation Expenses 2019 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2019	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2011 Depreciation Expense	2011 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 773,016	$ -	$ 773,016	$ -	$ 773,016	5	20.00%	$ 154,603	$ 154,603	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 241,719	$ -	$ 241,719	$ -	$ 241,719			$ -	$ -	$ -
1808	Buildings	$ 2,342,068	$ -	$ 2,342,068	$ 17,320	$ 2,350,728	50	2.00%	$ 47,015	$ 47,015	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 10,476,668	$ (112,772)	$ 10,589,440	$ 1,124,971	$ 11,151,925	45	2.22%	$ 247,821	$ 247,821	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 4,506,975	$ (43,326)	$ 4,550,302	$ 945,435	$ 5,023,019	50	2.00%	$ 100,460	$ 100,460	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,034,664	$ (3,751)	$ 5,038,415	$ 3,751	$ 5,040,290	80	1.25%	$ 63,004	$ 63,004	$ -
1835	Overhead Conductors & Devices	$ 11,845,899	$ 254,686	$ 11,591,213	$ 675,093	$ 11,928,760	65	1.54%	$ 183,519	$ 183,519	$ -
1840	Underground Conduit	$ 2,711,953	$ -	$ 2,711,953	$ 342,805	$ 2,883,356	85	1.18%	$ 33,922	$ 33,922	$ -
1845	Underground Conductors & Devices	$ 8,878,372	$ (26,111)	$ 8,904,483	$ 710,484	$ 9,259,725	60	1.67%	$ 154,329	$ 154,329	$ -
1850	Line Transformers - Overhead & Underground	$ 6,805,306	$ (39,148)	$ 6,844,454	$ 446,907	$ 7,067,907	40	2.50%	$ 176,698	$ 176,698	$ -
1855	Services -Overhead	$ 2,229,397	$ -	$ 2,229,397	$ 52,346	$ 2,255,570	65	1.54%	$ 34,701	$ 34,701	$ -
1855	Services - Underground	$ 2,457,788	$ -	$ 2,457,788	$ 213,669	$ 2,564,623	45	2.22%	$ 56,992	$ 56,992	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 678,797	$ 36,578	$ 642,219	$ 79,801	$ 682,119	35	2.86%	$ 19,489	$ 19,489	$ -
1860	Meters - Wholesale	$ 916,210	$ -	$ 916,210	$ -	$ 916,210	25	4.00%	$ 36,648	$ 36,648	$ -
1860	Meters (Smart Meters)	$ 3,419,470	$ (102,988)	$ 3,522,458	$ 102,988	$ 3,573,952	15	6.67%	$ 238,263	$ 238,263	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 160,220	$ -	$ 160,220	$ 8,504	$ 164,472	10	10.00%	$ 16,447	$ 16,447	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 297,506	$ -	$ 297,506	$ 17,765	$ 306,388	5	20.00%	$ 61,278	$ 61,278	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 219,728	$ -	$ 219,728	$ 1,970	$ 220,713	10	10.00%	$ 22,071	$ 22,071	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 1,735,011	$ -	$ 1,735,011	$ -	$ 1,735,011	15	6.67%	$ 115,667	$ 115,667	$ -
1935	Stores Equipment	$ 49,259	$ (39,260)	$ 88,519	$ 118,500	$ 147,769	10	10.00%	$ 14,777	$ 14,777	$ -
1940	Tools, Shop & Garage Equipment	$ 310,677	$ -	$ 310,677	$ 36,275	$ 328,814	10	10.00%	$ 32,881	$ 32,881	$ -
1945	Measurement & Testing Equipment	$ 32,767	$ -	$ 32,767	$ 8,124	$ 36,829	10	10.00%	$ 3,683	$ 3,683	$ -
1950	Power Operated Equipment	$ 41,017	$ -	$ 41,017	$ -	$ 41,017	10	10.00%	$ 4,102	$ 4,102	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 242,995	$ (2,360)	$ 245,355	$ 9,899	$ 250,204	10	10.00%	$ 25,020	$ 25,020	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,572	$ -	$ 212,572	$ 363	$ 212,753	15	6.67%	$ 14,184	$ 14,184	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,523,621)	$ (140,880)	$ (7,382,741)	$ (44,741)	$ (7,405,111)	50	2.00%	$ (148,102)	$ (148,102)	$ -
2440	Deferred Revenue	$ (2,314,468)	$ (3,522)	$ (2,310,946)	$ (440,240)	$ (2,531,066)	50	2.00%	$ (50,621)	$ (50,621)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
2055	WIP	$ 308,942	$ -	$ 308,942	$ 50,095	$ 333,990			$ -	$ -	$ -
	Total	$ 57,133,667	$ (222,854)	$ 57,356,521	$ 4,481,883	$ 59,597,462			$ 1,658,851	$ 1,658,851	$ -

Table 14 – Depreciation Expenses 2020 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2020	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2012 Depreciation Expense	2012 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 773,016	$ -	$ 773,016	$ 37,700	$ 791,866	5	20.00%	$ 158,373	$ 158,373	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 241,719	$ -	$ 241,719	$ -	$ 241,719			$ -	$ -	$ -
1808	Buildings	$ 2,359,388	$ -	$ 2,359,388	$ 161,261	$ 2,440,019	50	2.00%	$ 48,800	$ 48,800	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 11,488,867	$ -	$ 11,488,867	$ 1,060,458	$ 12,019,096	45	2.22%	$ 267,091	$ 267,091	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 5,409,084	$ (17,318)	$ 5,426,402	$ 1,097,090	$ 5,974,947	50	2.00%	$ 119,499	$ 119,499	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,034,665	$ (3,754)	$ 5,038,419	$ -	$ 5,038,419	80	1.25%	$ 62,980	$ 62,980	$ -
1835	Overhead Conductors & Devices	$ 12,775,678	$ (6,794)	$ 12,782,472	$ 900,589	$ 13,232,767	65	1.54%	$ 203,581	$ 203,581	$ -
1840	Underground Conduit	$ 3,054,758	$ -	$ 3,054,758	$ 78,403	$ 3,093,960	85	1.18%	$ 36,400	$ 36,400	$ -
1845	Underground Conductors & Devices	$ 9,562,745	$ (1,090)	$ 9,563,835	$ 499,990	$ 9,813,830	60	1.67%	$ 163,564	$ 163,564	$ -
1850	Line Transformers - Overhead & Underground	$ 7,213,065	$ (33,419)	$ 7,246,484	$ 415,163	$ 7,454,066	40	2.50%	$ 186,352	$ 186,352	$ -
1855	Services -Overhead	$ 2,281,743	$ -	$ 2,281,743	$ 65,138	$ 2,314,312	65	1.54%	$ 35,605	$ 35,605	$ -
1855	Services - Underground	$ 2,671,457	$ -	$ 2,671,457	$ 311,837	$ 2,827,376	45	2.22%	$ 62,831	$ 62,831	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 795,176	$ (3,815)	$ 798,990	$ 60,066	$ 829,023	35	2.86%	$ 23,686	$ 23,686	$ -
1860	Meters - Wholesale	$ 916,210	$ (22,916)	$ 939,126	$ 210,532	$ 1,044,392	25	4.00%	$ 41,776	$ 41,776	$ -
1860	Meters (Smart Meters)	$ 3,419,471	$ (87,574)	$ 3,507,045	$ 159,002	$ 3,586,545	15	6.67%	$ 239,103	$ 239,103	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 168,724	$ -	$ 168,724	$ -	$ 168,724	10	10.00%	$ 16,872	$ 16,872	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 315,270	$ -	$ 315,270	$ 68,049	$ 349,295	5	20.00%	$ 69,859	$ 69,859	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 221,698	$ (16,250)	$ 237,948	$ -	$ 237,948	10	10.00%	$ 23,795	$ 23,795	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 1,735,011	$ -	$ 1,735,011	$ 95,950	$ 1,782,986	15	6.67%	$ 118,866	$ 118,866	$ -
1935	Stores Equipment	$ 128,499	$ -	$ 128,499	$ -	$ 128,499	10	10.00%	$ 12,850	$ 12,850	$ -
1940	Tools, Shop & Garage Equipment	$ 346,952	$ -	$ 346,952	$ -	$ 346,952	10	10.00%	$ 34,695	$ 34,695	$ -
1945	Measurement & Testing Equipment	$ 40,891	$ -	$ 40,891	$ -	$ 40,891	10	10.00%	$ 4,089	$ 4,089	$ -
1950	Power Operated Equipment	$ 41,017	$ (19,400)	$ 60,417	$ -	$ 60,417	10	10.00%	$ 6,042	$ 6,042	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 250,333	$ -	$ 250,333	$ -	$ 250,333	10	10.00%	$ 25,033	$ 25,033	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,935	$ -	$ 212,935	$ -	$ 212,935	15	6.67%	$ 14,196	$ 14,196	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,709,242)	$ -	$ (7,709,242)	$ -	$ (7,709,242)	50	2.00%	$ (154,185)	$ (154,185)	$ -
2440	Deferred Revenue	$ (2,758,230)	$ -	$ (2,758,230)	$ (417,673)	$ (2,967,067)	50	2.00%	$ (59,341)	$ (59,341)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
2055	WIP	$ 359,037	$ -	$ 359,037	$ (172,927)	$ 272,574			$ -	$ -	$ -
		$ -		$ -		$ -			$ -	$ -	$ -
	Total	$ 61,392,696	$ (212,329)	$ 61,605,025	$ 4,630,628	$ 63,920,339			$ 1,762,411	$ 1,762,411	$ -

Table 15 – Depreciation Expenses 2021 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2021	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2013 Depreciation Expense	2013 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 810,716	$ -	$ 810,716	$ 17,000	$ 819,216	5	20.00%	$ 163,843	$ 163,843	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 241,719	$ -	$ 241,719	$ 3,881	$ 243,659			$ -	$ -	$ -
1808	Buildings	$ 2,520,649	$ -	$ 2,520,649	$ 6,513	$ 2,523,906	50	2.00%	$ 50,478	$ 50,478	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 12,549,325	$ -	$ 12,549,325	$ 40,013	$ 12,569,331	45	2.22%	$ 279,318	$ 279,318	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 6,488,857	$ -	$ 6,488,857	$ 1,252,305	$ 7,115,009	50	2.00%	$ 142,300	$ 142,300	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,030,911	$ (21,826)	$ 5,052,737	$ -	$ 5,052,737	80	1.25%	$ 63,159	$ 63,159	$ -
1835	Overhead Conductors & Devices	$ 13,669,473	$ (4,460)	$ 13,673,934	$ 736,278	$ 14,042,072	65	1.54%	$ 216,032	$ 216,032	$ -
1840	Underground Conduit	$ 3,133,161	$ -	$ 3,133,161	$ 30,713	$ 3,148,517	85	1.18%	$ 37,041	$ 37,041	$ -
1845	Underground Conductors & Devices	$ 10,061,644	$ -	$ 10,061,644	$ 333,096	$ 10,228,192	60	1.67%	$ 170,470	$ 170,470	$ -
1850	Line Transformers - Overhead & Underground	$ 7,594,810	$ (24,618)	$ 7,619,428	$ 267,489	$ 7,753,172	40	2.50%	$ 193,829	$ 193,829	$ -
1855	Services -Overhead	$ 2,346,881	$ -	$ 2,346,881	$ 59,798	$ 2,376,780	65	1.54%	$ 36,566	$ 36,566	$ -
1855	Services - Underground	$ 2,983,294	$ -	$ 2,983,294	$ 262,864	$ 3,114,726	45	2.22%	$ 69,216	$ 69,216	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 851,427	$ -	$ 851,427	$ 21,783	$ 862,318	35	2.86%	$ 24,638	$ 24,638	$ -
1860	Meters - Wholesale	$ 1,103,825	$ (46,665)	$ 1,150,490	$ -	$ 1,150,490	25	4.00%	$ 46,020	$ 46,020	$ -
1860	Meters (Smart Meters)	$ 3,490,898	$ (85,220)	$ 3,576,118	$ 70,451	$ 3,611,344	15	6.67%	$ 240,756	$ 240,756	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 168,724	$ (7,678)	$ 176,402	$ 38,521	$ 195,663	10	10.00%	$ 19,566	$ 19,566	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 383,319	$ -	$ 383,319	$ 17,301	$ 391,970	5	20.00%	$ 78,394	$ 78,394	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 205,448	$ -	$ 205,448	$ 41,594	$ 226,245	10	10.00%	$ 22,624	$ 22,624	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 1,830,961	$ -	$ 1,830,961	$ 329,626	$ 1,995,774	15	6.67%	$ 133,052	$ 133,052	$ -
1935	Stores Equipment	$ 128,499	$ -	$ 128,499	$ 22,044	$ 139,521	10	10.00%	$ 13,952	$ 13,952	$ -
1940	Tools, Shop & Garage Equipment	$ 346,952	$ -	$ 346,952	$ -	$ 346,952	10	10.00%	$ 34,695	$ 34,695	$ -
1945	Measurement & Testing Equipment	$ 40,891	$ -	$ 40,891	$ -	$ 40,891	10	10.00%	$ 4,089	$ 4,089	$ -
1950	Power Operated Equipment	$ 21,618	$ -	$ 21,618	$ -	$ 21,618	10	10.00%	$ 2,162	$ 2,162	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 250,333	$ -	$ 250,333	$ -	$ 250,333	10	10.00%	$ 25,033	$ 25,033	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,935	$ -	$ 212,935	$ -	$ 212,935	15	6.67%	$ 14,196	$ 14,196	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,709,242)	$ -	$ (7,709,242)	$ -	$ (7,709,242)	50	2.00%	$ (154,185)	$ (154,185)	$ -
2440	Deferred Revenue	$ (3,175,903)	$ -	$ (3,175,903)	$ (479,847)	$ (3,415,826)	50	2.00%	$ (68,317)	$ (68,317)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
2055	WIP	$ 186,110	$ -	$ 186,110	$ 1,682,799	$ 1,027,510			$ -	$ -	$ -
				$ -		$ -			$ -		$ -
	Total	$ 65,810,995	$ (190,468)	$ 66,001,463	$ 4,754,223	$ 68,378,574			$ 1,858,929	$ 1,858,929	$ -

Table 16 – Depreciation Expenses 2022 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2022	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2013 Depreciation Expense	2013 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 827,716	$ -	$ 827,716	$ 54,123	$ 854,778	5	20.00%	$ 170,956	$ 170,956	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 245,600	$ -	$ 245,600	$ -	$ 245,600			$ -	$ -	$ -
1808	Buildings	$ 2,527,162	$ -	$ 2,527,162	$ -	$ 2,527,162	50	2.00%	$ 50,543	$ 50,543	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 12,589,338	$ -	$ 12,589,338	$ 1,167,418	$ 13,173,046	45	2.22%	$ 292,734	$ 292,734	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 7,741,161	$ (11,970)	$ 7,753,132	$ 2,221,294	$ 8,863,779	50	2.00%	$ 177,276	$ 177,276	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,009,085	$ (2,183)	$ 5,011,268	$ -	$ 5,011,268	80	1.25%	$ 62,641	$ 62,641	$ -
1835	Overhead Conductors & Devices	$ 14,401,290	$ (4,410)	$ 14,405,701	$ 1,051,346	$ 14,931,374	65	1.54%	$ 229,713	$ 229,713	$ -
1840	Underground Conduit	$ 3,163,874	$ -	$ 3,163,874	$ 30,316	$ 3,179,032	85	1.18%	$ 37,400	$ 37,400	$ -
1845	Underground Conductors & Devices	$ 10,394,741	$ (2,598)	$ 10,397,339	$ 391,823	$ 10,593,251	60	1.67%	$ 176,554	$ 176,554	$ -
1850	Line Transformers - Overhead & Underground	$ 7,837,681	$ (40,308)	$ 7,877,989	$ 372,946	$ 8,064,462	40	2.50%	$ 201,612	$ 201,612	$ -
1855	Services -Overhead	$ 2,406,679	$ -	$ 2,406,679	$ 82,150	$ 2,447,754	65	1.54%	$ 37,658	$ 37,658	$ -
1855	Services - Underground	$ 3,246,158	$ -	$ 3,246,158	$ 487,807	$ 3,490,062	45	2.22%	$ 77,557	$ 77,557	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 873,210	$ -	$ 873,210	$ 27,550	$ 886,985	35	2.86%	$ 25,342	$ 25,342	$ -
1860	Meters - Wholesale	$ 1,057,160	$ -	$ 1,057,160	$ -	$ 1,057,160	25	4.00%	$ 42,286	$ 42,286	$ -
1860	Meters (Smart Meters)	$ 3,476,129	$ (56,117)	$ 3,532,246	$ 110,203	$ 3,587,348	15	6.67%	$ 239,157	$ 239,157	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 199,566	$ -	$ 199,566	$ -	$ 199,566	10	10.00%	$ 19,957	$ 19,957	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 400,621	$ -	$ 400,621	$ 38,707	$ 419,974	5	20.00%	$ 83,995	$ 83,995	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 247,042	$ -	$ 247,042	$ 65,447	$ 279,766	10	10.00%	$ 27,977	$ 27,977	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 2,160,587	$ -	$ 2,160,587	$ 425,362	$ 2,373,267	15	6.67%	$ 158,218	$ 158,218	$ -
1935	Stores Equipment	$ 150,543	$ -	$ 150,543	$ -	$ 150,543	10	10.00%	$ 15,054	$ 15,054	$ -
1940	Tools, Shop & Garage Equipment	$ 346,952	$ -	$ 346,952	$ 19,638	$ 356,771	10	10.00%	$ 35,677	$ 35,677	$ -
1945	Measurement & Testing Equipment	$ 40,891	$ -	$ 40,891	$ 11,950	$ 46,866	10	10.00%	$ 4,687	$ 4,687	$ -
1950	Power Operated Equipment	$ 21,618	$ -	$ 21,618	$ -	$ 21,618	10	10.00%	$ 2,162	$ 2,162	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 250,333	$ -	$ 250,333	$ -	$ 250,333	10	10.00%	$ 25,033	$ 25,033	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,935	$ -	$ 212,935	$ -	$ 212,935	15	6.67%	$ 14,196	$ 14,196	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,709,242)	$ -	$ (7,709,242)	$ -	$ (7,709,242)	50	2.00%	$ (154,185)	$ (154,185)	$ -
2440	Deferred Revenue	$ (3,655,750)	$ -	$ (3,655,750)	$ (496,170)	$ (3,903,835)	50	2.00%	$ (78,077)	$ (78,077)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
				$ -		$ -			$ -		$ -
	Total	$ 70,374,750	$ (117,587)	$ 70,492,337	$ 5,862,169	$ 73,423,422			$ 1,976,122	$ 1,976,122	$ -

Table 17 – Depreciation Expenses 2023 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2023	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2013 Depreciation Expense	2013 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 881,839	$ -	$ 881,839	$ 76,000	$ 919,839	5	20.00%	$ 183,968	$ 183,968	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 245,600	$ -	$ 245,600	$ -	$ 245,600			$ -	$ -	$ -
1808	Buildings	$ 2,527,162	$ -	$ 2,527,162	$ 195,000	$ 2,624,662	50	2.00%	$ 52,493	$ 52,493	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 13,756,755	$ -	$ 13,756,755	$ 2,423,114	$ 14,968,312	45	2.22%	$ 332,629	$ 332,629	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 9,950,485	$ -	$ 9,950,485	$ 1,145,592	$ 10,523,281	50	2.00%	$ 210,466	$ 210,466	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,006,902	$ -	$ 5,006,902	$ -	$ 5,006,902	80	1.25%	$ 62,586	$ 62,586	$ -
1835	Overhead Conductors & Devices	$ 15,448,227	$ -	$ 15,448,227	$ 1,347,478	$ 16,121,966	65	1.54%	$ 248,030	$ 248,030	$ -
1840	Underground Conduit	$ 3,194,190	$ -	$ 3,194,190	$ 184,344	$ 3,286,362	85	1.18%	$ 38,663	$ 38,663	$ -
1845	Underground Conductors & Devices	$ 10,783,965	$ -	$ 10,783,965	$ 1,207,254	$ 11,387,592	60	1.67%	$ 189,793	$ 189,793	$ -
1850	Line Transformers - Overhead & Underground	$ 8,170,320	$ -	$ 8,170,320	$ 685,907	$ 8,513,274	40	2.50%	$ 212,832	$ 212,832	$ -
1855	Services -Overhead	$ 2,488,829	$ -	$ 2,488,829	$ 11,986	$ 2,494,822	65	1.54%	$ 38,382	$ 38,382	$ -
1855	Services - Underground	$ 3,733,966	$ -	$ 3,733,966	$ 620,561	$ 4,044,246	45	2.22%	$ 89,872	$ 89,872	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 900,760	$ -	$ 900,760	$ -	$ 900,760	35	2.86%	$ 25,736	$ 25,736	$ -
1860	Meters - Wholesale	$ 1,057,160	$ -	$ 1,057,160	$ 16,319	$ 1,065,320	25	4.00%	$ 42,613	$ 42,613	$ -
1860	Meters (Smart Meters)	$ 3,530,215	$ -	$ 3,530,215	$ 341,677	$ 3,701,054	15	6.67%	$ 246,737	$ 246,737	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 199,566	$ -	$ 199,566	$ 10,000	$ 204,566	10	10.00%	$ 20,457	$ 20,457	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 439,328	$ -	$ 439,328	$ 136,000	$ 507,328	5	20.00%	$ 101,466	$ 101,466	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 312,489	$ -	$ 312,489	$ 166,856	$ 395,917	10	10.00%	$ 39,592	$ 39,592	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 2,585,948	$ -	$ 2,585,948	$ 504,237	$ 2,838,067	15	6.67%	$ 189,204	$ 189,204	$ -
1935	Stores Equipment	$ 150,543	$ -	$ 150,543	$ -	$ 150,543	10	10.00%	$ 15,054	$ 15,054	$ -
1940	Tools, Shop & Garage Equipment	$ 366,590	$ -	$ 366,590	$ 60,000	$ 396,590	10	10.00%	$ 39,659	$ 39,659	$ -
1945	Measurement & Testing Equipment	$ 52,841	$ -	$ 52,841	$ -	$ 52,841	10	10.00%	$ 5,284	$ 5,284	$ -
1950	Power Operated Equipment	$ 21,618	$ -	$ 21,618	$ -	$ 21,618	10	10.00%	$ 2,162	$ 2,162	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 250,333	$ -	$ 250,333	$ -	$ 250,333	10	10.00%	$ 25,033	$ 25,033	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,935	$ -	$ 212,935	$ -	$ 212,935	15	6.67%	$ 14,196	$ 14,196	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,709,242)	$ -	$ (7,709,242)	$ -	$ (7,709,242)	50	2.00%	$ (154,185)	$ (154,185)	$ -
2440	Deferred Revenue	$ (4,151,920)	$ -	$ (4,151,920)	$ (855,476)	$ (4,579,658)	50	2.00%	$ (91,593)	$ (91,593)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
2055	WIP	$ 1,669,167	$ -	$ 1,669,167	$ -	$ 1,669,167			$ -	$ -	$ -
etc.				$ -		$ -			$ -	$ -	$ -
				$ -		$ -			$ -	$ -	$ -
	Total	$ 76,119,333	$ -	$ 76,119,333	$ 8,276,849	$ 80,257,757			$ 2,181,129	$ 2,181,129	$ -

Table 18 – Depreciation Expenses 2024 (App 2-C)

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2023	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	2013 Depreciation Expense	2013 Depreciation Expense per Appendix 2-B Fixed Assets, Column K	Variance 2
		(a)	(b)	(c)	(d)	(e) = (c) + ½ x (d) 1	(f)	(g) = 1 / (f)	(h) = (e) / (f)		(m) = (h) - (l)
1609	Capital Contributions Paid	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1611	Computer Software (Formally known as Account 1925)	$ 957,839	$ -	$ 957,839	$ -	$ 957,839	5	20.00%	$ 191,568	$ 191,568	$ -
1612	Land Rights (Formally known as Account 1906 and 1806)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1805	Land	$ 245,600	$ -	$ 245,600	$ -	$ 245,600			$ -	$ -	$ -
1808	Buildings	$ 2,722,162	$ -	$ 2,722,162	$ 20,000	$ 2,732,162	50	2.00%	$ 54,643	$ 54,643	$ -
1810	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1815	Transformer Station Equipment >50 kV	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1820	Distribution Station Equipment <50 kV	$ 16,179,869	$ -	$ 16,179,869	$ 1,294,515	$ 16,827,127	45	2.22%	$ 373,936	$ 373,936	$ -
1825	Storage Battery Equipment	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1830	Poles, Towers & Fixtures -Wood	$ 11,096,077	$ -	$ 11,096,077	$ 1,295,868	$ 11,744,011	50	2.00%	$ 234,880	$ 234,880	$ -
1830	Poles, Towers & Fixtures - Steel	$ 5,006,902	$ -	$ 5,006,902	$ -	$ 5,006,902	80	1.25%	$ 62,586	$ 62,586	$ -
1835	Overhead Conductors & Devices	$ 16,795,705	$ -	$ 16,795,705	$ 1,344,980	$ 17,468,194	65	1.54%	$ 268,741	$ 268,741	$ -
1840	Underground Conduit	$ 3,378,534	$ -	$ 3,378,534	$ 344,689	$ 3,550,879	85	1.18%	$ 41,775	$ 41,775	$ -
1845	Underground Conductors & Devices	$ 11,991,219	$ -	$ 11,991,219	$ 884,431	$ 12,433,434	60	1.67%	$ 207,224	$ 207,224	$ -
1850	Line Transformers - Overhead & Underground	$ 8,856,227	$ -	$ 8,856,227	$ 1,034,543	$ 9,373,499	40	2.50%	$ 234,337	$ 234,337	$ -
1855	Services -Overhead	$ 2,500,815	$ -	$ 2,500,815	$ 24,624	$ 2,513,127	65	1.54%	$ 38,663	$ 38,663	$ -
1855	Services - Underground	$ 4,354,527	$ -	$ 4,354,527	$ 510,984	$ 4,610,019	45	2.22%	$ 102,445	$ 102,445	$ -
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$ 900,760	$ -	$ 900,760	$ -	$ 900,760	35	2.86%	$ 25,736	$ 25,736	$ -
1860	Meters - Wholesale	$ 1,073,479	$ -	$ 1,073,479	$ 16,878	$ 1,081,918	25	4.00%	$ 43,277	$ 43,277	$ -
1860	Meters (Smart Meters)	$ 3,871,892	$ -	$ 3,871,892	$ 377,643	$ 4,060,714	15	6.67%	$ 270,714	$ 270,714	$ -
1905	Land	$ 1,635	$ -	$ 1,635	$ -	$ 1,635			$ -	$ -	$ -
1908	Buildings & Fixtures	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1910	Leasehold Improvements	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1915	Office Furniture & Equipment (10 years)	$ 209,566	$ -	$ 209,566	$ 15,000	$ 217,066	10	10.00%	$ 21,707	$ 21,707	$ -
1915	Office Furniture & Equipment (5 years)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equipment - Hardware	$ 575,328	$ -	$ 575,328	$ 144,282	$ 647,469	5	20.00%	$ 129,494	$ 129,494	$ -
1920	Computer Equip.-Hardware(Post Mar. 22/04)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1920	Computer Equip.-Hardware(Post Mar. 19/07)	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1930	Transportation Equipment - under 3 Tons	$ 479,345	$ -	$ 479,345	$ 50,000	$ 504,345	10	10.00%	$ 50,435	$ 50,435	$ -
1930	Transportation Equipment - 3 Tons & Over	$ 3,090,185	$ -	$ 3,090,185	$ 200,000	$ 3,190,185	15	6.67%	$ 212,679	$ 212,679	$ -
1935	Stores Equipment	$ 150,543	$ -	$ 150,543	$ -	$ 150,543	10	10.00%	$ 15,054	$ 15,054	$ -
1940	Tools, Shop & Garage Equipment	$ 426,590	$ -	$ 426,590	$ 61,000	$ 457,090	10	10.00%	$ 45,709	$ 45,709	$ -
1945	Measurement & Testing Equipment	$ 52,841	$ -	$ 52,841	$ -	$ 52,841	10	10.00%	$ 5,284	$ 5,284	$ -
1950	Power Operated Equipment	$ 21,618	$ -	$ 21,618	$ -	$ 21,618	10	10.00%	$ 2,162	$ 2,162	$ -
1955	Communications Equipment	$ -	$ -	$ -	$ -	$ -	10	10.00%	$ -	$ -	$ -
1955	Communication Equipment (Smart Meters)	$ 41,126	$ -	$ 41,126	$ -	$ 41,126			$ -	$ -	$ -
1960	Miscellaneous Equipment	$ 250,333	$ -	$ 250,333	$ -	$ 250,333	10	10.00%	$ 25,033	$ 25,033	$ -
1970	Load Management Controls Customer Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1975	Load Management Controls Utility Premises	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1980	System Supervisor Equipment	$ 212,935	$ -	$ 212,935	$ -	$ 212,935	15	6.67%	$ 14,196	$ 14,196	$ -
1985	Miscellaneous Fixed Assets	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1990	Other Tangible Property	$ -	$ -	$ -	$ -	$ -			$ -	$ -	$ -
1995	Contributions & Grants	$ (7,709,242)	$ -	$ (7,709,242)	$ -	$ (7,709,242)	50	2.00%	$ (154,185)	$ (154,185)	$ -
2440	Deferred Revenue	$ (5,007,396)	$ -	$ (5,007,396)	$ (881,140)	$ (5,447,966)	50	2.00%	$ (108,959)	$ (108,959)	$ -
2005	Property Under Finance Lease	$ -	$ -	$ -	$ -	$ -	4	25.00%	$ -	$ -	$ -
				$ -		$ -			$ -	$ -	$ -
	Total	$ 82,727,015	$ -	$ 82,727,015	$ 6,738,296	$ 86,096,163			$ 2,409,135	$ 2,409,135	$ -

2.2.3 Summary of Capital Expenditure and Contribution

The tables below illustrate the gross fixed additions resulting from the capital investment by WPI from 2018 Board Approved to 2024 for the four OEB categories. WPI notes that it does not have any work in progress (WIP) and confirms that the capital expenditures below represent in-service additions.

Table 19 – Gross Fixed Asset Additions

Category	2018			2019			2020		
	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.
	$ '000		%	$ '000		%	$ '000		%
System Access									
Gross Capital Spend	1,258	1,643	30.60%	1,346	1,356	0.74%	1,353	1,617	19.51%
Capital Contributions	-508	-465	-8.46%	-341	-240	-29.62%	-341	-398	16.72%
Net Capital Expenditures	750	1,178	57.07%	1,005	1,116	11.04%	1,012	1,219	20.45%
System Renewal									
Gross Capital Spend	3,232	3,220	-0.37%	2,964	3,051	2.94%	3,159	2,947	-6.71%
Capital Contributions	0	0		0	-33	-	0	-99	-
Net Capital Expenditures	3,232	3,220	-0.37%	2,964	3,018	1.82%	3,159	2,848	-9.84%
System Service									
Gross Capital Spend	382	437	14.40%	67	160	138.81%	70	233	232.86%
Capital Contributions	0	0	-	0	-22	-	0	-4	-
Net Capital Expenditures	382	437	14.40%	67	138	105.97%	70	229	227.14%
General Plant									
Gross Capital Spend	585	948	62.05%	350	350	0.00%	590	425	-27.97%
Capital Contributions	0	0	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%
Net Capital Expenditures	585	948	62.05%	350	350	0.00%	590	425	-27.97%
Total Expenditure, Gross	5,457	6,248	14.50%	4,727	4,917	4.02%	5,172	5,222	0.97%
Total Capital Contribution	-508	-465	-8.46%	-341	-295	-13.49%	-341	-501	46.92%
Total Expenditure, Net	4,949	5,783	16.85%	4,386	4,622	5.38%	4,831	4,721	-2.28%
System O&M	1,968	1,949	-0.92%	2,007	2,135	6.39%	2,047	2,255	10.16%

Table 20 – Gross Fixed Asset Additions (Cont'd)

Category	2021			2022			2023		
	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.
	$ '000		%	$ '000		%	$ '000		%
System Access									
Gross Capital Spend	1,359	1,349	-0.74%	1,368	2,813	105.63%	1,803	N/A	N/A
Capital Contributions	-341	-480	40.76%	-341	-529	55.13%	-826	N/A	N/A
Net Capital Expenditures	1,018	869	-14.64%	1,027	2,284	122.40%	977	N/A	N/A
System Renewal									
Gross Capital Spend	3,450	1,660	-51.88%	3,467	2,860	-17.51%	5,748	N/A	N/A
Capital Contributions	0	0	-	0	-7		0	N/A	N/A
Net Capital Expenditures	3,450	1,660	-51.88%	3,467	2,853	-17.71%	5,748	N/A	N/A
System Service									
Gross Capital Spend	70	66	-5.71%	70	342	388.14%	510	N/A	N/A
Capital Contributions	0	0	-	0	-3	-	-30	N/A	N/A
Net Capital Expenditures	70	66	-5.71%	70	339	383.86%	480	N/A	N/A
General Plant									
Gross Capital Spend	95	476	401.56%	570	543	-4.66%	1,072	N/A	N/A
Capital Contributions	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	N/A	N/A
Net Capital Expenditures	95	476	401.56%	570	543	-4.66%	1,072	N/A	N/A
Total Expenditure, Gross	4,974	3,551	-28.60%	5,475	6,558	19.78%	9,133	N/A	N/A
Total Capital Contribution	-341	-480	40.76%	-341	-539	58.06%	-856	N/A	N/A
Total Expenditure, Net	4,633	3,071	-33.70%	5,134	6,019	17.24%	8,277	N/A	N/A
System O&M	2,088	2,056	-1.55%	2,130	2,654	24.61%	2,562	N/A	N/A

Table 21 – Gross Fixed Asset Additions (Cont'd)

Category	Forecast				
	2024	**2025**	**2026**	**2027**	**2028**
System Access					
Gross Capital Spend	1,794	1,862	1,891	1,947	2,003
Capital Contributions	- 850	- 876	- 893	- 911	- 929
Net Capital Expenditures	913	987	999	1,034	1,075
System Renewal					
Gross Capital Spend	4,982	5,193	5,269	5,411	5,433
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	4,982	5,193	5,269	5,411	5,433
System Service					
Gross Capital Spend	353	373	377	391	406
Capital Contributions	- 31	- 32	- 32	- 33	- 34
Net Capital Expenditures	322	341	345	358	372
General Plant					
Gross Capital Spend	490	582	745	709	608
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	490	582	745	709	608
Total Expenditure, Gross	**7,619**	**8,010**	**8,282**	**8,458**	**8,450**
Total Capital Contribution	**- 881**	**- 908**	**- 925**	**- 944**	**- 963**
Total Expenditure, Net	**6,738**	**7,102**	**7,357**	**7,514**	**7,487**
System O&M	2,585	2,650	2,716	2,784	2,853

Summary of Capital Expenditures 2018-2022

System Access:

System Access spending in 2018 was higher than budget due to an increase in customer demand and new developments. The initial forecast included budget for new developments under “New O/H Service Connections”. However, since Westario saw a large increase in new developments, new development connections were bucketed under a new category called “New Subdivisions” to differentiate from new connections. In addition, the increase in customer demand also led to the capital pole budget being exceeded to accommodate the new developments.

The actual System Access spending in 2019 was higher than budget due to an increase in new developments. Similarly, an increase in customer demand and new developments also led to increased investment in capital poles.

In 2020, System Access spending significantly increased primarily due to increased investment in capital poles program. An entire street had to be rebuilt and a second circuit was added to back up substation 3 in Southampton.

System Access spending in 2021 was higher than budget due to a large increase in new subdivision developments. Westario had planned for around eight (8) new subdivision connections in 2021 but facilitated thirteen (13) new subdivision connections.

The significant increase in System Access spending in 2022 was due to increased investments in capital poles and new subdivision connections. Other projects in this category also saw an increase in expenditure, due to increased third-party requests.

System Renewal:

System Renewal spending in 2018 was lower than budget due to an increase in system access customer demand and new developments capital work.

System Renewal spending in 2019 was slightly higher than budget due to an increase in higher-than-expected material supply costs. Westario saw an increase in expenditure due to higher supply chain costs, inflation, and the cost of assets.

System Renewal spending in 2020 was lower mostly due to the deferral of Fiberglass Base Replacement project to allow more time for planning and execution of a pilot project.

The decrease in System Renewal spending in 2021 was a result of the deferral of pilot project planned for the Fiberglass Base Replacement due to not receiving locates in time to complete the project.

The increase in spending in 2022 was due to the decrepit pole program. The expenditure was more than originally planned. This is mainly due to enhanced pole testing and the asset condition assessment, which identified a need to increase the number of poles replaced that are classed as decrepit.

System Service:

System Service spending in 2018 is within the materiality threshold.
System Service spending in 2019 was higher than expected due to an additional PME reverification, and the installation of automated line switch replacement.

System Service spending in 2020 was higher than expected due to an increase in additional residential smart meters, PME reverification required, and the installation of an automated line switch replacement.
System Service spending in 2021 within materiality threshold.

2022 saw an increase in the volume of metering work, thus increasing expenditure. Additionally, Westario saw an increase in meter reverifications.

General Plant:

The 2018 General Plant spending was higher than expected in 2018 due to an update required for metering software. When the budget was prepared for the year, it wasn't known that the existing software was reaching the end of life and would no longer be supported. Additionally, two on-call pick-up trucks were replaced in 2018 and the cost of replacing the other requested vehicles in the year was higher than what had been budgeted resulting in Vehicle Replacement being over budget.

General Plant in 2019 within materiality spending.
The 2020 General Plant spending was lower than planned due to the delayed purchase of a single bucket truck to 2022.

General Plant spending in 2021 was higher than expected due to large bucket truck purchases.

General Plant spending in 2022 is within the materiality threshold.

The variances between planned expenditures in the 2018 DSP and actual spending are presented in the 2024 Distribution System Plan in appendix 2A.

2.2.4 Capital Additions: Year over Year Variance Analysis

WPI has identified variance over the materiality threshold of $10,000. WPI has chosen to explain its variance analysis based on capital additions.

Table 22 – Yearly Capital Additions by traditional grouping or account

OEB Account [3]	Description [3]	2018	2019	2020	2021	2022	2023	2024
1609	Capital Contributions Paid	$0	$0	$0	$0	$0	$0	$0
1611	Computer Software (Formally known as Account 1925)	$79,438	$0	$37,700	$17,000	$54,123	$76,000	$0
1805	Land	$13,950	$0	$0	$3,881	$0	$0	$0
1808	Buildings	$43,732	$17,320	$161,261	$6,513	$0	$195,000	$20,000
1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0	$0
1820	Distribution Station Equipment <50 kV	$1,364,887	$1,124,971	$1,060,458	$40,013	$1,167,418	$2,423,114	$1,294,515
1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0
1830	Poles, Towers & Fixtures - Wood	$1,084,505	$945,435	$1,097,090	$1,252,305	$2,221,294	$1,145,592	$1,295,868
1830	Poles, Towers & Fixtures - Steel	$1,617	$3,751	$0	$0	$0	$0	$0
1835	Overhead Conductors & Devices	$688,312	$675,093	$900,589	$736,278	$1,051,346	$1,347,478	$1,344,980
1840	Underground Conduit	$325,741	$342,805	$78,403	$30,713	$30,316	$184,344	$344,689
1845	Underground Conductors & Devices	$643,042	$710,484	$499,990	$333,096	$391,823	$1,207,254	$884,431
1850	Line Transformers - Overhead & Underground	$518,093	$446,907	$415,163	$267,489	$372,946	$685,907	$1,034,543
1855	Services -Overhead	$92,344	$52,346	$65,138	$59,798	$82,150	$11,986	$24,624
1855	Services – Underground	$182,469	$213,669	$311,837	$262,864	$487,807	$620,561	$510,984
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$40,036	$79,801	$60,066	$21,783	$27,550	$0	$0
1860	Meters – Wholesale	$40,050	$0	$210,532	$0	$0	$16,319	$16,878
1860	Meters (Smart Meters)	$221,296	$102,988	$159,002	$70,451	$110,203	$341,677	$377,643
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture & Equipment (10 years)	$19,649	$8,504	$0	$38,521	$0	$10,000	$15,000
1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0	$0
1920	Computer Equipment - Hardware	$37,647	$17,765	$68,049	$17,301	$38,707	$136,000	$144,282
1920	Computer Equip.-Hardware (Post Mar. 19/07)	$0	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment - under 3 Tons	$95,840	$1,970	$0	$41,594	$65,447	$166,856	$50,000
1930	Transportation Equipment - 3 Tons & Over	$445,574	$0	$95,950	$329,626	$425,362	$504,237	$200,000
1935	Stores Equipment	$0	$118,500	$0	$22,044	$0	$0	$0
1940	Tools, Shop & Garage Equipment	$15,694	$36,275	$0	$0	$19,638	$60,000	$61,000
1945	Measurement & Testing Equipment	$0	$8,124	$0	$0	$11,950	$0	$0
1955	Communication Equipment (Smart Meters)	$18,973	$0	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	$61,782	$9,699	$0	$0	$0	$0	$0
1980	System Supervisor Equipment	$212,572	$363	$0	$0	$0	$0	$0
1995	Contributions & Grants	$1,225	-$44,741	$0	$0	$0	$0	$0
2440	Deferred Revenue	-$465,133	-$440,240	-$417,673	-$479,847	-$496,170	-$855,476	-$881,140
2055	WIP	$0	$50,095	-$172,927	$1,682,799	-$199,742	$0	$0
	Total	**$5,783,334**	**$4,481,883**	**$4,630,628**	**$4,754,223**	**$5,862,169**	**$8,276,849**	**$6,738,296**

Table 23 – Year over Year variances

OEB Account [3]	Description [3]	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1609	Capital Contributions Paid	$0	$0	$0	$0	$0	$0
1611	Computer Software (Formally known as Account 1925)	-$79,438	$37,700	-$20,700	$37,123	$21,877	-$76,000
1805	Land	-$13,950	$0	$3,881	-$3,881	$0	$0
1808	Buildings	-$26,412	$143,941	-$154,748	-$6,513	$195,000	-$175,000
1815	Transformer Station Equipment >50 kV	$0	$0	$0	$0	$0	$0
1820	Distribution Station Equipment <50 kV	-$239,916	-$64,513	-$1,020,445	$1,127,405	$1,255,696	-$1,128,599
1825	Storage Battery Equipment	$0	$0	$0	$0	$0	$0
1830	Poles, Towers & Fixtures - Wood	-$139,070	$151,655	$155,214	$968,989	-$1,075,702	$150,276
1830	Poles, Towers & Fixtures - Steel	$2,134	-$3,751	$0	$0	$0	$0
1835	Overhead Conductors & Devices	-$13,219	$225,496	-$164,311	$315,069	$296,132	-$2,498
1840	Underground Conduit	$17,064	-$264,402	-$47,690	-$397	$154,028	$160,345
1845	Underground Conductors & Devices	$67,442	-$210,494	-$166,893	$58,727	$815,431	-$322,823
1850	Line Transformers - Overhead & Underground	-$71,186	-$31,744	-$147,674	$105,457	$312,961	$348,636
1855	Services -Overhead	-$39,998	$12,792	-$5,340	$22,352	-$70,165	$12,639
1855	Services - Underground	$31,200	$98,168	-$48,973	$224,943	$132,754	-$109,577
1860	Meters - Energy Meters, CT/PT, Repeaters, & Collectors	$39,765	-$19,736	-$38,283	$5,767	-$27,550	$0
1860	Meters - Wholesale	-$40,050	$210,532	-$210,532	$0	$16,319	$558
1860	Meters (Smart Meters)	-$118,308	$56,014	-$88,550	$39,752	$231,474	$35,966
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0
1915	Office Furniture & Equipment (10 years)	-$11,145	-$8,504	$38,521	-$38,521	$10,000	$5,000
1915	Office Furniture & Equipment (5 years)	$0	$0	$0	$0	$0	$0
1920	Computer Equipment – Hardware	-$19,882	$50,284	-$50,748	$21,406	$97,293	$8,282
1920	Computer Equip.- Hardware(Post Mar. 19/07)	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment - under 3 Tons	-$93,870	-$1,970	$41,594	$23,853	$101,409	-$116,856
1930	Transportation Equipment - 3 Tons & Over	-$445,574	$95,950	$233,676	$95,736	$78,875	-$304,237
1935	Stores Equipment	$118,500	-$118,500	$22,044	-$22,044	$0	$0
1940	Tools, Shop & Garage Equipment	$20,581	-$36,275	$0	$19,638	$40,362	$1,000
1945	Measurement & Testing Equipment	$8,124	-$8,124	$0	$11,950	-$11,950	$0
1955	Communication Equipment (Smart Meters)	-$18,973	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	-$52,083	-$9,699	$0	$0	$0	$0
1980	System Supervisor Equipment	-$212,209	-$363	$0	$0	$0	$0
1995	Contributions & Grants	-$45,966	$44,741	$0	$0	$0	$0
2440	Deferred Revenue	$24,893	$22,567	-$62,174	-$16,324	-$359,306	-$25,664
2055	WIP	$50,095	-$223,022	$1,855,726	-$1,882,541	$199,742	$0
	Total	**-$1,301,451**	**$148,744**	**$123,595**	**$1,107,947**	**$2,414,680**	**-$1,538,553**

1808 – Building

2019-2020 increase of $143,941

The increase in 2020 was mainly for the construction of a large truck parking shelter in the Westario yard with overhead covers to eliminate snow and cold start-ups in the winter season.

2022-2023 increase of $195,000

The increase in 2023 was for a combination of concrete apron addition for the large truck parking shelter and administration building roof replacement ($155k).

1820 – Distribution Station Equipment <50 kV

2021-2022 increase of $1,127,405

The major increase relates to the delay of the works originally planned for 2021 moving to 2022 caused by the transformer delivery delays. Specifically, Southampton MS3 station.

2022-2023 increase of $1,255,696

The major increase relates to the delay of the works originally planned for 2022 moving to 2023 Specifically, Southampton Port Elgin MS5. Scheduled works at Port Elgin MS1 is nearly completion with the transformer delivery in December 2023.

1830 – Poles, Towers & Fixtures -Wood

2019-2020 increase of $151,655

The year over year increase is due to additional 12 poles compared to 2019. The remainder of the increase reflects inflationary trends that emerged at the onset of the pandemic.

2020-2021 increase of $155,214

The year over year increase is due to additional 48 poles compared to 2020. The remainder of the increase reflects inflationary trends that emerged at the onset of the pandemic.

2021-2022 increase of $968,989

The year over year increase is due to subcontracting of several WPI projects. Ottawa Street project in Southampton was to accommodate the backyard construction ($465k). WPI contracted the design, labor, and material procurement for the pole line construction, including a great deal of vegetation management in Southampton.

Additionally, a pole line reconstruction was required for a new 44kV customer in Port Elgin. In Kincardine, a pole line reconstruction was completed for potential concerns to improve station feeder reliability and capacity restraints.

A lot of 2022 works were completed using the overtime and weekend hours to accommodate the needs of the local business, which almost doubled the cost of labour.

2023-2024 increase of $150,276

The full amount of the planned increase represents the extra 24 poles (110+51 DSP) potentially coming up from pole testing scheduled in 2024. The historical average completed over the last five years represents 185.

1835 – Overhead Conductors & Devices

2019-2020 increase of $225,496

The year over year increase is due to the labor and material for the pole line hardware for 12 extra poles compared to 2019. The additional costs for replacing three pole line reconstruction projects, extra switch replacements throughout the WPI service territory. Emergency work to maintain the WPI system reliability. The remainder of the increase represents an extra cost of material and labour.

2021-2022 increase of $315,069

The year over year variance is directly tied to large pole line projects completed by subcontractors and WPI crews in Neustadt and Southampton areas. Those projects were driven by the 2 tornados in September 2022.

2022-2023 increase of $296,132

The year-over-year increase is due to the extra 9 pole line hardware and the remainder. related to the additional labor and material costs. The remainder of the difference relates to the planned 2022 works moved further to 2023 caused by the more urgent tornado repair works.

1840 – Underground Conduit

2022-2023 increase of $154,028

The year-over-year increase relates to the 2022 underspend. In 2023 38 units were originally planned to be replaced in 2023.
Additional factors, include the Kincardine voltage conversion, and the addition of underground fiberglass base rehabilitation delayed from previous years.

2023-2024 increase of $160,345

The projected increase is due to aging transformers requiring replacement, support of the Kincardine voltage conversion and 12 fiberglass base rehabilitation units.

1845 – Underground Conductors & Devices

2018-2019 increase of $67,442

The increase relates to an extra 16 pad mount transformers installation 2019 compared to 2018. The remainder of the increase also reflects the additional underground conductors and devices for a large subdivision development in Port Elgin.

2021-2022 increase of $58,727

The year over year increase relates to extra 12 pad mounted transformer replacements and underground conductors and devices related to them.

2022-2023 increase of $815,431

The additional contracted services to complete the planned work resulted in extra costs for boring, new underground cable and repairs to the underground faults related to the construction.

1850 – Line Transformers - Overhead & Underground

2022-2021 increase of $105,457

The year over year variance reflects the additional large pole line projects completed, as well as additional 14 pad mount transformers installed in 2022 to 2021.

2023-2022 increase of $312,961

The increase relates to the addition of 30 transformers in Kincardine required for the load balancing within the community. The remainder of the increase is impacted by the price increases per transformer unit and increase of the fiberglass transformer bases.

2024-2023 increase of $348,636

Planned increase of 90 in 2024 based on the continuation of the load balancing within Kincardine community. This is year 2 of the 5-year program. The remainder of the increase is expected from the price increases per transformer unit and increase of the fiberglass transformer bases.

1855 – Services – Underground

2020-2019 increase of $98,168

The year-over-year increase reflects additional underground servicing costs attributed to an extra 20 transformer replacement. As per the AMP the expected pad mounted transformer replacements were 10 and 30 were installed in 2020. The remainder of the increase relates to 21 additional new services in 2020 compared to 2019.

2021-2022 increase of $224,943

The year over year increase represents additional underground servicing costs attributed mainly to the rise of over $135k in emergency underground cable replacement work in 2022 compared to 2021.

The remainder of the increase relates to the extra costs for boring attached to the additional 18 transformer replacements in 2022.

2024-2023 increase of $132,754

The year over year projected increase relates to the 5 extra fiberglass base replacements according to DSP recommendation.

1860 – Meters Wholesale and Smart meters

2020-2019 increase of $210,532

The year over year increase in wholesale meters is due to measurement Canada mandatory wholesale meter reverification testing at 3 locations in 2020 and none completed in 2019. Additionally, the contracted meter service provider had a 50 percent labour rate increase compared to 2019. Significant meter material cost from the single source supplier increased in 2020 compared to 2019.

2020-2019 increase of $56,014

The contracted meter service provider also had a 50 percent labour rate increase. Significant meter material cost increase in 2020 to 2019 were also incurred from the single source supplier. Extra 17 new services compared to 2019 were installed.

2023-2022 increase of $231,474

The year over year increase is due to additional meter reverification testing of 725 meters. Remainder of the increase relates to the increased labour and material costs in 2023.

1920 – Computer Equipment – Hardware

2019-2020 increase of $50,284

The year-over-year increase is due to additional hardware purchased during 2020. Representing replacement of ‘A’ server and supporting equipment ($30k). The remainder of the increase is attributable to the extra laptops (5 employees switched to laptops) , updates to the Scada systems and overall increased expenditure with the remote work requirements.

2023-2022 increase of $97,293

The increase in expenditure is attributed to the acquisition of additional IT hardware, encompassing the following components: ongoing enhancements to the host servers amounting to over $60k, as well as upgrades to laptops $15k to meet the demands of remote work for the remainder of the employees.

1930 – Transportation Equipment - 3 Tons & Over

2020-2019 increase of $95,950
The year over year increase is due to bucket truck purchase delay from 2019 to 2020. As per the AMP the replacement is determined by achieving years of use, mileage or hours of use as per manufacturers' recommendations for replacement. With the larger service territory for WPI the vehicles accommodate a great deal of mileage which attributes to additional maintenance and potentially shorter in-service life.

2021-2020 increase of $233,676
The year over year increase is due to an additional bucket truck purchased in 2021. As per the AMP the replacement is determined by achieving years of use, mileage or hours of use as per manufacturers' recommendations for replacement. With the larger service territory for WPI the vehicles accommodate a great deal of mileage which attributes to additional maintenance and potentially shorter in-service life and therefore the additional bucket truck approval justified.

2022-2021 increase of $95,736
The year over year increase is due to delayed purchase of a bucket truck in 2020 to 2022. As per the AMP the replacement is determined by achieving years of use, mileage or hours of use as per manufacturers' recommendations for replacement. With the larger service territory for WPI the vehicles accommodate a great deal of mileage which is attributed to additional maintenance and potentially shorter in-service life.

2023-2022 increase of $78,875
The year over year increase is due to delayed purchase of pole trailer in 2022 to 2023. As per the AMP the replacement is determined by achieving years of use, mileage, or hours of use as per manufacturers' recommendations for replacement. With the larger service territory for WPI the vehicles accommodate a great deal of mileage which is attributed to additional maintenance and potentially shorter in-service life.

1935 – Stores Equipment

2018-2019 increase of $118,500
The year-over-year increase is due to a new forklift purchase in 2019. As per the AMP the replacement is determined by achieving years of use and manufacturers' recommendations for replacement. This determination also includes the hours of daily usage and maintenance to determine the best economical timing of useful life and replacement.

2.3. DERIVATION OF THE WORKING CAPITAL ALLOWANCE

WPI's working capital allowance was determined by taking the sum of Cost of Power and controllable expenses (i.e., Operations, Maintenance, Billing and Collecting, Community Relations, Administration and General) and applying an allowance of 7.5%. The table below shows WPI's calculations in determining its Allowance for Working Capital. The increase in OM&A is discussed in detail in Exhibit 4. Other components of the Working Capital Allowance are discussed below. The Working Capital Allowance has increased by $73,990 over the 2018 Board Approved. The decrease from the 2018 Board Approved to the Test Year 2024 is due to the reduction in Power Supply Expenses.

Table 24 – Trend in Working Capital Allowance

Expenses for Working Capital	Last Board Approved	2018	2019	2020
Eligible Distribution Expenses:				
3500- Operation	$580,760	$522,033	$655,009	$758,568
3550- Maintenance	$1,386,773	$1,427,339	$1,480,065	$1,496,436
3650-Billing and Collecting	$1,132,000	$839,486	$903,280	$672,592
3700-Community Relations	$31,000	$29,323	$53,566	$14,104
3800-Administrative Expenses	$2,680,500	$2,638,752	$2,816,581	$3,088,241
	$35,000	$34,925	$34,842	$34,827
Total Eligible Distribution Expenses	$5,846,033	$5,491,859	$5,943,343	$6,064,769
3350-Power Supply Expenses	$50,685,050	$44,203,682	$49,234,428	$59,846,378
Total Expenses for Working Capital	$56,531,083	$49,695,541	$55,177,771	$65,911,147
Working Capital factor	7.50%	7.50%	7.50%	7.50%
Total Working Capital	$4,239,831	$3,727,166	$4,138,333	$4,943,336

Expenses for Working Capital	2021	2022	2023	2024	Variance
Eligible Distribution Expenses:					
3500- Operation	$709,495	$620,655	$666,970	$670,580	$89,820
3550- Maintenance	$1,346,049	$2,033,085	$1,892,422	$1,879,524	$492,751
3650-Billing and collecting	$654,748	$805,438	$821,942	$850,197	-$281,803
3700-Community Relations	$25,068	$15,930	$33,760	$35,422	$4,422
3800-Administrative Expenses	$4,003,714	$4,410,573	$3,282,288	$3,535,994	$855,494
Property Taxes	$30,937	$44,788	$47,256	$49,008	$14,008
Total Eligible Distribution Expenses	$6,770,012	$7,930,470	$6,744,638	$7,020,725	$1,174,692
3350-Power Supply Expenses	$52,998,217	$52,019,912	$54,568,879	$50,496,893	-$188,157
Total Expenses for Working Capital	$59,768,229	$59,950,382	$61,313,517	$57,517,618	$986,535
Working Capital factor	7.50%	7.50%	7.50%	7.50%	0.00%
Total Working Capital	$4,482,617	$4,496,279	$4,598,514	**$4,313,821**	**$73,990**

2.3.1 Deemed Allowance vs Lead Lag

WPI has used the 7.5% Allowance Approach to calculate its Allowance for Working Capital. WPIs was done per the letter issued by the Board on June 03, 2015, for a rate of 7.5%

WPI is not proposing to use a lead-lag study to determine its Working Capital Allowance and has chosen to follow the Board's June 3, 2015, letter, which provided two options for the calculation of the allowance for working capital:

(1) The 7.5% allowance approach; or

(2) The filing of a lead/lag study.

WPI notes that it has not previously been directed by the Board to undertake a lead/lag study.

Increased Distribution Expenses

WPI's 2024 Test Year operating costs are projected to be $6,971,717, representing an increase of $1,160,684 or 20% from its 2018 Board Approved costs. Details are introduced in Table 24 below. Explanations and details are presented in the next section and throughout WPIs exhibit.

Table 25 – 2024 OM&A vs 2018 Board Approved OM&A

	2018 Board Approved	2024	Variance from 2018BA
Operations	$580,760	$670,580	$89,820
Maintenance	$1,386,773	$1,879,524	$492,751
Subtotal	**$1,967,533**	**$2,550,104**	**$582,571**
Billing and collecting	$1,132,000	$850,197	-$281,803
Community Relations	$31,000	$35,422	$4,422
Administrative and General+LEAP	$2,680,500	$3,535,994	$855,494
Subtotal	**$3,843,500**	**$4,421,613**	**$578,113**
Total	**$5,811,033**	**$6,971,717**	**$1,160,684**
%Change (Test Year vs Last Rebasing Year			20.0%

2.3.2 Derivation of the Cost of Power

The components of WPI's cost of power are summarized below and detailed in several tables illustrated over the following pages. WPI confirms that it used the most up to date inputs and guidelines to determine its cost of power.

Table 26 – 2024 Cost of Power

Component		$	Calculated based on loss adjusted or non-loss adjusted
4705 -Power Purchased		$34,724,582	Loss adjusted
4707- Global Adjustment		$7,444,800	Loss adjusted
4708-Charges-WMS		$2,162,813	Loss adjusted
4714-Charges-NW		$4,127,875	Loss adjusted
4716-Charges-CN		$3,168,702	Loss adjusted
4730-RRRP		$332,316	Loss adjusted
4750-Charges-LV		$1,992,852	Loss adjusted
4751-IESO SME		$123,826	Non-loss-adjusted
Misc A/R or A/P		-$3,580,873	Customer Count
TOTAL		**$50,496,893**	

Commodity and Global Adjustment non-RPP (4705- Power Purchased and 4707 Global Adjustment)

WPI attests that the Cost of Power is determined by the split between RPP and non-RPP customers based on actual data, using the most current RPP price and current UTR. WPI calculated the cost of power for the 2023 Bridge Year and the 2024 Test Year based on the results of the load forecast discussed in detail in Exhibit 3. The commodity prices used in the calculation were published in the Board's "Regulated Price Plan - Price Report November 01 to October 31, 2023". Should the Board issue a revised Regulated Price Plan Report before the Board's Decision in the application, WPI will update the electricity prices in the forecast.

The Commodity share of the Cost of Power is calculated in the same manner as has been previously approved by the OEB in WPI's previous Cost of Service application and other applications.

The sale of energy is a flow-through revenue, and the cost of power is a flow-through expense. Energy sales and the cost of power expense are presented in the table below. WPI records no profit or loss from the flow-through energy revenues and costs. Any temporary variances are included in the RSVA account balances.

Table 27 – Commodity

		2024 Test Year	RPP			2024 Test Year	non-RPP		Total
Electricity Commodity	**Units**	Volume	Rate	$		Volume	Rate	$	$
Class per Load Forecast				-					
Residential	kWh	194,890,249		18,202,749		2,921,163		170,391	18,373,141
General Service < 50 kW	kWh	52,525,006		4,905,836		20,837,433		1,215,447	6,121,283
General Service > 50 to 4999 kW	kWh	4,795,237		447,875		165,052,306		9,627,501	10,075,376
Unmetered Scattered Load	kWh	187,434		17,506		34,009		1,984	19,490
Sentinel Lighting	kWh	7,550		705		0			705
Street Lighting	kWh					2,307,333		134,587	134,587
SUB-TOTAL		252,405,476		23,574,671		191,152,244		11,149,910	$34,724,582
Global Adjustment non-RPP	**Units**	Volume	Rate	$		Volume	Rate	$	Total
Class per Load Forecast									
Residential	kWh							114,042	
General Service < 50 kW	kWh							813,493	
General Service > 50 to 4999 kW	kWh							3,550,892	
Unmetered Scattered Load	kWh							1,328	
Sentinel Lighting	kWh								
Street Lighting	kWh								
CLASS A								2,874,967	
SUB-TOTAL								7,444,800	$7,444,800

**Regulated Price Plan Price Report November 1, 2022, to October 31, 2023 Ontario Energy Board Oct 21,2021*

Transmission Network and Connection Charges (4714-Charges-NW and 4716-Charges-CN)

Electricity distributors are charged for transmission costs at the wholesale level and subsequently pass these charges on to their distribution customers through the Retail Transmission Service Rates (RTSRs). For each distribution rate class, there are two RTSRs:

- RTSR Network charge - recovers the Uniform Transmission Rates (UTR) wholesale network service charge.
- RTSR Connection charge - recovers the UTR wholesale line and transformation connection charges.

The table below summarizes the projected transmission network and connection expenses, applying the proposed rates to the 2024 load forecast kWh and kW volumes:

Table 28 - Transmission Network and Connection Expenses

Transmission - Network	Units	Volume	Rate	$		Volume	Rate	$	Total
Class per Load Forecast									
Residential	kWh	208,589,672	0.0091	1,893,902		3,126,500	0.0091	28,387	
General Service < 50 kW	kWh	56,217,147	0.0082	462,945		22,302,159	0.0082	183,657	
General Service > 50 to 4999 kW	kW	12,916	3.4632	44,731		431,655	3.4632	1,494,917	
Unmetered Scattered Load	kWh	200,610	0.0082	1,652		36,399	0.0082	300	
Sentinel Lighting	kW	16	2.6280	42		-	2.6280	-	
Street Lighting	kW	6,650	2.6078	17,342		-	2.6078	-	
				-				-	
SUB-TOTAL				2,420,614				1,707,261	4,127,875
Transmission - Connection	**Units**	Volume	Rate	$		Volume	Rate	$	Total
Class per Load Forecast									
Residential	kWh	208,589,672	0.0071	1,480,779		3,126,500	0.0071	22,195	
General Service < 50 kW	kWh	56,217,147	0.0065	363,453		22,302,159	0.0065	144,187	
General Service > 50 to 4999 kW	kW	12,916	2.5717	33,217		431,655	2.5717	1,110,106	
Unmetered Scattered Load	kWh	200,610	0.0065	1,297		36,399	0.0065	235	
Sentinel Lighting	kW	16	2.0306	32		-	2.0306	-	
Street Lighting	kW	6,650	1.9848	13,199		-	1.9848	-	
SUB-TOTAL				1,891,978				1,276,724	3,168,702

**Rates are based on Decision and Rate Order EB-2021-0276 2022 Uniform Transmission Rates issued December 16,2021*

The transmission network charges, included in the Cost of Power for the Test Year 2024, are projected at $4,192,442, and the connection charges are projected at $2,997,299. The Rates are applied to the 2024 Load Forecast to determine the amount included in the Cost of Power.

Wholesale Market Service Charges & Capacity Based Recovery Charges (4708-Charges-WMS)

On December 17, 2019, the OEB released Decision and Order for the Wholesale Market Service (WMS) effective January 1, 2020. The Board's decision is summarized as follows:

- The WMS rate used by rate-regulated distributors to bill their customers shall be $0.0030 per kilowatt-hour, effective January 1, 2020.
- For Class B customers, a Capacity-based Recovery (CBR) component of $0.0004 per kilowatt-hour shall be added to the WMS rate for a total of $0.0034 per kilowatt-hour.
- For Class A customers, distributors shall bill the actual CBR costs to Class A customers in proportion to their contribution to the peak.

In compliance with WPIs order, WPI has applied the Board-approved rate of $0.0034/kWh to its' 2024 Load Forecast to include $1,424,210 for WMS and $26,498 in Class A CBR and $189,895 in Class B CBR in its' Cost of Power projections as illustrated in the table below:

Table 29- Wholesale Market and CBR

Wholesale Market Service	Units	Volume	Rate	$		Volume	Rate	$	Total
Class per Load Forecast									
Residential	kWh	208,589,672	0.0041	855,218		3,126,500	0.0041	12,819	
General Service < 50 kW	kWh	56,217,147	0.0041	230,490		22,302,159	0.0041	91,439	
General Service > 50 to 4999 kW	kWh	5,132,308	0.0041	21,042		176,654,330	0.0041	724,283	
Unmetered Scattered Load	kWh	200,610	0.0041	822		36,399	0.0041	149	
Sentinel Lighting	kWh	8,080	0.0041	33		-	0.0041	-	
Street Lighting	kWh	-	0.0041	-		2,469,522	0.0041	10,125	
SUB-TOTAL				1,107,606				838,815	1,946,421
Class A CBR	**Units**	Volume	Rate	$		Volume	Rate[4]	$	Total
Class per Load Forecast									
General Service > 50 to 4999 kW	kWh			-		176,654,330	0.00015	26,498	
SUB-TOTAL				-				26,498	26,498
Class B CBR	**Units**	Volume	Rate	$		Volume	Rate	$	Total
Class per Load Forecast									
Residential	kWh	208,589,672	0.0004	83,436		3,126,500	0.0004	1,251	
General Service < 50 kW	kWh	56,217,147	0.0004	22,487		22,302,159	0.0004	8,921	
General Service > 50 to 4999 kW	kWh	5,132,308	0.0004	2,053		176,654,330	0.0004	70,662	
Unmetered Scattered Load	kWh	200,610	0.0004	80		36,399	0.0004	15	
Sentinel Lighting	kWh	8,080	0.0004	3		-	0.0004	-	
Street Lighting	kWh	-	0.0004	-		2,469,522	0.0004	988	
SUB-TOTAL				108,059				81,836	189,895

**DECISION AND ORDER EB-2020-0276 In the matter of regulatory charges effective January 1, 2021, for the Wholesale Market Services rate and the Rural or Remote Electricity Rate Protection charge issued December 10, 2020*

Rural or Remote Electricity Protection Rate (RRRP) Charges

On December 17, 2019, the OEB released Decision and Order for the Rural or Remote Electricity Protection Rate (RRRP) effective January 1, 2020. The Board's decision is summarized as:

- The RRRP rate used by rate-regulated distributors to bill their customers shall be $0.0005 per kilowatt-hour, effective January 1, 2020.

In compliance with WPIs order, WPI has applied the Board Approved $0.0005/kWh to its' 2024 Load Forecast to include $237,368 in its' Cost of Power as illustrated in the table below:

Table 30 – Rural or Remote Electricity Rate Protection (4708-Charges-RRRP)

RRRP	Units	Volume	Rate	$	Volume	Rate	$	Total
Class per Load Forecast								
Residential	kWh	208,589,672	0.0007	146,013	3,126,500	0.0007	2,189	
General Service < 50 kW	kWh	56,217,147	0.0007	39,352	22,302,159	0.0007	15,612	
General Service > 50 to 4999 kW	kWh	5,132,308	0.0007	3,593	176,654,330	0.0007	123,658	
Unmetered Scattered Load	kWh	200,610	0.0007	140	36,399	0.0007	25	
Sentinel Lighting	kWh	8,080	0.0007	6	-	0.0007	-	
Street Lighting	kWh	-	0.0007	-	2,469,522	0.0007	1,729	
SUB-TOTAL				189,103			143,212	332,316

Smart Meter Charge

On March 1, 2018, the Ontario Energy Board (OEB) approved the application by the Independent Electricity System Operator (IESO), in its capacity as the Smart Metering Entity (SME), for a smart metering charge (SMC) for the 2018-2022 period, for a new SMC of $0.57 per smart meter (Residential and General Service <50 kW) per month. The proposed rate remains at $0.57 per the OEB guidance provided on March 23, 2018.
In compliance with WPIs order, WPI has applied the Board Approved rate of $0.57 per month for the forecasted Residential and General Service<50kW customers for Test Year 2024 and included the projected amount of $17,166 in its' Cost of Power as illustrated below:

Table 31 - Smart Meter Entity (4751-IESO SME)

Smart Meter Entity Charge	Customers	Rate	$
Class per Load Forecast			
Residential	21,879	0.42	110,269
General Service < 50 kW	2,690	0.42	13,557
			-
SUB-TOTAL			123,826

Low Voltage

WPI seeks to update its LV service rates using the calculations embedded in the 2024 IRM model.

The 2024 projected LV charges are based on the last year of LV charges, in this case, 2022. The projections were allocated to customer classes per Board policy according to each class share of projected Transmission-Connection revenue. The resulting LV charges for each class were divided by the applicable 2022 volumes from Tab 4 Billing Det, for Def-Var. Current LV revenues are recovered through a separate rate adder and are not embedded within the approved Distribution Volumetric rate. LV rates appear on a distinct line item on the proposed schedule of rates.

Table 32 – 2022 LV Charges (4750-Charges-LV)

2022	
Service Points	
541716 Palmerston TS	
541716 Douglas point TS	
541716 Wingham TS	
541716 Hanover TS	
Month	Total Monthly Charge
January	$154,805.47
February	$151,335.87
March	$142,839.17
April	$129,165.43
May	$139,524.51
June	$148,089.13
July	$145,655.00
August	$148,814.69
September	$131,362.62
October	$120,933.03
November	$140,938.07
December	$146,433.92
Total	**$1,699,896.91**

The projections were allocated to customer classes, according to each class share of projected Transmission-Connection revenue, per Board policy. The resulting LV charges for each class were divided by the applicable 2024 volumes from the load forecast, as presented in Exhibit 3.

Current LV revenues are recovered through a separate rate adder and are not embedded within the approved Distribution Volumetric rate. LV rates appear on a distinct line item on the proposed schedule of rates.

Table 33 – Proposed LV Charges

Low Voltage Charges - Historical and Proposed LV Charges							
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Host Volume					1812563.86	1,812,564	1,812,564
Host Charges	1,244,277	1,699,171	2,233,772	2,390,967	1,699,897	1,699,897	1,699,897

Rate Class	Unit	2024	RTSR Connection Rate	Loss Adjusted Volume	RTSR Connection Revenue	Allocation	Allocated Low Voltage Charges	Loss Adjusted Volume	Low Voltage Rates
Residential	$/kWh	194,967,766	0.0067	208,672,638	1,398,107	54.7%	930,162	208,672,638	0.0045
General Service < 50 kW	$/kWh	72,307,815	0.0061	77,390,549	472,082	18.5%	314,077	77,390,549	0.0041
General Service > 50 to 4999 kW	$/kW	274,792	2.4424	274,792	671,153	26.3%	446,519	274,792	1.6249
Unmetered Scattered Load	$/kWh	218,260	0.0061	233,602	1,425	0.1%	948	233,602	0.0041
Sentinel Lighting	$/kW	15	1.9285	15	29	0.0%	19	15	1.2830
Street Lighting	$/kW	6,516	1.8850	6,516	12,283	0.5%	8,172	6,516	1.2541
TOTAL					**2,555,079**	**100.0%**	**1,699,897**		

2.4. DISTRIBUTION SYSTEM PLAN FOR SMALL UTILITIES

Per section 2.2.2.1 of the filing requirements, WPI has filed its 2024 DSP as a stand-alone document, included in Appendix 2A of WPI's exhibit 2.

The DSP describes how WPI's proposed capital investments for the 2024-2027 period are informed by its asset management plan and continuous internal asset condition monitoring and assessment. The Asset Management Plan conducted for the purpose of updating the DSP is also filed at Appendix 2B of this Exhibit.

APPENDICES

List of Appendices

Appendix 2A	Distribution System Plan
Appendix 2B	Asset Management Plan

Westario Power Incorporated

Distribution System Plan

Historical Period:

2018 – 2023 (2023 Bridge Year)

Forecast Period:

2024 – 2028

[October 2023]

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LIST OF ACRONYMS

Acronym	Meaning
ACA	Asset Condition Assessment
AM	AM Asset Management
AMP	Asset Management Process
CAIDI	Customer Average Interruption Duration Index
CAPEX	Capital Expenditure
CDM	Conservation Demand Management
CHI	Customer Hours Interrupted
CI	Customers Interrupted
COS	Cost of Service
DER	Distributed Energy Resources
DS	Distribution Station
DSC	Distribution System Code
DSP	Distribution System Plan
ESA	Electrical Safety Authority
GIS	Geographical Information System
GS	General Service
HI	Health Index
HONI	Hydro One Networks Inc
HV	High Voltage
ICM	Incremental Capital Module
IEEE	Institute of Electrical and Electronics Engineers
IESO	Independent Electricity System Operator
IRRP	Integrated Regional Resource Plan
IT	Information Technology
KPI	Key Performance Indicator
LDC	Local Distribution Company
LOS	Loss of Supply

LV	Low Voltage
MED	Major Event Days
METSCO	METSCO Energy Solutions Inc.
NA	Needs Assessment
O&M	Operations and Maintenance
OEB	Ontario Energy Board
OH	Overhead
REG	Renewable Energy Generation
RIP	Regional Infrastructure Plan
RRF	Renewed Regulatory Framework
ROE	Return on Equity
RRP	Regional Planning Process
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
RRP	Regional Planning Process
SQR	Service Quality Requirements
TS	Transformer Station
UG	Underground

5.2 DISTRIBUTION SYSTEM PLAN

Distributors are encouraged to organize the required information using the section and subsection headings indicated from here onwards.

The DSP's duration is a minimum of ten years in total, comprising of an historical period and a forecast period. The historical period is the first five years of the DSP duration, consisting of five historical years, ending with the bridge year. For distributors that have not filed a DSP within the past five years, the historical period is from the test year of a distributor's last cost or service application to the bridge year. The forecast period is the last five years of the DSP duration, consisting of five forecast years, beginning with the test year of the current cost of service application.

Westario Power Incorporated (Westario) has prepared this Distribution System Plan (DSP) in accordance with the Ontario Energy Board's (OEB's) Chapter 5 – Distribution System Plan Filing Requirements for Electricity Distribution Rate Applications, dated December 15, 2022 (the "Filing Requirements") as part of its 2023 Cost of Service Application (the Application).

The DSP is a stand-alone document that is filed in support of Westario's Application. The DSP's duration is a minimum of ten years in total, comprising of a historical period and a forecast period. The DSP covers the historical period of 2018 to 2022, with 2023 being the bridge year, and a forecast period of 2024 to 2028, with 2024 being the Test Year.

The DSP contents are organized into three major sections:

- Section 5.2 provides a high-level overview of the DSP, including coordinated planning with third parties and performance measurement for continuous improvement.
- Section 5.3 provides an overview of asset management practices, including an overview of the assets managed and asset lifecycle optimization policies and practices.
- Section 5.4 provides a summary of the capital expenditure plan, including a variance analysis of historical expenditures, an analysis of forecast expenditures, and justification of material projects above the materiality threshold.

The materiality threshold for Westario is $58,000, and detailed descriptions of specific projects/programs exceeding the materiality threshold are provided in Section 5.4.2.1 and Appendix A. Other pertinent information relevant to this DSP is included in the Appendices.

This DSP follows the chapter and section headings in accordance with the Chapter 5 Filing Requirements.

5.2.1 DISTRIBUTION SYSTEM PLAN OVERVIEW

The distributor must provide a high-level overview of the information filed in the DSP and is encouraged not to unnecessarily repeat details contained in the rest of the DSP. This overview should include capital investment highlights and changes since the last DSP. A distributor should list out the objectives it plans to achieve through this DSP, which will be used as a baseline comparison in the performance measurement section below. This DSP will be used to inform and potentially support any requests for incremental capital module (ICM) funding during the 5-year DSP term.

5.2.1.1 Description of the Utility Company

Brief overview of the LDC (regions served, size of service area, total number of customers).

Community and History

Bruce and Huron County sits on the eastern shore of Lake Huron in western Ontario. The area was settled by people of European descent in the mid-1800s. Port Elgin, for example, was originally a settlement on the beaches of Lake Huron, with a harbour that was constructed in the 1850s. The village served as a distributor between agricultural communities. Likewise, the neighbouring community of Southampton was populated by several families and established its very own post office in 1851. Walkerton was incorporated as a town in 1871, named for Joseph Walker who had settled there in 1850. Kincardine was amalgamated in 1999; the communities that comprise Kincardine had existed since 1855. Wingham, too, is an amalgam of the village of Blyth, the township of East Wawanosh and the town of Wingham.

Westario Power Inc.

Westario serves fifteen towns and communities in Bruce, Grey, Huron, and WellingtonCounties. They are Clifford, Elmwood, Hanover, Harriston, Kincardine, Lucknow, Mildmay, Neustadt, Palmerston, Port Elgin, Ripley, Southampton, Teeswater, Walkerton and Wingham. Westario supplies approximately 24,201 customers with electricity through 589 km of distribution lines.

Westario was incorporated on November 1, 2000, in affiliation with Westario Power Services Inc. and Westario Power Holdings Inc. These three were amalgamated in 2007 under Westario Power Inc. The list of shareholders follows:

- The Township of Huron-Kinloss 3.19%
- The Municipality of Kincardine 13.48%
- The Municipality of South Bruce 3.67%
- The Town of Saugeen Shores 24.98%
- The Township of North Huron 7.71%
- The Municipality of Brockton 12.61%
- The Town of Hanover 15.09%
- The Town of Minto 9.28%
- Fortis Ontario Inc. 9.99%

The following corporate entities comprised the corporation:

- Westario Power Inc. Local Distribution Company (LDC)

Westario Power Holdings Inc. filed an application with the OEB in 2007 to amalgamate the three corporations into one LDC, naming it Westario Power Inc. (henceforth Westario). The OEB approved the application on July 17, 2007, and the amalgamation was made official on January 1, 2008.

As a corporation, Westario operates through the organization outlined in Figure 5.2-1.

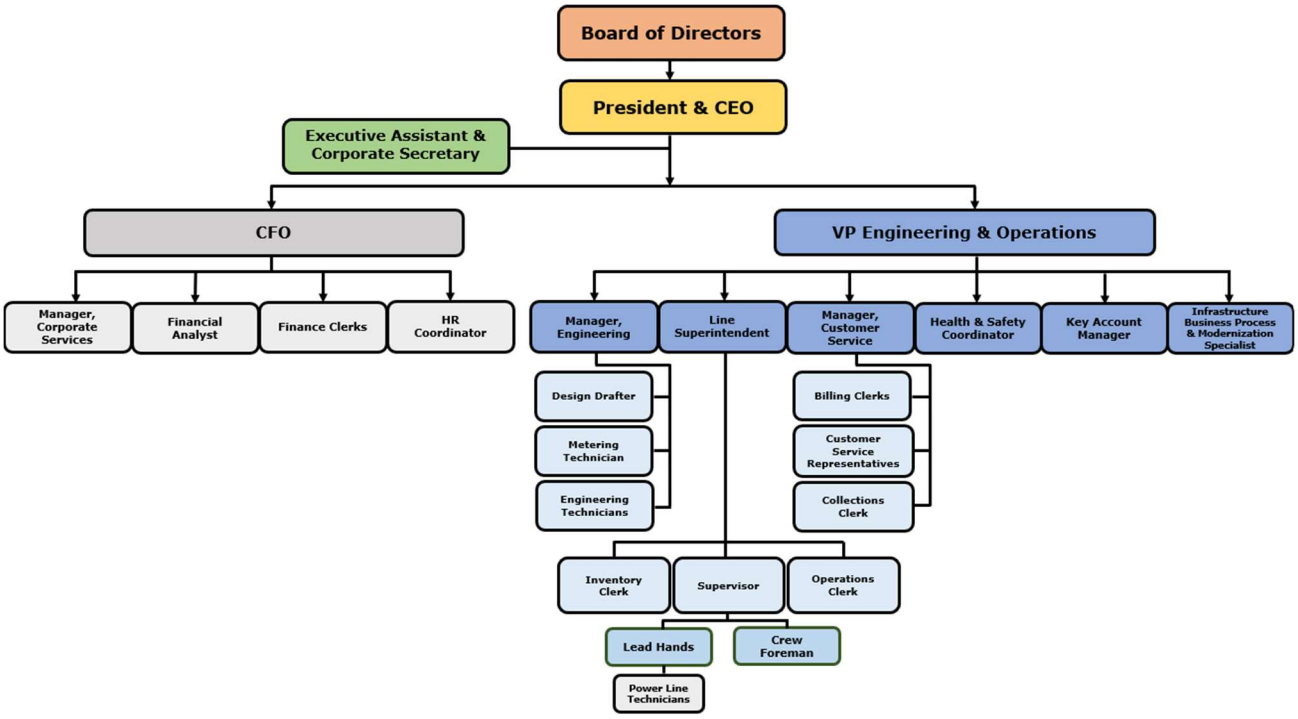

Figure 5.2-1: Westario Power Inc. Organization Chart, 2023

Westario distributes power to its customers through either direct transmission-connected feeders or through its municipal distribution substations. Westario owns 27 municipal substations within its service territory along with one mobile substation. Within its service territory, there are a total of five communities that are directly fed by Hydro One-owned distribution stations as there is no Westario-owned distribution station. These communities are Clifford, Elmwood, Mildmay, Neustadt, and Ripley.

The service area of Westario covers a large geographical area spanning approximately 60 kilometers east/west by 80 kilometers north/south. The service territory is non-contiguous and areas between these service territories are served by Hydro One Network Inc. (HONI). Below is a map of the fifteen communities in Bruce, Grey, Huron and Wellington counties where Westario operates.

Figure 5.2-2: Westario's Service Territory

Westario continues to advance its business by powering communities safely, reliably, and efficiently while focusing on customer excellence. Westario's Mission and Vision statements are as follows:

Mission Statement:

Powering people's lives.

Vision Statement:

Growth, Community Prosperity, Excellence

Core Values:

Passion, Leadership, Commitment

5.2.1.2 Capital Investment Highlights

Westario's capital investments over the planning period have been aligned to the four categories of system access, system renewal, system service, and general plant outlined in the Filing Requirements. Table 5.2-1 presents Westario's historical actuals and forecast expenditures for both capital and O&M categories.

Table 5.2-1: Historical and Forecast Capital Expenditures and System O&M

Category	Historical ($ '000)					Bridge Year	Forecast ($ '000)				
	2018	2019	2020	2021	2022	2023*	2024	2025	2026	2027	2028
System Access (Gross)	$1,643	$1,356	$1,617	$1,349	$2,813	$1,803	$1,794	$1.862	$1,891	$1,947	$2,003
System Renewal (Gross)	$3,220	$3,051	$2,947	$1,660	$2,860	$5,748	$4,982	$5,193	$5,269	$5,411	$5,433
System Service (Gross)	$473	$160	$233	$66	$342	$510	$353	$373	$377	$391	$406
General Plant (Gross)	$948	$350	$425	$476	$543	$1,072	$490	$582	$745	$709	$608
Gross Capital Expenses	$6,248	$4,917	$5,222	$3,551	$6,558	$9,133	$7,619	$8,010	$8,282	$8,458	$8,450
Contributed Capital	$465	$295	$501	$480	$539	$856	$881	$908	$925	$944	$963
Net Capital Expenses after Contributions	$5,783	$4,622	$4,721	$3,071	$6,019	$8,277	$6,738	$7,102	$7,357	$7,514	$7,487
System O&M	$1,949	$2,135	$2,255	$2,056	$2,654	$2,562	$2,585	$2,650	$2,716	$2,784	$2,853

**2023 is 100% forecasted*

By working through the process of conducting an asset condition assessment and creating an asset management plan, Westario has managed to gain a clear understanding of its distribution asset base, as well as its general plant assets, and the costs required in maintaining them and providing reliable service to customers. This sound planning and asset management allow Westario to save its customers money by ensuring the best possible capital investment planning.

System Access

The main objective of capital expenditures in the system access category is to allocate sufficient funds for new connections in both the existing distribution system area, and for the growth needs of Westario customers, such as extension of the system to developing regions. These new developments include three-phase customer connections, new single phase commercial connections, and new subdivisions and relate to the asset management plan's objective of addressing growth of the communities it serves. The timing of investment is driven by the needs of the external parties. These expenditures are mandatory. Specific project scopes are rarely known at the time that the budget is set, and total expenditures can vary from year to year. These investments are non-discretionary and Westario adjusts its plans accordingly to deliver these projects.

System Renewal

The main objective of capital expenditures in the system renewal category is to allocate sufficient funds for the replacement and refurbishment of existing assets, to keep the distribution system as safe and reliable as feasibly possible. This objective is particularly significant as Westario's system is an aging one which requires significant renewal investments to maintain this safety and reliability. Major targeted assets for renewal over the forecast period include wood poles, pole and pad mount transformers, substation upgrades and underground infrastructure. Attempts to perform these investments as efficiently as possible are informed by the Asset Condition Assessment (ACA) and other annual inspection data collected by Westario. Another project in this category is the Kincardine Voltage Conversion. The town is at capacity and cannot support any future growth in demand and does not have any redundancy available during the winter months in the event of an outage. All of these expenditures relate to Westario's asset management plan's objective of addressing service safety and reliability while minimizing line losses. In addition, further system studies are being carried out to assess any future capacity upgrades that may be required.

System Service

The main objective of the capital expenditures in the system service category is to allocate sufficient funds for providing the most reliable service and meeting regulatory requirements. Ongoing investments in this category include ongoing customer and station metering replacements. These expenditures align with Westario's asset management plan's objective of addressing service reliability to its customers.

General Plant

The main objective of the capital expenditures in the general plant category is to allocate sufficient funds to allow Westario to perform its day-to-day activities, and ultimately fulfil its Vision and Mission statement, and achieving all other investment categories objectives. Investments in this category include tools, small vehicles and large trucks and technology such as computer hardware and software. All these expenditures align with Westario's asset management plan's objective of addressing service reliability to its customers and of achieving its goal of building a quality, customer focused organization, as without these general plant items, no objective could be reached.

5.2.1.3 Key Changes since Last DSP Filing

Where applicable, an indication of important changes since the last DSP Plan filing.

Since Westario's last DSP filing in 2018, Westario has made several important changes to improve its asset management processes and value to customers. Key changes are highlighted below.

Improved Data Collection & Availability

Westario upgraded its Geographic Information System (GIS) in 2021, since the previous version was no longer supported, offered no operability with other systems and had no real prospect of being the technology platform needed moving forward. The upgraded GIS tracks connectivity and provides more thorough, comprehensive, and accurate data on the utility's assets, along with interoperability with existing back-end systems such as the enterprise-wide ERP system. The upgraded GIS system has greatly assisted in the collection, maintenance, accuracy of asset information and customer connection details. Having a clearer understanding of the assets' conditions and other pertinent factors, such as geographic location, allows for better asset management and planning in terms of replacement and refurbishment.

Westario has also expanded its use of SCADA systems to monitor, track, diagnose, and optimize distribution system loading configuration. This has reduced the burden on existing equipment, eliminating the shortened useful life for those distribution system assets while improving reliability and stability.

The improved asset information from the upgraded GIS, in conjunction with Westario's SCADA systems, allows for more accurate reporting of outage frequency, duration, and customers affected. This, in turn, will improve the reporting of the system reliability statistics to the OEB and for internal control purposes.

Westario also plans to continue to upgrade its SCADA capabilities and Utilismart's SmartMAP software. This will allow for near-real time analysis of the network to manage overloading, under/over voltage, outages, and line losses. This will lead to improved asset management and decisions will be substantiated with historical evidence. Additionally, it will serve as a new tool to aid in troubleshooting outages more quickly, focusing the crew in on a probable cause, saving time and money, as well as decreasing outage response time and outage durations for the customer.

Improved Asset Condition Data

Westario retained METSCO Energy Solutions to undertake a full and complete Asset Condition Assessment in 2018 and an updated Asset Condition Assessment in 2022 to help inform its investment plan. The ACA provided Health Index information for Westario's key asset classes. This in turn has resulted in a better understanding of System Renewal needs and was used to inform Westario's capital and maintenance plans over the forecast period.

Westario has also undertaken a comprehensive scientific-based pole testing program that tests all poles on a 3-year cycle. The results of the testing give the strength of the pole as a percentage of the strength of a new pole, which in turn helps to identify which poles need attention and how urgently. The findings of this program helped Westario to better understand System Renewal needs relating to its population of poles and was used to inform Westario's planned pole replacements over the forecast period.

Internal Business Systems Improvement

Prior to the last DSP filing, Westario's operation was supported by many paper-based, inefficient, and labor-intensive systems. In 2022, Westario implemented a modern Enterprise Resource Planning (ERP) system to replace the legacy system and manual standalone systems of individual departments and offices.

The ERP implementation uses proprietary, multi-module software applications to improve, standardize and automate a wide range of operations including purchasing, finance, accounting, human resources, payment collections, inventory oversight, customer service, order tracking, resource planning, management control and operational control. Implementation of the ERP has enabled Westario to maintain and improve service to customers, while also enabling the integration of core business processes, facilitating consistent, integrated reporting, and enabling additional oversight and accountability.

5.2.1.4 DSP Objectives

A distributor should list out the objectives it plans to achieve through this DSP. This should include a reference to the four performance outcomes established by the OEB: customer focus, operational effectiveness, public policy responsiveness, and financial performance.

The purpose of the DSP is to provide a management framework to ensure that Westario:

- Maintains service levels that will meet customer, community, and regulatory expectations for its distribution system network;
- Understands what levels of distribution system capacity, reliability, and security of supply will be required both now and in the future, and what issues will drive these requirements;
- Has programs and procedures to manage all phases of the distribution system life cycle from inception to retirement;
- Has considered the management of the distribution system in terms of the best risk management practices with the ultimate goal of minimizing identified risks;
- Has made adequate provisions to fund all phases of the distribution system asset life cycle;
- Makes decisions based on structured business strategies and models;
- Considers renewable energy generation applications, identifying how capital will be allocated to include such alternative systems into the DSP; and

- Has a continuously improving knowledge of its assets with respect to locations, age, condition, capacity, and attributes.

5.2.2 Coordinated Planning with Third Parties

A distributor must demonstrate that it has coordinated infrastructure planning with customers, (e.g., large customers, subdivisions developers, and municipalities), the transmitter, (e.g., Regional Infrastructure Planning), other distributors, the Independent Electricity System Operator (IESO) (e.g., Integrated Regional Resource Planning) or other third parties where appropriate. A distributor should explain whether the consultation(s) affected the distributor's DSP as filed and if so, provide a brief explanation as to how.

For consultations that affect the DSP, a distributor should provide:

- *an overview of the consultation,*
- *relevant material supporting the effects the consultation had on the DSP*

An overview of any consultation(s) should include: The purpose and outcome of the consultation; whether the distributor initiated the consultation or was invited to participate in it; and the other participants in the consultation process (e.g., customers, transmitter, IESO).

A distributor should file the most recent regional plan (Integrated Regional Resource Plan, Regional Infrastructure Plan). In the absence of a regional plan, the distributor should file a Regional Planning Status Letter from the transmitter. Further, a distributor is required to identify any inconsistencies between its DSP and any current Regional Plan. If there are any inconsistencies, the distributor shall explain the reasons why, particularly where a proposed investment in their DSP is different from the recommended optimal investment identified in the Regional Plan.

Westario consults with the various stakeholder groups to ensure that the input from those stakeholders is taken into consideration when developing the DSP. Westario has considered input from the following stakeholders when preparing the DSP:

- Customers
- Towns
- Developers
- Hydro One (local transmission/distribution);
- Independent Electricity System Operator (IESO)
- Telecommunication Companies
- CDM Partners

5.2.2.1 Customers Consultations

Westario serves 15 communities covering a wide geographic area, and the area served is experiencing low but steady growth (approximately one percent). The utility has approximately 24,000 customers with 589km of distribution lines.

Westario contracted the help of UtilityPULSE to conduct customer satisfaction surveys. To meet the OEB's expectations in relation to coordinating infrastructure planning with customers, additional questions were added as part of the development of the DSP and Cost of Service. The purpose of the

feedback from customers was to assist Westario to make decisions about investments (capital and maintenance) and on operational/service quality improvements.

The UtilityPULSE survey was conducted from October 13 - 21, 2021, and is based on 402 one-on-one telephone interviews with residential and small commercial customers who pay or look after the electricity bill. The customers were interviewed from a customer list provided by Westario. The overview included feedback from customers who participated in providing a range of issues related to Westario.

Westario also engages with customers, developers, and Townships for both existing and future requirements. These requirements include existing servicing upgrades as well as new development expansions of Westario power infrastructure through scheduled and annual meetings. On March 22, 2023, Westario attended the Utility Communication Forum meeting with all the following utilities and Townships in the service area to discuss the future development and reconstruction planning for Westario's service territory:

- Municipalities of Brockton, Kincardine, South Bruce, North Huron, West Grey
- County of Bruce, Grey County
- Town of Hanover, Minto, Saugeen Shores
- Township of Huron-Kinloss
- Communication companies of Bell Canada, Bruce Telecom, EH!tel, GBTel, Hurontel, Rogers Communication, Eastlink Cable TV, and Wightman Communications
- Hydro One
- MTO
- EPCOR
- Enbridge Gas

Key survey responses are summarized below. A complete copy of the Westario Power Inc's Customer Engagement Survey in included in Appendix B: UtilityPULSE Electric Utility Customer Survey.

- **Overall Satisfaction with the Utility (Survey Page 8):** Almost all (95%) respondents indicate being "very + fairly satisfied" with the service they receive from Westario. We have included three tables that show the breakdown comparing the utility to the provincial benchmark, and a breakdown of scores by customer groups.
- **Satisfaction with Customer Service (Survey Page 34):** Westario scored 64%, as compared to 74% province wide for customers most recent experiences. Despite this, service quality ratings for Westario Power are very good compared to the Ontario benchmark.
- **Outage Management (Survey Page 36):** 48% of Westario Power respondents claimed they experienced an outage problem in the past 12 months.
- **Standard of Reliability (Survey Page 37):** 90% of Westario Power respondents agree ('strongly + somewhat') the utility's standard of reliability is consistent with their expectations.
- **Strategy - Priority Planning (Survey Page 82):** Respondents for Westario identified the following projects/initiatives as top items which Westario should focus attention and resources:
    - Maintaining and upgrading equipment to ensure a safe and reliable electricity supply (92%)
    - Investing to ensure that more frequent and severe weather events will cause less damage to distribution system (89%)

Customer preferences and survey results have helped to inform the DSP in the following manner:

Affordable Electricity Costs

Westario is proposing a Cost of Service Application that balances customer focus, operational effectiveness, public policy responsiveness and solid financial performance. The rate impact of the customer is always considered when budgeting for future plans in order to be affordable for the utility's customers while at the same time having the ability to provide a reliable distribution system and excellent customer service.

Westario consistently looks for cost savings opportunities such as improved planning of capital investments, making work processes more efficient, and exercising prudence with respect to staffing. The planning associated with this DSP will allow for increased but steady capital expenditures to meet the prioritized system deficiencies identified and at the same time meet the growth requirements.

Reliability of Service

The UtilityPULSE survey results indicate that reliability is a top priority. As a result, Westario's asset management and capital expenditure plans have been formulated to address this concern. Westario has prioritized the maintenance of its distribution system, through renewing assets before their deterioration has negative effects on service, providing system access to new connection customers, and upgrading technologies.

The constant monitoring of the reliability of the distribution system points the utility towards issues or areas that need attention. When Westario is aware of a problem it can direct capital towards fixing it; this is consistent with the customer priority of staying ahead of deteriorating assets and replacing them before failure.

Positive Communications for Outages

Within the customer survey, customers conveyed the need for effective communication during unplanned power outages. This is one area where there can always be improvement. Westario currently utilizes the following programs to communicate with customers and understands that the evolving state of technology allows for enhanced measures using alternative technologies to provide more accurate and timely information. The need for this enhanced technology is reflected in the DSP.

- Call blast for large, planned outages;
- Individual door knock for small, planned outages (door hangers, if nobody home);
- Updates on corporate website;
- Social media (during business hours);
- Direct email with town/municipal leaders;
- Direct interface with large, commercial customers.

Delivery of High Quality of Services

All of Westario's capital investment and asset management planning work towards delivering consistently high-quality distribution service to its customer base.

As a utility, Westario recognizes that these are common concerns, and takes them into account when planning its capital projects and asset management. Sound planning will allow Westario to keep customer costs as low as possible while providing the most reliable service possible.

5.2.2.2 Town Consultations

Westario consults with different towns on a regular basis. Operations staff meet and consult annually with the majority of the towns (not all have full operations departments) on their respective upcoming capital projects, status, and any Municipal Road Act work. The discussions include specific development plans and infrastructure plans regarding scope and timing of road widenings or other infrastructure consultations. Westario co-ordinates any capital work to save tax/rate payers.

Westario's DSP has incorporated the input from the town meetings into the preparation of the DSP.

5.2.2.3 Developer Consultations

As part of ongoing development community consultations, Westario operations staff consult with various local and regional land developers about their needs. The meetings include discussing their development plans. In terms of project specific plans, it is important for the utility to consult with the development community to seek level of growth with over 12 different developers.

Westario's DSP has incorporated the input from the development community into the preparation of the DSP.

5.2.2.4 Hydro One Consultations [Transmitter]

Hydro One is the transmission and distribution company supplying Westario's service area. Most of Westario's interactions with Hydro One are related to operational issues regarding Hydro One supply points.

On an operating basis Westario meets with Hydro One representatives twice per year in HydroOne hosted distributor sessions:

- **Hydro One Customer Conference to discuss the Annual Outage Plan:** This provides an opportunity to coordinate any outage requirements and therefore minimizeinterruptions and multiple operations.
- **Daily Operations:** Westario Operations staff coordinate system requirements with Hydro One. These are in theform of daily operational needs to information exchange at the system planning level.

Westario does not anticipate any impact on Westario's DSP from consultation with Hydro One regarding any operational matters.

In addition, Hydro One and Westario jointly participate in the regional planning Group 3: Greater Bruce-Huron Region. Additional information on the Regional Planning process is included in Section 5.2.2.7.

5.2.2.5 Independent Electricity System Operator

Westario's interactions and coordination with the IESO typically relate to the following:

- **Renewable energy generation (REG) plan:** Westario has historically coordinated with the IESO to provide information on REG plans. However, since there are no costs included in this DSP to accommodate and connect REG facilities over the forecast period, no engagement was required as part of this DSP.
- **Conservation and Demand Management (CDM):** Although Westario continues to consult with its stakeholders including customers, consultants, other distributors and the IESO in an effort to effectively promote and deliver the conservation programs, Westario does not anticipate any major impact of CDM programs on Westario's DSP.

- **Regional Planning Process:** Westario has consulted with the IESO as part of the Greater Bruce-Huron Region planning process. Please refer to Section 5.2.2.7 for more information.

5.2.2.7 Greater Bruce/Huron Regional Planning Process

Westario is part of the Greater Bruce/Huron planning region, shown in Figure 5.2-3. The planning region includes the following participants:

- IESO
- Hydro One Networks Inc. (Transmission)
- Hydro One Networks Inc. (Distribution)
- Festival Hydro Inc.
- Wellington North Power Inc.
- ERTH Power
- Entegrus Power Lines Inc.
- Westario Power Inc.

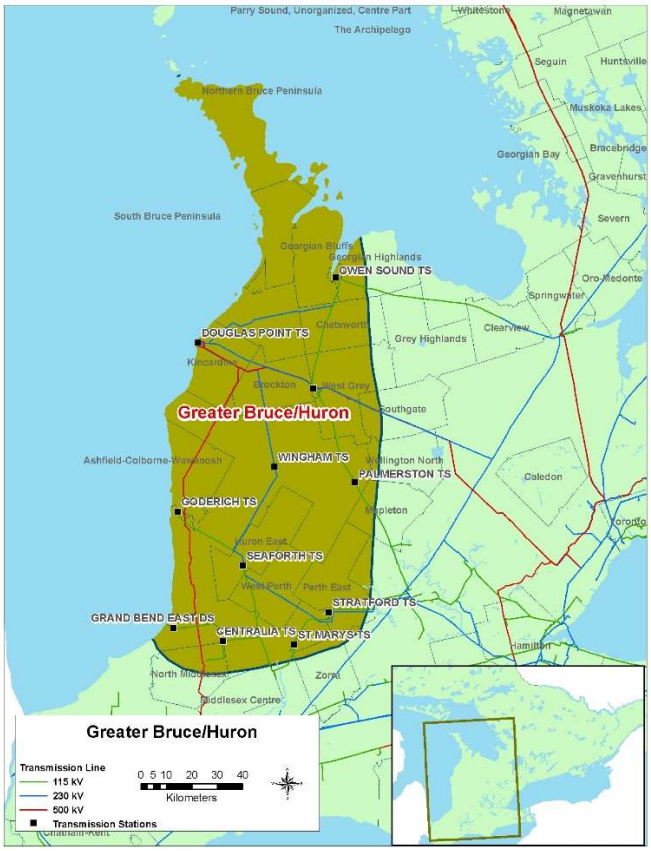

Figure 5.2-3: Greater Bruce/Huron Regional Planning Area

The first regional planning cycle for the region commenced in spring 2016 and was completed in August 2017 with the publication of the Regional Infrastructure Plan (RIP) which identified needs and recommendations for the near- and medium-term timeframes. The August 2017 RIP issued by Hydro One is included in Appendix C.

The second regional planning cycle was completed in April 2022. The second cycle was triggered for the region in 2019 with the development of a Needs Assessment. As part of this process, Westario participated in a regional planning meeting for the Greater Bruce/Huron Region hosted by Hydro One. The objective of the meeting was to initiate communication between Hydro One Transmission and the LDCs in the region as part of the Regional Planning Process; this meeting sought to initiate the Needs Assessment portion of the Planning Process. As part of this process, additional meetings were had to discuss net load forecasts, LDC and Hydro One Transmission capital investment plans, transformer ratings, and to assess the next steps in the planning process. The Greater Bruce/Huron Region Needs Assessment report was published by HONI in May 2019, which recommended that a number of initiatives required regional coordination.

The 2022 Regional Infrastructure Plan report from Hydro One identified two end-of-life equipment replacement need in Westario's service area: Wingham TS and Hanover TS. The current scope of the Wingham TS project is for Hydro One to replace the 230/44 kV step-down transformers, T1 and T2 and associated surge arrestors. This project is underway, with a planned in-service date for 2023. The scope of the Hanover TS project includes the replacement of 230 kV motorized switches, 115/44 kV step-down transformer T2 and associated equipment, 115 kV motorized switches, surge arrestors, auto-ground switches and potential transformers. The expected in-service date for this project was in 2022, the remaining component replacements that were planned as part of the T2 work will now be bundled with the replacement of T1 and have an expected in-service date of 2031. This work is being carried out by Hydro One.

Copies of the May 2019 Needs Assessment and the 2022 Regional Infrastructure Planning reports are included in Appendix D.

Additionally, the outcomes of the Needs Assessment were input into the Scoping Assessment to determine the nature of the planning process. The Scoping Assessment was released by the IESO in September 2019, which identified the need for further coordination at the sub-regional level to develop an Integration Regional Resource Plan (IRRP) for the Southern Huron-Perth sub-region (this region does not include Westario). The IRRP for this sub-region was issued by the IESO in September 2021.

As of the writing of this DSP, there are no suggested changes or plans that will affect the work planned as part of Westario's DSP. The planned replacement projects highlighted in the 2022 RIP report have had no impact on Westario's capital planning.

5.2.2.8 Telecommunication Entities

In January 11, 2022, the OEB issued further guidance to the regulation that requires distributors to consult with any telecommunications entity that operates within its service area when preparing a capital plan for submission to the OEB, for the purpose of facilitating the provision of telecommunications services, and include the following information in its capital plan:

- *The number of consultations that were conducted and a summary of the manner in which the distributor determined with whom to consult.*
- *A summary of the results of the consultations.*
- *A statement as to whether the results of the consultations are reflected in the capital plan and, if so, a summary as to how.*

Consultations

Westario works closely with numerous telecommunication entities operating within its service territory and allows for other pole attachments such as cable, telephone, fibre etc. as part of its joint use initiative. The joint use agreements set out the required design standards to ensure the safety of employees and the public.

Westario also informs service providers, including telecommunication companies, of its planned capital projects to ensure that respective parties are aware of the plans for budgeting purposes and to allow opportunities to coordinate work between companies to gain efficiencies. Westario typically sends out a letter and a survey to the telecommunication entities in the service area to inform them of the long-term capital plans and ask them about prospective pole attachments. On March 29, 2022, Westario informed eight (8) telecommunication entities of its capital plans and consulted about using Westario's distribution poles to attach their services. Table 5.2-2 highlights the result of the consultations with the following entities:

Table 5.2-2: Westario Telecommunications Consultations

Telecommunication Entity	Results
Eastlink	No expansion plans that will require new pole attachments.
Wightman Telecom	No plans for pole attachments.
Bell	No projects planned for joint use.
Rogers	No reply to survey
HuronTel	No reply to survey
Bruce Telecom	No reply to survey
Grey Bruce Telecom (GBTel)	No reply to survey
EH!tel Networks	No reply to survey

Consultation Effects on the DSP

There will be no signification changes to the DSP based on the consultation results. Westario will continue to consult with the telecommunication entities operating in its service territory before finalizing its long-term capital plans.

5.2.2.9 CDM Engagements

Per the 2021 CDM Guidelines, the distributor should describe any CDM-related consultations (if applicable).

Although Westario continues to consult with its stakeholders including customers, consultants, other distributors and the IESO in an effort to effectively promote and deliver conservation and demand

management programs, Westario does not anticipate any major impact of CDM programs on Westario's DSP.

5.2.2.10 Renewable Energy Generation (REG)

A distributor is expected to coordinate with the IESO in relation to REG investments and confirm if there are no REG investments in the region.

There are no costs included in this DSP to accommodate and connect REG facilities over the forecast period. As a result, a comment letter from the IESO is not required.

5.2.3 Performance Measurement for Continuous Improvement

5.2.3.1 Distribution System Plan

Distributors are expected to summarize objectives for continuous improvement (e.g., reliability improvement and other desired outcomes) the distributor set out to address in its last DSP and to discuss whether these objectives have been achieved or not. For objectives not achieved, a distributor should explain how it affects this DSP and, if applicable, improvements a distributor has implemented to achieve the objectives set out in Section 5.2.1.

In order to continually improve its operating performance, Westario continually measures and monitors its performance. The performance measures tracked by Westario align with the OEB's "Scorecard – Performance Measures" for electricity distributors, as listed below:

- service quality;
- customer satisfaction;
- safety;
- system reliability;
- asset management;
- cost control;
- connection of renewable generation; and
- financial ratios.

Where applicable, the performance measures included on the scorecard have an established minimum level of performance to be achieved. The scorecard is designed to track and show Westario's performance results over time and helps to benchmark its performance and improvement against other utilities and best practices.

summarizes Westario's performance during historical years from 2017 to 2021. Explanations for any missed targets, including the impact on the DSP and any associated improvements, are detailed in the following sub-sections.

Table 5.2-3: DSP Performance Measures

Performance Outcome	Measure	Metric	2017	2018	019	2020	2021	Target
Customer Focus	Service Quality	New Residential/Small Business Services Connected on Time	92.25%	90.61%	91.83%	95.43%	96.24%	>90.00 %
		Scheduled Appointments Met on Time	94.86%	96.40%	95.02%	97.33%	99.52%	>90.00 %
		Telephone Calls Answered on Time	82.29%	86.92%	85.86%	86.73%	88.45%	>65.00 %
	Customer Satisfaction	First Contact Resolution	99.56%	98.95%	97.18%	98.19%	98.83%	No target
		Billing Accuracy	99.99%	99.93%	99.77%	99.61%	99.78%	98.00%
		Customer Satisfaction Survey	92.00%	92.00%	95.00%	94.00%	94.00%	No target
Operational Effectiveness	Safety	Level of Public Awareness	82.00%	82.00%	83.00%	83.00%	84.00%	No target
		Level of Compliance with Ontario Regulation 22/04	C	C	C	C	C	C
		Number of General Public Incidents	0	0	0	0	0	0
		Rate per 10, 100, 1000 km of line	0	0	0	0	0	0.027
	System Reliability	Ave. Number of Hours that Power to a Customer is Interrupted	1.20	0.58	1.12	1.92	1.79	2.37
		Ave. Number of Times that Power to a Customer is Interrupted	0.26	0.21	0.38	0.50	0.73	0.62
	Asset Management	Distribution System Plan Implementation Progress	Completed	Completed	Completed	Completed	Completed	No target
	Cost Control	Efficiency Assessment	3	3	3	3	3	No target
		Total Cost per Customer	$582	$575	$601	$558	$610	No target
		Total Cost per km of Line	$25,148	$24,850	$25,517	$24,427	$25,340	No target
Public Policy Responsiveness	Connection of Renewable Generation	Renewable Generation CIA Completed on Time	100%	-	-	100%	-	No target

		New Micro-embedded Generation Facilities Connected on Time	100%	100%	100%	100%	100%	90%
Financial Performance	Financial Ratios	Liquidity: Current Ratio (Current Assets / Current Liabilities)	0.90	1.40	1.27	1.26	1.05	No target
		Leverage: Total Debt (short-term & long-term) to Equity Ratio	0.66	0.73	0.65	0.70	0.66	No target
		Regulatory ROE – Deemed (included in rates)	8.98%	9.00%	9.00%	9.00%	9.00%	No target
		Regulatory ROE - Achieved	2.55%	10.10%	10.99%	8.77%	7.01%	No target

Based on the review of the historical performance above, Westario has largely met or exceeded expectations over the historical period, with the following exceptions:

SAIFI in 2021:

Westario did not meet its SAIFI performance targets in 2021. Westario's average number of times that power to a customer was interrupted was 0.73, which is higher than Westario's target of 0.62 and the five-year rolling average of 0.42 in 2021. This is primarily attributed to the fact that although Westario experienced three significant storms in a row in September 2021 causing downed equipment, the storms were not big enough to be classed a MEDs.

A more detailed breakdown of Westario's service quality and reliability performance over the historical period is provided in the following sub-sections.

5.2.3.2 Service Quality and Reliability

Chapter 7 of the OEB's Distribution System Code outlines the OEB's expectations regarding Service Quality Requirements (SQR) for Electricity Distributors. A distributor is required to provide the reported SQRs for the last five historical years. A distributor should also provide explanations for material changes in service quality and reliability, and whether and how the DSP addresses these issues. The OEB expects any five-year declining trends in reliability for SAIDI and SAIFI to be explained. If a distributor has reliability targets established in a previously filed DSP, as described below, any underperformance should also be explained.

A completed Appendix 2-G, documenting both the Service Quality and Service Reliability indicators, must be filed. A distributor must confirm that data is consistent with the scorecard or must explain any inconsistencies.

A summary of performance for the historical period using the methods and measures (metrics/targets) identified and described above, and how this performance has trended over the period. This summary must include historical period data on

- *All interruptions*
- *All interruptions excluding loss of supply*
- *All interruptions excluding Major Events and loss of supply for the following:*
  - *The distribution system average interruption frequency index (SAIFI)*
  - *System average interruption duration index (SAIDI)*

Service Quality Requirements

Explanations required for any underperformance, missed targets, material changes or declining trends, and whether and how the DSP addresses these issues.

Westario tracks and reports the Service Quality Requirements (SQR) outlined in Chapter 7 of the OEB's Distribution System Code (DSC). Westario's SQR performance for the last five historical years is summarized in Table 5.2-4. Explanations for any material changes, missed targets or declining trends, and whether and how the DSP addresses these issues, is detailed below.

Table 5.2-4: Service Quality Indicators

Service Quality Metric	2017	2018	2019	2020	2021	Minimum Standards
Low Voltage Connections	92.25%	90.61%	91.83%	95.43%	96.24%	> 90%

High Voltage Connections	n/a	n/a	n/a	n/a	n/a	> 90%
Telephone accessibility	82.29%	86.92%	85.86%	86.73%	88.45%	> 65%
Appointments met	94.86%	96.40%	95.02%	97.33%	99.52%	> 90%
Written response to enquiries	97.52%	98.57%	97.71%	99.65%	98.92%	> 80%
Emergency Urban Response	50%	n/a	n/a	n/a	n/a	> 80%
Emergency Rural Response	n/a	100.00%	100.00%	88.24%	94.74%	> 80%
Telephone call abandon rate	2.99%	1.31%	1.75%	1.50%	0.78%	< 10%
Appointment scheduling	99.63%	76.15%	57.69%	73.06%	33.67%	> 90%
Rescheduling a Missed Appointment	100%	100.00%	100.00%	100.00%	99.85%	> 100%
Reconnection Performance Standard	100%	100.00%	100.00%	100.00%	100.00%	> 85%
New Micro-embedded Generation Facilities Connected	100%	100.00%	100.00%	100.00%	100.00%	> 90%
Billing Accuracy	99.99%	99.93%	99.77%	99.61%	99.78%	> 98%

A review of the service quality indicators data above indicates that Westario continues to meet and exceed the majority of the OEB requirements. However, there are a few instances where the minimum targets were not met:

- Appointment Scheduling metric did not meet the minimum standards in 2018, 2019, 2020, and 2021 due to Westario not scheduling customer requests for appointments within the five-day timeframe as described in the DSC. This is primarily due to internal issues faced by the third-party locater that Westario contracted to work with customers. Although Westario had been trying to address this issue with the third-party locater over the last few years, this issue was not resolved. In addition, Westario also had some in-house issues from 2018-2019 that prevented it from meeting the metric standards. Lastly, COVID-19 pandemic related issues also contributed to Westario not meeting the metric standards in 2020 and 2021. However, Westario has replaced its previous contractor and is already working with the new contractor to address this issue moving forward.

Reliability Requirements

Explanations required for any underperformance, missed targets, material changes or declining trends, and whether and how the DSP addresses these issues.

The key metrics that Westario tracks to measure reliability are the System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI). SAIDI, SAIFI and CAIDI are measured under four scenarios:

1. By including all power interruptions
2. By excluding interruptions due to Loss of Supply
3. By including interruptions due to LOS and excluding Major Event Days
4. By excluding interruptions due to LOS and Major Event Days

Loss of Supply (LOS) outages occur due to problems associated with assets owned by another party other than Westario or the bulk electricity supply system. “Major Events” are defined by OEB as the events beyond the control of the distributor and are unforeseeable, unpredictable; unpreventable; or unavoidable. Such events disrupt normal business operation and occur so infrequently that it would be uneconomical to take them into account when designing and operating the distribution system. Such events cause exceptional and/or extensive damage to assets, they take significantly longer than usual to repair, and they affect a substantial number of customers. Major Event Days (MED) are calculated using the IEEE Std 1366-2012 methodology. MEDs are confirmed by assessing whether interruption was beyond the control of Westario (i.e., force majeure or LOS) and whether the interruption was unforeseeable, unpredictable, unpreventable, or unavoidable.

The fixed performance baseline targets for SAIDI and SAIFI over the historical period is based on the average performance over the 2013-2017 period, excluding LOS and Major Events. This corresponds to a fixed target of 2.37 for SAIDI and 0.62 for SAIFI. No targets are set for CAIDI.

Westario’s reliability performance for the last five historical years is summarized in Table 5.2-5 and Table 5.2-6. Explanations for any material changes, missed targets or declining trends, and whether and how the DSP addresses these issues, is detailed below.

Table 5.2-5: Historical Service Interruption Indices – All Cause Codes

Metric	2017	2018	2019	2020	2021	Average
SAIDI	2.10	1.52	4.59	12.47	11.20	6.38
SAIFI	0.71	0.5	1.22	2.04	2.28	1.35
CAIDI	2.95	3.07	3.75	6.11	4.91	4.16

Table 5.2-6: Historical Service Interruption Indices – LOS and MED Adjusted

Metric	2017	2018	2019	2020	2021	Average
	Loss of Supply Adjusted (including MEDs, Excluding LOS)					
SAIDI	1.20	1.19	1.12	1.92	2.53	1.59
SAIFI	0.26	0.34	0.38	0.5	0.77	0.45
CAIDI	4.68	3.54	2.92	3.81	3.29	3.65
	Major Event Days Adjusted (including LOS, excluding MEDs)					
SAIDI	2.10	1.52	4.59	6.52	7.28	4.40
SAIFI	0.71	0.5	1.22	1.64	1.86	1.19
CAIDI	2.95	3.07	3.75	3.98	3.83	3.52
	Loss of Supply and Major Event Days Adjusted (excluding LOS and MEDs)					
SAIDI	1.20	1.19	1.12	1.92	1.79	1.44
SAIFI	0.26	0.34	0.38	0.5	0.73	0.44

CAIDI	4.68	3.54	2.92	3.81	2.44	3.48

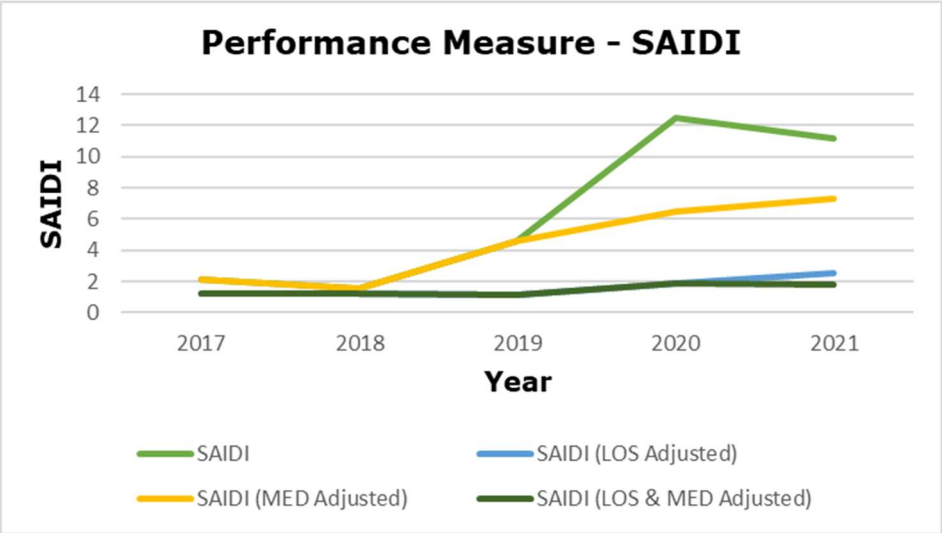

Figure 5.2-4: Performance Measure – SAIDI

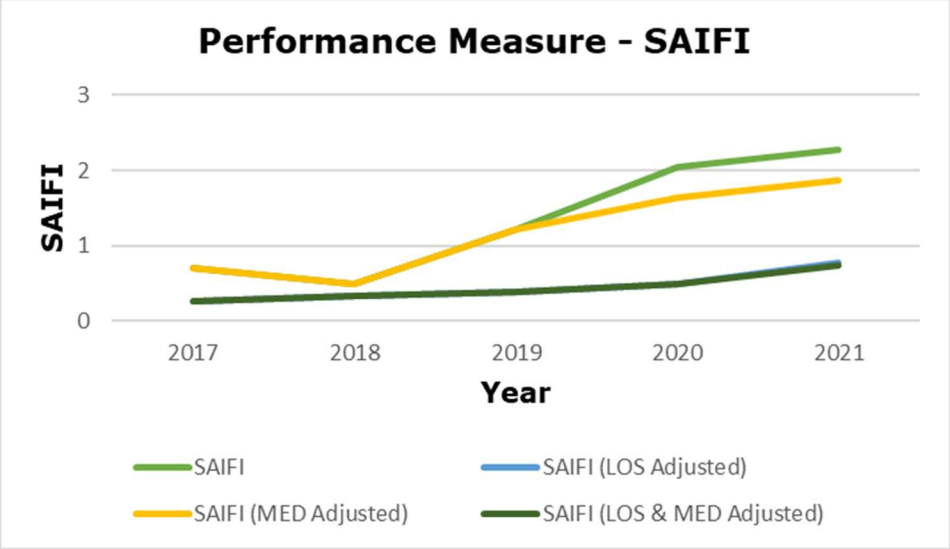

Figure 5.2-5: Performance Measure – SAIFI

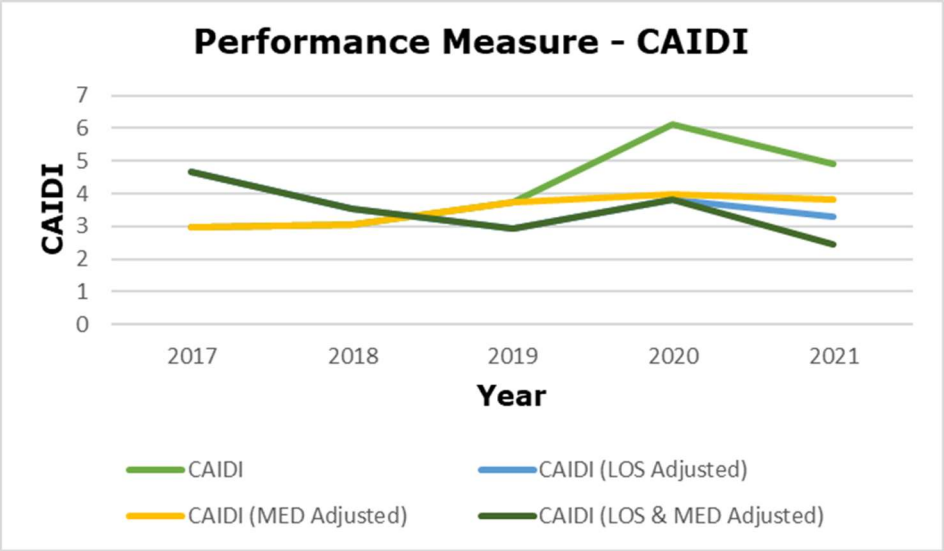

Figure 5.2-6: Performance Measure - CAIDI

The significant spike in reliability performance observed in 2020 and 2021 before adjusting for LOS and MED can be attributed to two MEDs caused by Loss of Supply and Adverse Weather. These MEDs are described in detail below.

When reviewing the above service interruption information, it is evident that Westario's outage frequencies and durations are heavily impacted by the loss of supply from Hydro One. Since Westario is embedded within the Hydro One distribution system, Westario has no control in responding to outages caused by loss of supply. When loss of supply events is taken out of the calculation of the above indices, both the frequency and duration of service outages to Westario customers are significantly decreased.

A further review into the root causes of Westario distribution system outages is indicated in the following sub-section.

Outage Details for Years 2017-2021

Major Events

The applicant should also provide a summary of Major Events that occurred since the last Cost of Service (CoS) filing.

A "Major Event" is an event that is beyond the control of Westario. Because these events occur infrequently and unpredictably, these events are not considered when designing and operating the distribution system. The following tables provide a summary of Westario's Major Event Days (MEDs) over the historical period.

Table 5.2-7: Summary of MEDs over the Historical Period

Year	# of MEDs	Cause of MEDs
2017	0	N/A
2018	0	N/A
2019	0	N/A

Year	# of MEDs	Cause of MEDs
2020	1	Loss of Supply and Adverse Weather
2021	1	Loss of Supply and Adverse Weather

Table 5.2-8 lists the major event days that occurred over the historical period. There were no major event days in 2017, 2018, and 2019.

Table 5.2-8: List of MEDs over the Historical Period

Date	Customer Base Interrupted	Description
November 15, 2020	9,613	**Loss of Supply from Adverse Weather** – On November 15, 2020, at approximately 13:45 hours EST, Towns of Port Elgin, Southampton, Ripley, and Lucknow were affected by Loss of Supply due to a Hydro One outage caused by severe weather. Hydro One had numerous outages within their transmission and distribution system which effected Westario's customer base. Among the total 9,613 customer base interrupted, 9,594 customers were directly affected by the Loss of Supply, 10 customers were affected by Tree Contacts, 5 customers were affected by other Adverse Weather related interruption and 4 customers were affected by Defective Equipment interruption which was extended by the major event.
September 7, 2021	10,113	**Loss of Supply from Adverse Weather** – On September 17, 2021, at approximately 17:00 hours EST, Towns of Port Elgin, Southampton, Ripley, and Lucknow were affected by Loss of Supply due to a Hydro One outage caused by severe weather and wind. Hydro One had numerous outages within their transmission and distribution system which effected Westario's customer base. Among the total 10,113 customer base interrupted, 9,203 customers were directly affected by the Loss of Supply, 905 customers were affected by other Adverse Weather related interruptions and 5 customers were affected by Defective Equipment interruptions which was extended by the major event.

For each cause of interruption, a distributor should, for the last five historical years, report the following data:

- *Number of interruptions that occurred as a result of the cause of interruption*
- *Number of customer interruptions that occurred as a result of the cause of interruption*
- *Number of customer-hours of interruptions that occurred as a result of the cause of interruption*

Table 5.2-9 presents a summary of outages that have occurred within Westario's service territory under three different categorizations. The table values indicate a slightly increasing trend with respect

to outages within Westario's service territory. A further breakdown by cause codes is provided in the following subsections.

Table 5.2-9: Number of Outages (2018-2022)

Categorization	2017	2018	2019	2020	2021
All interruptions	64	105	115	157	137
All interruptions excluding LOS	60	97	102	132	118
All interruption excluding MED and LOS	60	92	102	128	112

Outages Experienced

Table 5.2-10 presents the count of outages broken down by cause code for the historical period. The number of outages is an indication of outage frequency and impacts customers differently based on customer class. For example, residential customers may tolerate a larger number of outages with shorter duration while commercial and industrial customers may prefer fewer outages with longer duration thereby reducing the overall impact on production and business disruption. Westario continues to assess and execute capital and O&M projects to manage the number of outages experienced.

Table 5.2-10 Outage Numbers by Cause Codes – Excluding MED

Cause Code	2017	2018	2019	2020	2021	Total Outages	%
0-Unknown/Other	1	6	3	8	4	22	4%
1-Scheduled Outage	21	28	37	22	11	119	21%
2-Loss of Supply	4	13	13	25	17	72	12%
3-Tree Contacts	2	5	8	10	19	44	8%
4-Lightning	0	0	1	2	1	4	1%
5-Defective Equipment	22	33	44	64	53	216	37%
6-Adverse Weather	8	10	2	10	24	54	9%
7-Adverse Environment	0	0	1	0	0	1	0%
8-Human Element	0	5	3	0	0	8	1%
9-Foreign Interference	6	5	3	16	8	38	7%
Total	**64**	**105**	**115**	**157**	**137**	**578**	**100%**

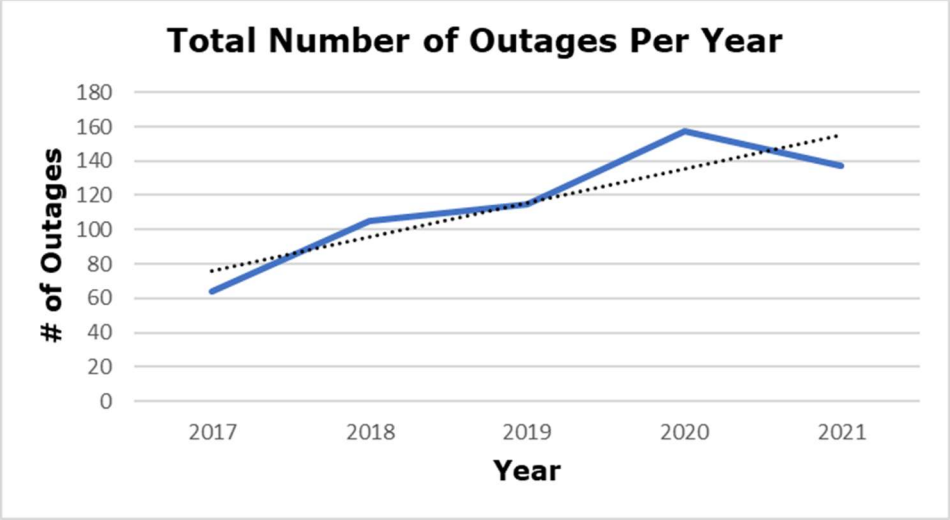

Figure 5.2-7: Total Number of Outages by Year

The total annual number of interruptions over the historical period varies from a low of 64 to a high of 157, with the overall trend increasing in the period. This represents an average of 0.175 to 0.430 interruptions per day.

A summary of the causes of outages within Westario's system is presented in the following graph along with the percentage of overall outage incidents attributable to each cause type.

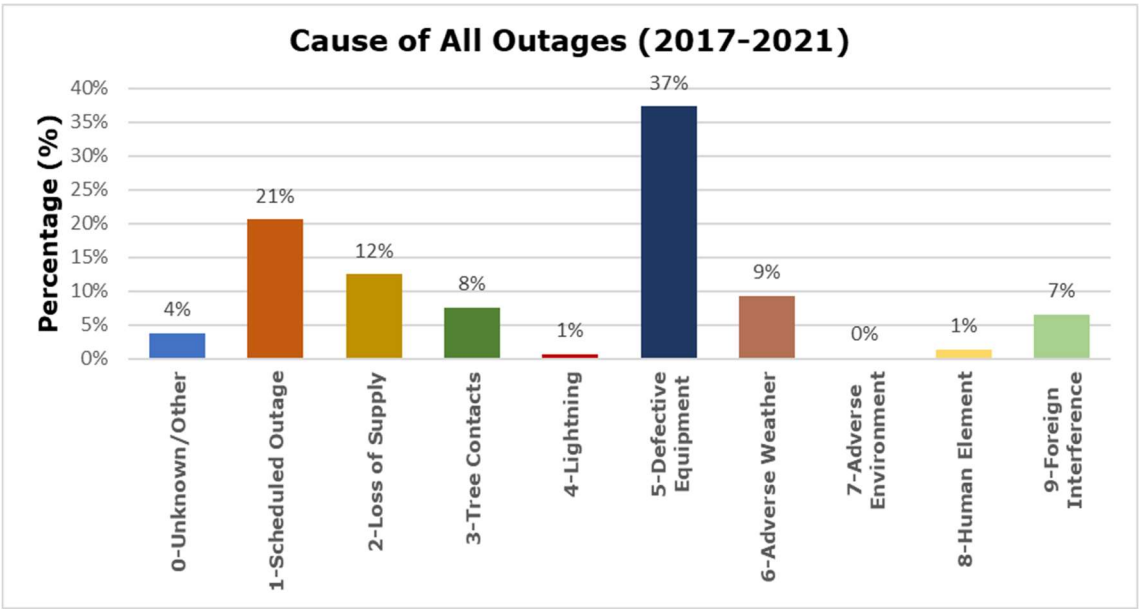

Figure 5.2-8: Percent of Outages by Cause code

As illustrated in Figure 5.2-8 above, the top three contributors to the quantity of outages experienced over the historical period are Defective Equipment, Scheduled Outage, and Loss of Supply.

At 37%, Defective Equipment represents the top contributing cause for outages experienced by Westario. Defective Equipment failures result from equipment failures due to condition deterioration, ageing effects or imminent failures detected from reoccurring maintenance programs. Westario has planned renewal investments to prioritize assets for replacement before experiencing a failure that may cause an outage. This includes replacing decrepit poles, underground infrastructure, and distribution transformers and upgrading substation assets. Westario utilizes asset condition data from the recently completed ACA to assist in prioritizing investments in asset classes.

At 21%, Scheduled Outages represent the second top contributing cause for outages on Westario's distribution system over the last five years. Scheduled Outages are due to the temporary suspension of service for Westario to complete capital investments or to perform maintenance activities on assets that require them to be disconnected for employee safety. Westario aims to mitigate the impact of these outages through proactive planning, maintenance, and advanced notice to affected customers.

At 12%, Loss of Supply represents the third top cause for outages. Since Westario is embedded within the Hydro One distribution system, Westario has no control in responding to outages caused by Loss of Supply. Westario works closely with Hydro One to resolve these issues and Westario also strives to improve system reliability when possible.

Customers Interrupted and Customer Hours Interrupted

The number of Customers Interrupted (CI) is a measure of the extent of outages. Customer Hours Interrupted (CHI) is a measure of outage duration and the number of customers impacted. The tables below provide the historical values and trends for both CI and CHI.

Table 5.2-11 Customers Interrupted Numbers by Cause Codes – Excluding MED

Cause Code	2017	2018	2019	2020	2021	Total CI	%
0-Unknown/Other	4	1,096	551	450	1,210	3,311	2%
1-Scheduled Outage	4,796	923	4,108	3,817	73	13,717	10%
2-Loss of Supply	10,645	6,709	19,902	27,082	27,210	91,548	65%
3-Tree Contacts	8	713	854	881	4,915	7,371	5%
4-Lightning	0	0	1	82	200	283	0%
5-Defective Equipment	700	1,093	3,411	6,321	6,283	17,808	13%
6-Adverse Weather	417	487	10	377	4,460	5,751	4%
7-Adverse Environment	0	0	120	0	0	120	0%
8-Human Element	0	367	6	0	0	373	0%
9-Foreign Interference	98	272	3	74	459	906	1%
Total	**16,668**	**11,660**	**28,966**	**39,084**	**44,810**	**141,188**	**100%**

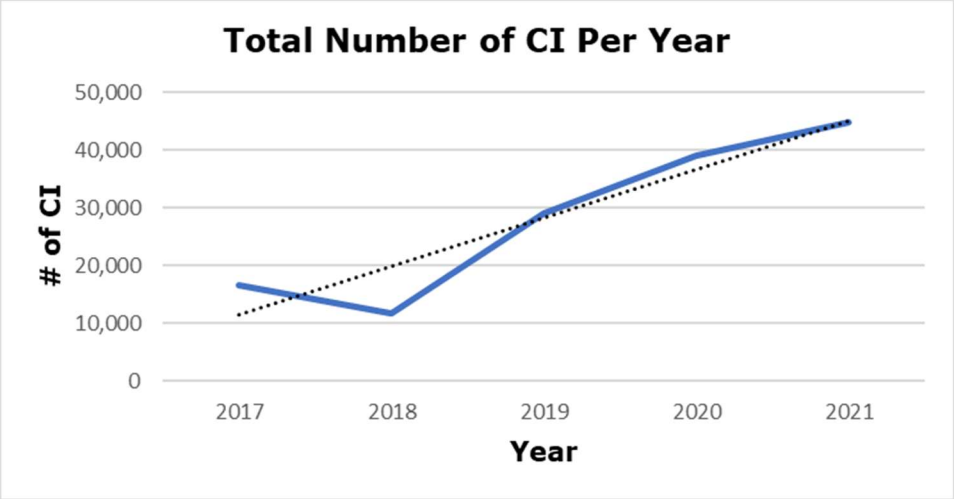

Figure 5.2-9: Total Number of customers Interrupted by Year

Table 5.2-12 Customer Hours Interrupted Numbers (rounded) by Cause Codes – Excluding MED

Cause Code	2017	2018	2019	2020	2021	Total CHI	%
0-Unknown/Other	8	4,185	928	814	1,782	7,717	1%
1-Scheduled Outage	24,158	3,613	17,598	22,275	250	67,894	13%
2-Loss of Supply	20,880	22,188	82,068	109,893	132,327	367,356	70%
3-Tree Contacts	17	1,584	2,294	3,047	15,278	22,220	4%
4-Lightning	0	0	3	226	1,000	1,229	0%
5-Defective Equipment	2,252	2,651	5,458	18,154	11,916	40,431	8%
6-Adverse Weather	1,529	987	76	1,013	11,557	15,162	3%
7-Adverse Environment	0	0	30	0	0	30	0%
8-Human Element	0	101	37	0	0	138	0%
9-Foreign Interference	246	511	16	191	1,214	2,178	0%
Total	**49,089**	**35,820**	**108,508**	**155,611**	**175,325**	**524,354**	**100%**

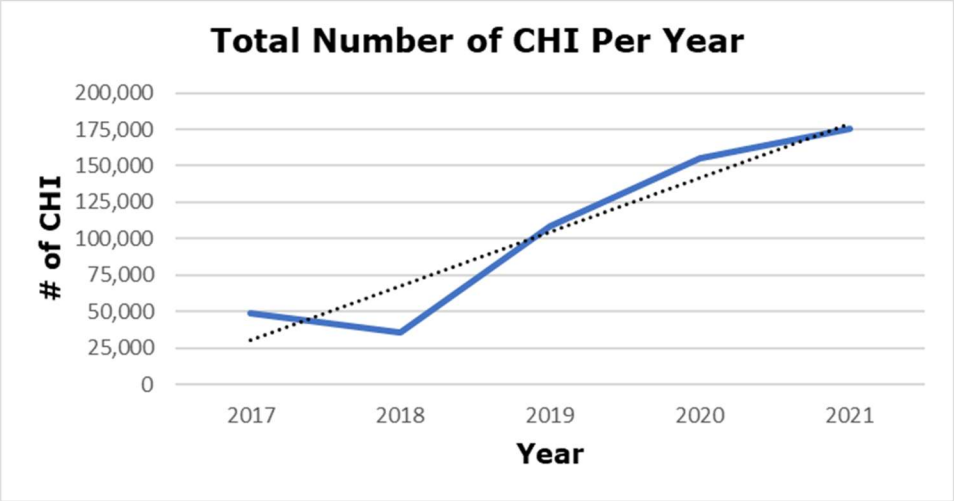

Figure 5.2-10: Total Number of Customer Hours Interrupted by Year

The trend for total number of CI or total number of CHI over the historical period is increasing. The significant increase in CI and CHI observed in 2020 and 2021 is largely driven by the two MEDs where customers were affected by the Loss of Supply from Hydro One.

When analyzing CI and CHI, Loss of Supply and Defective Equipment remain within the top contributing causes, as seen in Table 5.2-11 and Table 5.2-12. Another trend that can be observed is that customers being affected by Adverse Weather is also increasing. Although weather-related interruptions are out of Westario's control, Westario continues to implement measures such as replacing decrepit poles in order to mitigate outages caused by other elements related to Adverse Weather.

Westario uses outage data to gauge the system reliability performance and maintain tight control over capital and maintenance spending. Within this DSP period, there are several ongoing and planned

efforts to reduce the number of controllable outages and continue meeting the established reliability targets. These efforts include:

- Planned renewal of end-of-life assets such as poles
- Voltage conversion program to replace end of life 4.16 kV system with 13.8 kV in Kincardine
- Ongoing inspection & maintenance of assets to identify and mitigate potential problems

Equipment Failures

Of the 216 equipment failure events over the historical period (2017-2021), Table 5.2-13 shows the detailed breakdown by type of equipment.

Table 5.2-13: Equipment Failure (Breakdown by Westario subcategory)

Westario Subcategory	Code Description	Number of Occurrences
1	Unknown	26
2	Switch Cutout Arrestor	73
3	Fuses	23
4	Connections	29
5	U/G Burn-off	15
6	Transformers	29
7	Conductor Broken/Blown	2
8	Other	19
Total Equipment Failure		216

To address this issue and reduce equipment failures, Westario is investing in System Renewal programs in the forecast period to replace damaged assets or assets reaching the end of their useful life. Westario has taken a more systematic approach in determining the condition of assets through an Asset Condition Assessment (ACA). The ACA helps generate an informed replacement plan for each asset type to determine whether an asset requires replacement or refurbishment. Westario's most recent ACA can be found in Appendix E. Please refer to Section 5.3 to learn more about Westario's asset management strategies and Section 5.4 to learn more about the investment plans.

5.2.3.3 Distributor Specific Reliability Targets

As established in the Report of the OEB: Electricity Distribution System Reliability Measures and Expectations, distributors' SAIDI and SAIFI performance is expected to meet the performance target set out in the Scorecard. Distributors who wish to establish performance expectations based on something other than historical performance should provide evidence of its capital and operational plan and other factors that justify the reliability performance it plans to deliver. Distributors should also provide a summary of any feedback from their customers regarding the reliability of the LDC's distribution system.

Distributors who wish to use SAIDI and SAIFI performance benchmarks that are different than the historical average must provide evidence to support the reasonableness of such benchmarks.

The fixed performance baseline targets for SAIDI and SAIFI over the historical period were set based on the average performance over the 2013-2017 period, excluding LOS and MEDs. This corresponded to a fixed target of 2.37 for SAIDI and 0.62 for SAIFI.

In addition to meeting the fixed performance baseline targets, SAIDI and SAIFI trending is done by comparing the fixed performance baseline targets against the most recent five-year rolling average (i.e., average of the most recent five-year performance, updated annually). This information is reported annually as part of the OEB Scorecards.

5.3 Asset Management Process

A distributor must use an asset management process to plan, prioritize, and optimize expenditures. The purpose of the information requirements set out in this section is to provide the OEB and stakeholders with an understanding of the distributor's asset management process, and the links between the process and the expenditure decisions that comprise the distributor's capital investment plan.

This section describes Westario's asset management (AM) process and the direct links between the AM process and the expenditure decisions that comprise the capital investment plan covered by this DSP.

5.3.1 Planning Process

5.3.1.1 Overview

The distributor must provide an overview of its planning process that has informed the preparation of the distributor's five-year capital expenditure plan (a flowchart accompanied by explanatory text may be helpful).

Westario's asset management (AM) process proactively identifies, manages, and mitigates risks within its electricity distribution system, thereby allowing Westario to achieve a desired level of service for its customer base at the best appropriate cost as accepted by its customers.

Integrated within Westario's AM process are Asset Management Objectives (AM Objectives) that are largely driven by a combination of Westario's corporate mission, vision, values and strategic goals (previously described in Section 5.2.1.1.2), and relevant legislative and regulatory obligations, including the OEB's RRF Performance Outcomes and requirements outlined in the DSC and the OEB Act.

Table 5.3-1: AM Objectives

Category	AM Objectives
Safety	• Ensure all assets are structurally sound and well maintained. • Safety of staff, contractors, and the public will always be the highest priority even if this means exceeding budgets or taking additional steps to ensure both safety and regulatory compliance. • Maintain awareness of safety around electricity at the forefront for company, customers, and the general public.
Reliability/Quality of Supply	• Maintain and develop an effective distribution system. • Maintain customer reliability through effective maintenance plans and planned replacement of assets at their end of life. • Maintain power quality by implementing the modeling of the electrical distribution system in GIS. • Design the distribution system with the intent of maximizing the reduction in electrical losses. • Conduct annual customer satisfaction surveys to understand customers' needs and expectations and rebuild infrastructure to meet customers' expectations.
Financial Stability	• Westario must be financially viable.

	• Promote economic efficiency and cost effectiveness. • It is important Westario charges rates that are reflective of the service it provides, whilst balancing the need to keep rates reasonable, minimizing fluctuations for their customers.
Electricity Rates	• Rates reflect an appropriate balance between revenues and expenditures. • Westario's pricing strategy must be cost effective and at the same time be enough to continue to balance distribution system security, capacity, reliability, and return on investment.
Compliance	• Adhere to regulatory requirements to protect the interests of consumers with respect to prices and the adequacy, reliability, safety, and quality of electricity service.

These AM Objectives form the high-level philosophy framework for Westario's capital program. These objectives help to define the content of the programs and the major projects in the capital expenditure plan to be able to sustain Westario's electrical distribution system. The objectives guide Westario to make effective capital investment decisions, which inherently make the best use of, and maximize the value of the assets to the company. The objectives identify an initial starting point and continue to be developed, enhanced, or adjusted as necessary to be aligned with the business environment that the company operates in and help to encourage the process of continuous improvement. The AM Objectives have been integrated into Westario's capital investment process to prioritize investments for several years, including the bridge and Test Year.

The asset management process flow chart below documents the current practice for data review and decision-making process in place at Westario.

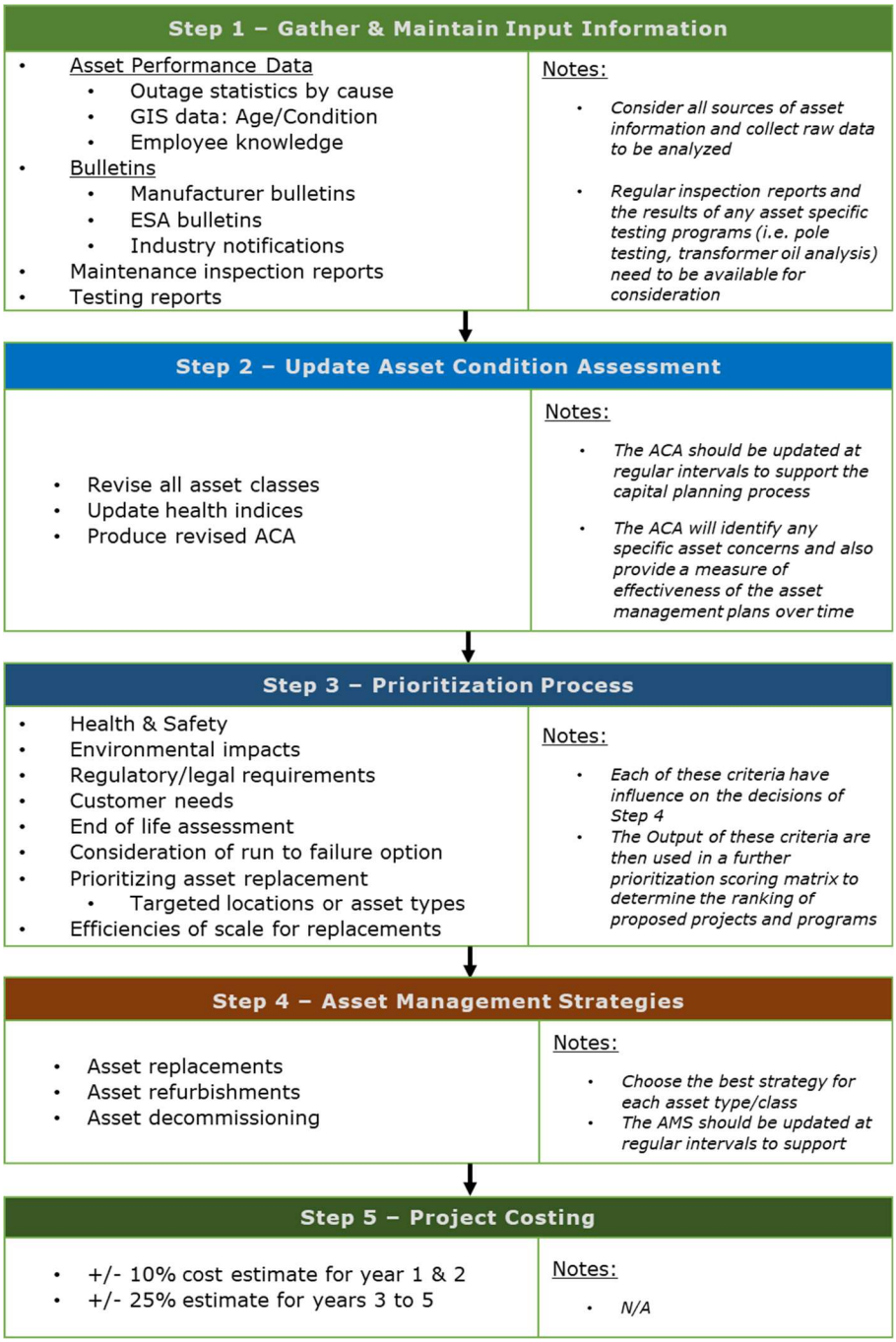

Figure 5.3-1: Westario AM Process Flowchart

Decisions involving investment into fixed assets play a major role in determining the optimal performance of distribution system fixed assets. Investments that are either oversized or made too far in advance of the actual system need may result in non-optimal operation. On the other hand, investments not made on time when warranted by system needs raise the risk of performance targets not being achieved and contribute to sub-optimal operation. Optimal operation of the distribution system is achieved when “right sized” investments into renewal and replacement (capital investments) and into asset repair, rehabilitation and preventative maintenance are planned and implemented based on a “just-in-time” approach. In summary, the overarching objective of the AM strategy is to find the right balance between capital investments in new infrastructure and operating and maintenance costs so that the combined total cost over the life of the asset is minimized.

5.3.1.2 Important Changes to Asset Management Process since last DSP Filing

A distributor should provide a summary of any important changes to the distributor's asset management process (e.g., enhanced asset data quality or scope, improved analytic tools, process refinements, etc.) since the last DSP filing.

Since the last DSP filing, Westario has made some important changes to its asset management processes to improve asset data quality. To begin with, as described below in Section 5.3.3.1, Westario performs regular pole testing program to better identify pole conditions. Westario's asset management processes now include regular pole testing program, system inspection enhancement, and AM data in GIS being cleaned up and verified. Pole and pad mount transformers are now inspected regularly to see whether these assets meet the conditions for replacement. The majority of transformer changes now occur through spot and pole line reconstruction projects. In addition, the upgraded GIS tracks connectivity and provides more thorough, comprehensive, and accurate data on the utility's assets. Lastly, Westario is regularly updating its asset condition assessment, on an at least every 5-year basis. For certain asset types, Westario may consider performing one-off asset condition assessments.

5.3.1.3 Process

A distributor should provide the processes used to identify, select, prioritize (including reprioritizing investments over the five-year term), and pace the execution of investments over the term of the DSP. A distributor should be able to demonstrate that it has considered the correlation between its capital plan and customers' needs. A distributor should also demonstrate that is has considered the potential risks of proceeding/not proceeding with individual capital expenditures (e.g., the risk/benefit of a reactive service transformer replacement program instead of proactively replacing service transformers).

A distributor should demonstrate how it does grid optimization using an approach that considers the distributor's whole system. This should include, where applicable, assessing the use of non-distribution alternatives, cost-effective implementation of distribution improvements affecting reliability and meeting customer needs at acceptable costs to customers, other innovative technologies, and consideration of distribution rate funded Conservation and Demand Management (CDM) programs.

A distributor must also demonstrate that it has a planning process for future capacity needs of the distribution system, which must include, among others, increased adoption of electric vehicles. On November 2, 2022, the OEB posted the "Load Forecast Guideline for Ontario" provided by the Regional Planning Process Advisory Group (RPPAG), which provided guidance in the development of demand forecasts to increase consistency among distributors. Distributors should consider this guidance when developing their load forecasts. The guidance recommended a sensitivity analysis to capture uncertainty in the demand forecast and noted "one of the evolving components with respect to the demand for electricity is electrification which is expected to change the growth patterns such as they are not well represented by historical trends."

2021 CDM Guidelines:
Distributors are required to make reasonable efforts to incorporate consideration of CDM activities into their distribution system planning process, by considering whether distribution rate-funded CDM activities may be a preferred approach to meeting a system need, thus avoiding or deferring spending

on traditional infrastructure. A distributor's distribution system plan should describe how it has taken CDM into consideration in its planning process.

Westario uses input data and information to enable it to determine its operating and capital expenditure plans. As illustrated in Figure 5.3-1, this is done in a multistage process that is detailed below.

Step 1: Gather and Maintain Input Information

The process starts with data gathering from all available sources, which includes the Geographical Information System (GIS), outage statistics for the prior planning period, employee knowledge, maintenance inspection and test reports, as well as any manufacturer or industry issued safety bulletins.

The Asset Condition Assessment (ACA) (found in Appendix G: Asset Management Plan) is also updated as part of this step. The update is necessary to make adjustments for assets that have been removed from service, refurbished, and/or added to the system since the last update, which was completed in 2022. The updated ACA will identify any specific asset concerns and also provide evidence to support the actions of the previous planning period and adjustments to the direction needed in the proposed plan period.

In addition to asset-specific data, Westario also gathers information on customer preferences, third party infrastructure requirements and any other external factors which may influence Westario's decision making in determining the optimal plans for their system. This includes data on EV uptake, which is assessed in the development of a load forecast. As EV's become more prevlant, Westario will need to make additional decisions to accommodate potential capacity and grid impacts. All of the data inputs that are used to help inform Westario's planning process are described further in Section 5.3.1.4.

Step 2: Needs Assessment

Using data from Step 1, a needs assessment is performed. This allows Westario to identify high-level projects and programs that Westario could undertake over the forecast period to address the needs identified. As part of this, an evaluation of the different options to address the need is also performed. Depending on the type of projects, below are some of the typical options considers:

- Do Nothing – This option considers whether an asset can be left in its current condition and only replaced in a reactive manner/on failure.
- Proactive Like for Like Replacement – This is a common approach Westario takes, where assets that have reached end of life, are in poor condition, and at risk of failure, are proactively replaced. Assets are typically replaced with the same asset ensuring the latest standards are met
- Enhancement – This is similar to the Proactive option but can be where assets no longer meet legislation or are obsolete and need upgrading/enhancement. This option is also used where assets can longer deliver the requirements needed and need enhancement to meet the needs of customers.

Step 3: Prioritization Process

Following the identification of projects and programs needed to address the identified needs, a prioritization process is undertaken. Firstly, the outcome of the needs assessment is reviewed against a list of Westario's operational strategies that include:

- Health and safety impacts;
- Environmental impacts;
- Regulatory and legal impacts;
- Customer needs;
- End of life assessment based on Typical Useful Life and condition;
- Consideration of the run-to-failure option on the above criteria and outage statistics;
- Asset location and political impact; and
- Any efficiencies of scale that can be realized from grouping asset replacements into projects.

Then a quantifiable prioritization matrix is used to rank the proposed projects and programs. Westario has adopted a scoring matrix as outlined below when prioritizing its capital investment projects. Westario regularly reviews it and makes adjustment to criteria and scoring. The output of this process is a prioritized list of projects and programs.

- **Prudence of Expense** describes whether the cost to perform project is or can be reasonable and defensibly justified. The conditions listed below are for guidance only. It is difficult to prepare a table to cover all possible device and field conditions.
- **Public Safety** describes the risk the general public is exposed to by the distribution system and its components. The risks may be obvious to the public, nor not.
- **Worker Safety** describes the risk Westario worker are exposed to by the distribution system and its components.
- **Environmental** describes risks to the natural environment. This includes air quality, water and soil quality, and how the condition affects the community and society.
- **Reliability** describes how the project will improve delivery of power to customers by reducing system interruptions, or improving restoration times.
- **Power Quality** describes the voltage delivered to the customer, and the presence of harmonics or “noise” on the delivered power.
- **End of Life** refers to equipment is at end of its manufacturers suggested life span.
- **Maintainability** refers to where there will be a substantial improvement in the maintainability of the system.
- **Operability** refers to a substantial improvement in the line switching, load transferring, or back-up/alternate supply of the system.

Criteria	Min Score	Min Criteria Description	Max Score	Max Criteria Description
Prudence of Expense	0	Where there is uncertainty whether the regulator will support, or interveners will reasonably question the project’s requirements the project shall receive the minimum score	15	Where the project is driven by legislative or regulatory compliance requirements or the assets are clearly necessary to supply customers, the project shall receive the maximum score

Public Safety	0	Where the project will have no impact on public safety the project shall receive the minimum score	15	Where the project is likely to eliminate a single public injury once every 10 years the project shall receive the maximum score
Worker Safety	0	Where the project will have no impact on worker safety the project shall receive the minimum score	15	Where the project is likely to eliminate a single worker injury once every 10 years, the project shall receive the maximum score
Environmental	0	Where the project will have no impact on the reduction of environmental risk the project shall receive the minimum score	10	Where the project is likely to eliminate a single environmental incident once every 10 years, the project shall receive the maximum score. **Note**: Additional consideration to be given to system losses
Reliability	0	Where the project will have no impact on system reliability, the project shall receive the minimum score	10	Where the project is likely to eliminate a single system 4 hr outage to at least 200 customers once a year, the project shall receive the maximum score. **Note**: Additional consideration to be given to multiple outage situations
Power Quality	0	Where the project will have no impact on voltage, the project shall receive the minimum score	5	Where the project will correct existing voltage concerns or problems for 200 or more customers, the project shall receive the maximum score. **Note**: Consideration also to be given to size of customers effected and the severity of the impact on the customer
End of Life	0	Where the equipment still retains 50% or more of its life expectancy, the project shall receive the minimum score	10	Where the equipment is at end of life and is not expected to be operable for more than two more years, the project shall receive the maximum score
Maintainability	0	Where there will be no improvement in the maintainability of the system, the project shall. receive the minimum score	5	Where there will be a substantial improvement in the maintainability of the system, the project shall receive the maximum score
Operability	0	Where there will be no improvement in the operability of the system, the project shall receive the minimum score	5	Where there will be a substantial improvement in the operability of the system, the project shall receive the maximum score

	0	Minimum	100	Maximum

Step 4: Asset Management Strategies

Once a planned list of projects for the planning period have been determined, the pacing of the projects is then established on an annual basis. The pacing is primarily influenced by customer demand, compliance and regulatory requirements, and inspection timings.

Step 5: Project Costing

Lastly, the engineering department estimates the project costs at:

- +/-10% for projects occurring within one-to-two years.
- +/- 25% for projects occurring in the period beyond two years.

Asset Management Plan

Westario's Asset Management Plan is a separate document that is referenced and updated in parallel with the planning process described above. Westario's AMP provides the framework required to derive how Westario plans to manage its distribution system assets in accordance with the mandated requirements, all the while providing efficient and safe electrical supply to its customers. The AMP continually evolves to meet the ever-changing needs of the customers, the regulator, the utility, and the distribution system. Westario's AMP is included in Appendix G and includes additional details of the various components of the process.

5.3.1.4 Data

A distributor should identify, describe, and provide a summary of the data used in the processes above to identify, select, prioritize, and pace the execution of investments over the term of the DSP (e.g., asset condition by major asset type and reliability information).

Westario uses several datasets and inputs to assess the status of its distribution system assets and to assist in determining the capital and operational investments to be made in the system. This ranges from asset age and condition information, outage data records, and inspection and maintenance results to what its AM objectives are and how they link to the OEB's performance outcomes and any external factors. Some of the key elements are explained in further detail below.

5.3.1.4.1 Outage Statistics

Westario places a high level of importance on ensuring distribution system reliability meets the expectations of its customers. Outage causes are tracked and analysed by outage cause codes. This allows Westario to identify trends in causes of outages and allows for this information to feed into its prioritization and evaluation process when developing its capital investment plans. The analysis is used to inform the development of O&M programs and capital expenditure plan for each year.

5.3.1.4.2 Asset Age and Condition Data

Westario tracks asset age demographics in order to know the age distribution of its assets and to identify those which have either exceeded or at nearing their typical useful life.

In addition to age, Westario also uses condition data to help inform the planning process. An ACA was completed in 2018 for Westario's station and distribution assets, which uses condition to identifies those assets most likely to fail. An updated ACA was completed in 2022. The ACA involves the interpretation of condition and performance data of key assets to assess the overall condition of the asset and identify assets that have the highest probability of failure. The ACA is a key supporting tool for developing an optimized lifecycle plan for asset sustainability. Further information on Westario's ACA can be found in Section 6.2 of the AMP.

5.3.1.4.3 Employee Knowledge

Westario has a strong team with broad and in-depth knowledge of assets and system needs. Westario fosters the assimilation of knowledge from its employees to support the development of O&M programs and capital expenditures plans.

5.3.1.4.4 Industry Bulletins

Westario actively monitors for updates to manufacturer, Electrical Safety Authority (ESA) and industry bulletins and notifications as these may influence Westario's decision-making in determining the optimal O&M programs and capital expenditure plans for their system.

5.3.1.4.5 Inspection & Maintenance

Westario undertakes maintenance and inspection practices on a regular basis to maintain customer reliability and power requirements in the system. Inspection, maintenance, and operational data are collected and stored which is used to support Westario's operating and capital expenditure plans.

Completion of the inspection and maintenance programs is not only a matter of compliance but the results from the inspection and maintenance programs allow a continual update of the asset database. The programs allow for assets to be inspected and assessed for any necessary actions that need to be taken promptly in a proactive approach. Westario's inspection and maintenance programs are audited every year as required by Ontario Regulation 22/04. Further information on Westario's maintenance and inspection practices can be found in Section 5.3.3 of the DSP, and Section 5.2 of the AMP.

5.3.1.4.6 Testing Reports

In addition to the regular inspection and maintenance practices, Westario also conducts regular asset specific testing on certain assets including poles and transformers. These testing programs give specific data about which assets need attention, and in how urgent. This evidence-based testing data is used by Westario in conjunction with other asset records to help inform future projects and capital expenditures.

5.3.1.4.7 System Loading & Capacity

Load forecasting and capital growth planning continue to be the underlying basis for the near and longer-term capital requirements for new or enhanced capacity. The loading and capacity information help to identify system needs and constraints. The information is collected and analysed to measure the risk of system overloading and to mitigate any concerns. Where there may be concerns on capacity issues, Westario engages third-party support to perform system studies. The outputs of these studies are used to help inform future investment needs.

5.3.1.4.8 Customer Needs

Westario focuses on providing reliable, efficient, and safe electricity to its customers. As part of the investment planning process, Westario conducts customer surveys to understand customer needs. Customer needs also address requirement for new customer connections and/ or modification to existing customer connections and incorporate them early in the asset management process. Additional information on Westario's customer engagement process and findings are included in section **Error! Reference source not found.** of this DSP.

5.3.1.4.9 Third Party Infrastructure Requirements

Westario also has an obligation, as per the DSC regulation, to address investments in third party infrastructure. Any requirements by the city or other 3rd parties to develop or modify the system are considered.

5.3.1.4.10 External Factors

External drivers may sometimes influence Westario's decision-making in determining the optimal plans for their system. External drivers include:

- Political – governments have their directions and strategies that Westario needs to be mindful of and to be in alignment with their plans.
- Economic – economic growth and decline within Westario's service area as well as the shift of business operations within residential units.
- Social – changes in the environment that illustrate customer needs and wants.
- Technological – innovation and development within the electrical/utility sector which includes automation, technology awareness, electric vehicle penetration, battery storage and new services.
- Environmental – ecological and environmental aspects that can affect Westario's operations or demand which includes renewable resources, weather or climate changes, and utility responsibility initiatives.
- Regulatory/Legal – legal allowances and/or changing requirements from the OEB as well as additional legal operations such as health and safety requirements, labour laws, and consumer protection laws.

Westario continues to remain cognizant of these external drivers when developing its capital and maintenance plans.

5.3.2 Overview of Assets Managed

Assessment of DSPs requires a comprehensive understanding of all aspects of the assets managed by a distributor. Distributors may vary in terms of the level of detail that it chooses to record for its distribution assets but the expectation is that in assessing the condition of major assets (e.g., station transformers and poles), ***solely using asset age is not sufficient.***

This section presents a description of Westario's service area, a summary of the system configuration, asset condition, and Westario's system utilization relative to planning criteria.

5.3.2.1 Description of Service Area

A distributor should provide an overview of its distribution service area (e.g., system configuration; urban/rural; temperate/extreme weather; underground/overhead; fast/slow economic growth) pertinent for supporting its capital expenditures over the forecast period.

Overview of Service Area

Westario's distribution system covers approximately 64 square kilometers and serves 15 communities in the region. Westario is the LDC supplying electricity to the Ontario communities of: Clifford, Elmwood, Hanover, Harriston, Kincardine, Lucknow, Mildmay, Neustadt, Palmerston, Port Elgin, Ripley, Southampton, Teeswater, Walkerton and Wingham. All areas between communities served by Westario are serviced by Hydro One. A map of the service territory is shown in Figure 5.2-2**Error! Reference source not found.**.

Generally speaking, Westario's service territory is made up of mostly residential development, with small supporting commercial and industrial areas.

Customers Served

The greatest single customer population within Westario's service area is in the Town of Saugeen Shores (Port Elgin/Southampton) representing 30% of the overall customer base. Westario currently serves over 24,000 customers.

Table 5.3-2 below illustrates an increasing trend in Westario's total customer base over the historical period, divided into residential, general service less than 50 kW, and general service greater or equal to 50 kW. Westario's service territory has seen regular but not significant growth, averaging around one percent annually throughout the historical period. Not much load growth can be anticipated in the rate class above 50kW, based on customer engagement.

Table 5.3-2: Changing Trends in Customer Base

Annual Year	Residential	General Service <50 kW	General Service ≥50kW	Total
2022	21,581	2,674	174	24,429
2021	21,333	2,630	178	24,141
2020	21,159	2,613	181	23,953
2019	20,983	2,598	193	23,774
2018	20,779	2,577	191	23,547

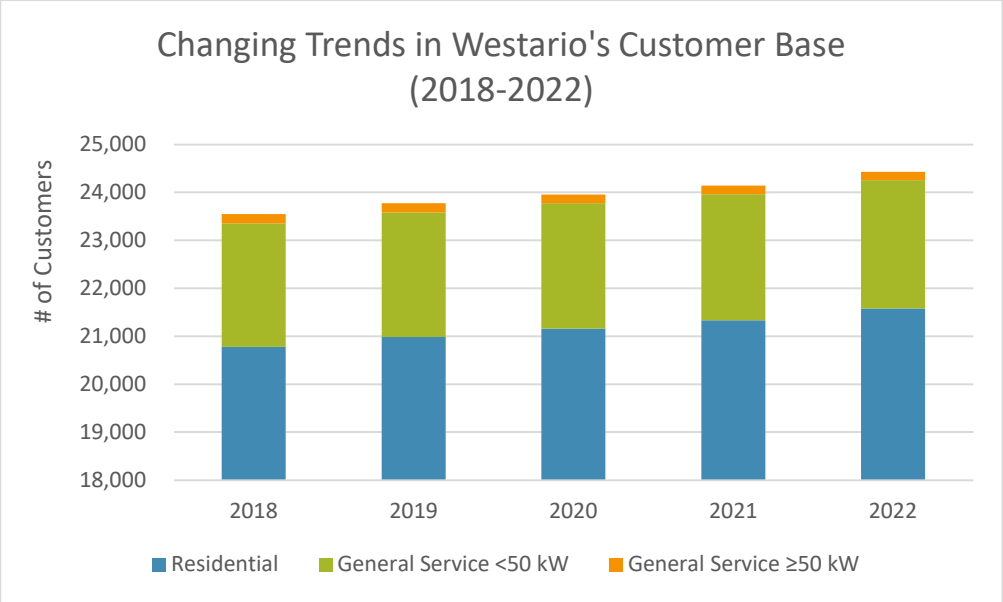

Figure 5.3-2: Change in customer base by category over historical period.

System Demand & Efficiency

Table 5.3-3 shows the annual season and average peak demand in kW for Westario's distribution system.

Table 5.3-3: Peak System Demand Statistics

Year	Winter Peak (kW)	Summer Peak (kW)	Average Peak (kW)
2022	77,910	74,798	76,354
2021	73,717	77,697	75,707
2020	73,182	74,978	74,080
2019	80,824	70,762	75,793
2018	77,362	73,818	75,590

Historically, Westario has been a winter peaking utility due to electrical heating used in many communities within the service area. However, in the years 2020 and 2021, the trend shifted towards summer peaks. In 2022, Westario regained its winter peak. Multiple factors influenced this shift in 2020 and 2021. To begin with, the pandemic and the resulting lockdowns greatly affected the businesses in Westario's service area. As largest consumers of electricity in the area, many businesses, including factories had to shut-off their facilities in winter, which led to lower-than-average consumption during the winters in both 2020 and 2021. Additionally, both 2020 and 2021 saw record-breaking hot summers across Canada and the world. Due to this, both 2020 and 2021 saw highest system peak loads in the summer months, particularly in the month of August. As such, the summer peaks in 2020 and 2021 can be considered an exception. As indicated by the return to winter pealing in 2022, Westario expects to remain a winter peaking utility in the future.

Table 5.3-4 indicates the efficiency of kilowatt hours (kWh) purchased by Westario and delivered. Losses as a percentage of purchased energy has remained over 5% over the historical period, greatest losses occurring in 2020 and 2021 at 8% respectively. The losses as a percentage of purchased energy improved to 6% in 2022.

Table 5.3-4: Efficiency of kWh Purchased by Westario

Year	Total kWh Delivered (excluding losses)	Total kWh Purchased	Losses as % of Purchased
2022	444,452,790	474,832,766	6%
2021	437,783,480	473,829,448	8%
2020	437,158,928	476,934,359	8%
2019	443,657,476	469,462,365	5%
2018	442,080,065	468,240,621	6%

Summary of System Configuration

Westario is connected to the Ontario power transmission grid at four transformer stations which are owned by Hydro One. Westario customers are supplied via seven 44kV feeder circuits which feed 27 Westario-owned substations. Within the service territory of Westario, there are also multiple customer-owned distribution stations fed from the 44kV circuits.

As of 2022, Westario owns 589 km of primary conductor, with majority of the primary conductors being overhead.

Climate

The climate in this region is relatively mild compared to the broader provincial area due to its proximity to the Great Lakes. The coldest months of the year are typically January and February; the average lowest temperatures across the area are between -11° and -13°C. Record low temperatures have been as extreme as -40°C. The warmest months are July and August, with average high temperatures of 24° to 26°C. Record summer temperatures have been as high as 35° to 37°C.

This region receives its highest precipitation levels during the Fall and Winter months. While most precipitation in the months between December and March is snow, the region receives more snow than other parts of southwestern Ontario.

The Westario region has been experiencing an increased number of storms in recent years, with increased levels of severity. As storms become more frequent and more intense, they pose risks to the reliability of Westario's distribution system. There have been instances of stronger winds than previous years' storms created. This is one case where projects like tree trimming are especially important in preventing vegetation from interfering with distribution lines and causing outages.

Colder winters have created higher usage of electrical heat, which translates into higher load demands. From a system peak load perspective, Westario remains a winter peaking utility, with the exception of years 2020 and 2021, mainly due to the above-average amount of electrical heating in many of the communities they serve.

Economic Growth

According to Statistics Canada census data, the Huron-Bruce electoral district saw a population increase of 6% between 2016 and 2021. However, this is increase is primarily focused on regions near urban centres, which is mostly outside of Westario's service territory. As such, the pace of economic growth is not expected to drastically change during the next 5-year period, covered by the DSP.

5.3.2.2 Asset Information

A distributor should provide asset information (e.g., asset capacity and utilization; asset condition; asset risks; and asset demographics), by major asset type, that may help explain the specific need of the capital expenditures and demonstrate that a distributor has considered all economic alternatives.

Asset Condition and Demographics

The Asset Condition Assessment (ACA) study was carried out by METSCO for Westario to establish the health and condition of in-service distribution and substation assets. The latest ACA was carried out in November 2022, with the following section containing a summary of the results.

The following table is drawn from the Asset Condition Assessment (ACA) and summarizes the distribution and substation assets. (Appendix G: Asset Management Plan contains exhaustive information on the utility's assets.)

Table 5.3-5: Summary of Assets

Asset Group	Asset Class	Population
Substation	Power Transformers	29
	Circuit Breakers (4.16 kV, 13.8 kV & 44 kV)	52
	Reclosers (3 Phase)	33
	Fused Switchgear	15
	Buildings	27
	MV Primary Cables	n/a
	HV Primary Cables (44kV)	n/a
Distribution (Overhead and Underground)	Distribution Poles (Wood)	6,638
	Distribution Poles (Steel)	1,499
	Distribution Poles (Concrete)	34
	Cross Arms	n/a
	Pole-Mount Transformers	1,622
	Pad-Mount Transformers	1,074
	Switches	290
	Km of Overhead Lines – 3 Phase	198
	Km of Overhead Lines – single phase	92
	Km of Underground Lines – 3 phase	33
	Km of Underground Lines – single phase	123
	Switching Cubicles	80
	Protective line relays	N/A
	Line circuit breakers/reclosers	N/A

Note: *"n/a" indicates "Not Available". "N/A" indicates "Not Applicable"*

Figure 5.3-3 below presents the summary results of the ACA for Westario's distribution and substation assets. The HI is not calculated for any distribution asset with a Data Availability Indicator ("DAI") less

than 70% (i.e., less than 70% of the condition parameters – by weight – are available for that asset) or less than 65% for station assets. The HI results for assets with a known HI were divided into ten-year bands and extrapolated to the unknown set within those bands. The age demographics and condition breakdown for each asset class is detailed further below. The complete ACA study can be found in Appendix E of the DSP. Westario utilizes the outputs of the ACA as a key input into it capital planning process. Where Westario has calculated valid HIs with the required data availability, it uses this information to inform which assets to potentially replace and/or repair. Where data availability is below the DAI threshold and Westario has identified the asset(s) may need attention, Westario performs further assessments, gathering further data before deciding if the asset(s) should be replaced and/or repaired.

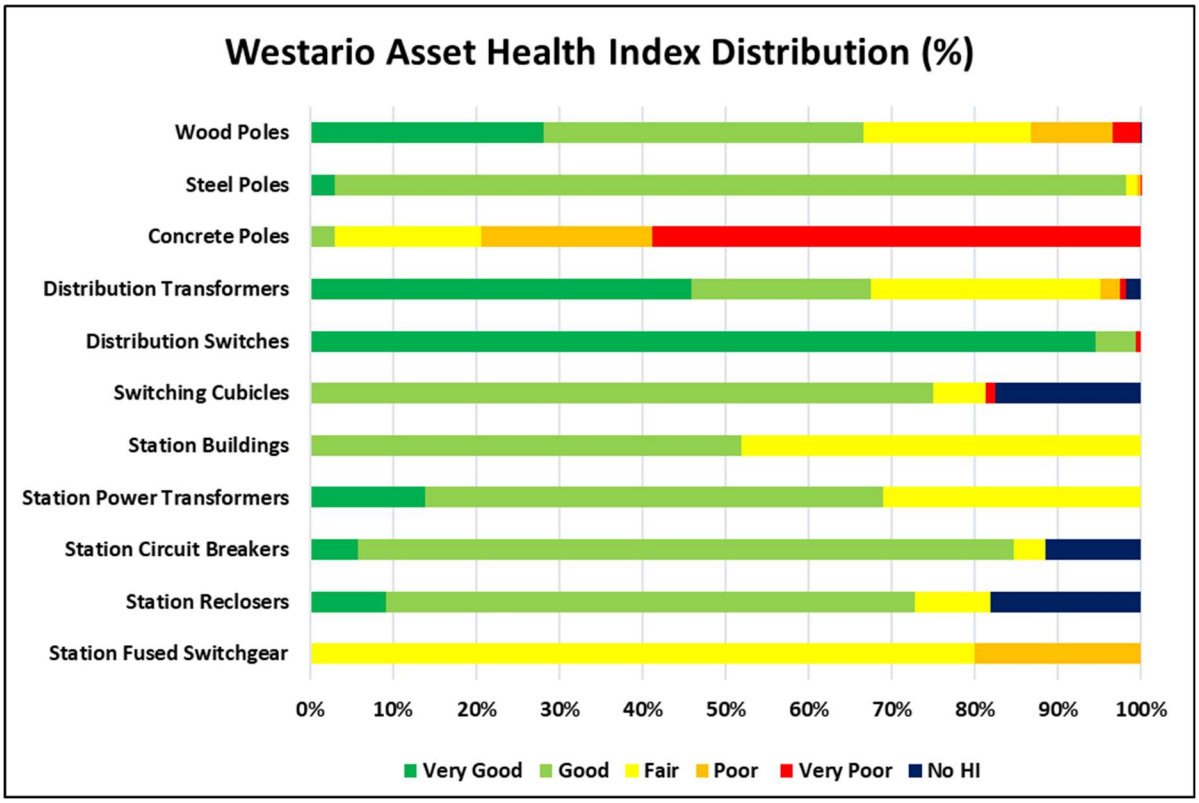

Figure 5.3-3: Overall Asset Condition Assessment Results

Condition of Distribution Assets

Wood Poles

Wood poles are an integral part of any distribution system. They are the support structures for overhead distribution system. Westario owns 6,638 wood poles distributed throughout all the towns in its service territory. It is estimated that 60% of Westario's wood poles were installed within the last 30 years. Figure 5.3-4: Wood Pole Age Demographic presents the age distribution for wood poles within Westario's service territory.

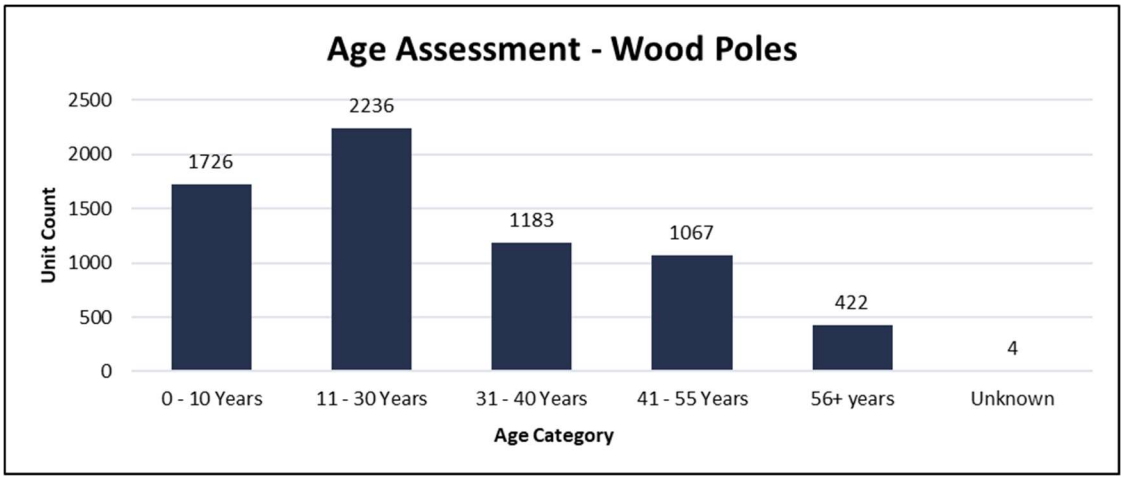

Figure 5.3-4: Wood Pole Age Demographic

Valid HI results were calculated for all but four wood poles. Most of Westario's wood poles that have valid HI results are in Fair or better condition, with 655 of the poles in Poor condition and 228 of the poles in Very Poor condition. Figure 5.3-5 presents the HI Distribution of the wood poles.

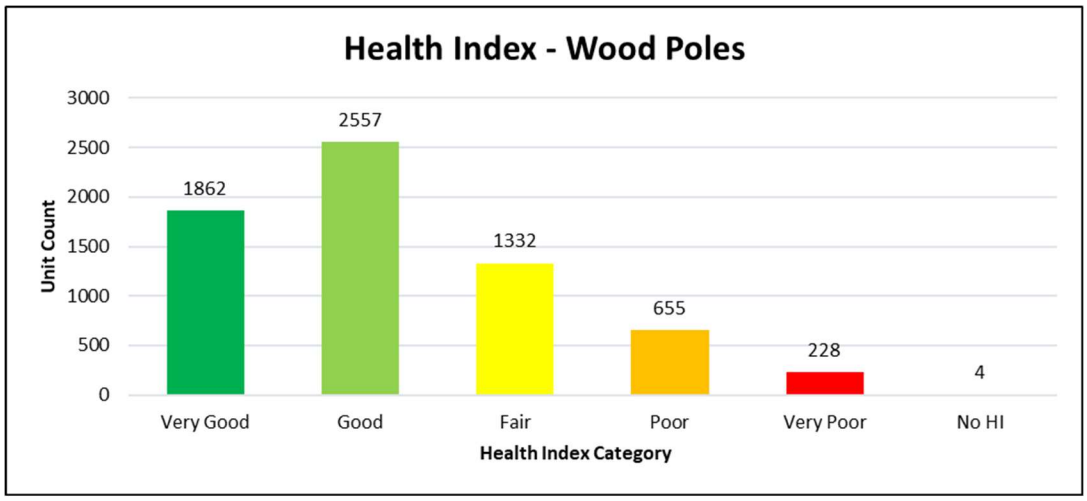

Figure 5.3-5: Wood Poles HI Results

Steel Poles

Steel poles have a similar use as wood poles in the distribution system. Steel poles have different degradation mechanisms than wood poles. There is no practical "pole test" for steel poles, but since poles are hollow, there are also limited opportunities for invisible degradation and interior rot. The presence of rust on steel poles compromises the pole's strength and can be identified through visual inspections.

Westario has 1,499 steel poles in its service territory. As seen in Figure 5.3-6, around 82% of Westario's steel poles were installed within the last 20 years.

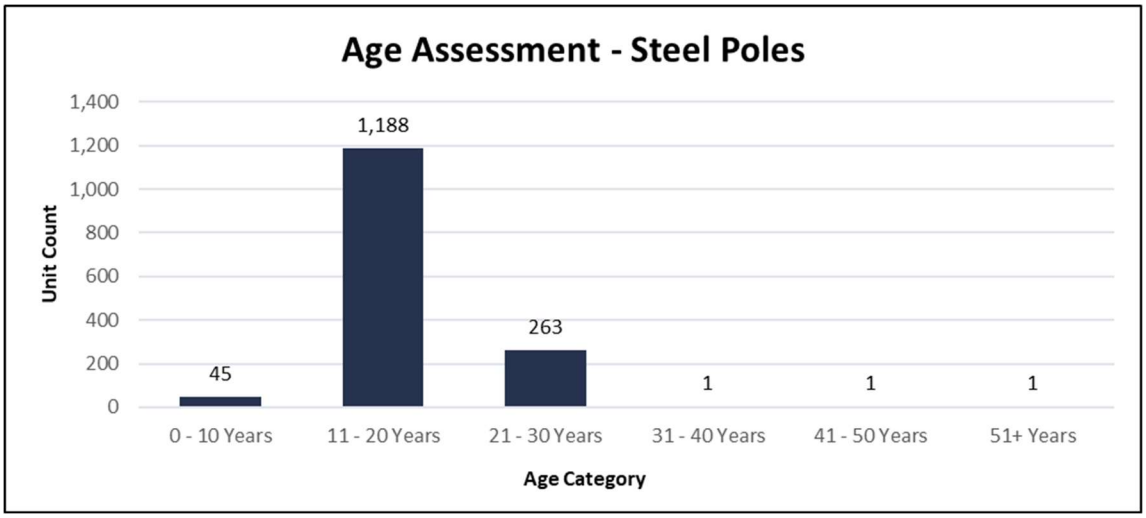

Figure 5.3-6: Steel Poles Age Demographic

Valid HI results were calculated for all of the steel poles. As seen in Figure 5.3-7, most of Westario's steel poles are in Good condition.

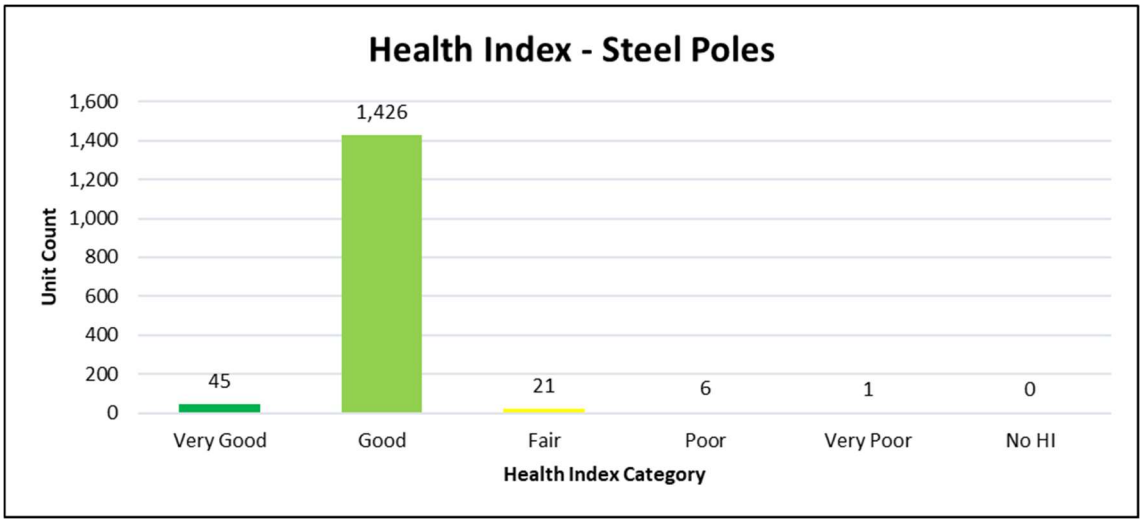

Figure 5.3-7: Steel Poles HI Results

Concrete Poles

Westario has a total of 34 concrete poles in its service territory, located within the following towns: Port Elgin, Southampton, and Teeswater. As seen in Figure 5.2-7, around 97% of Westario's concrete poles are between 40 and 70 years old, with 76% poles installed more than 50 years ago.

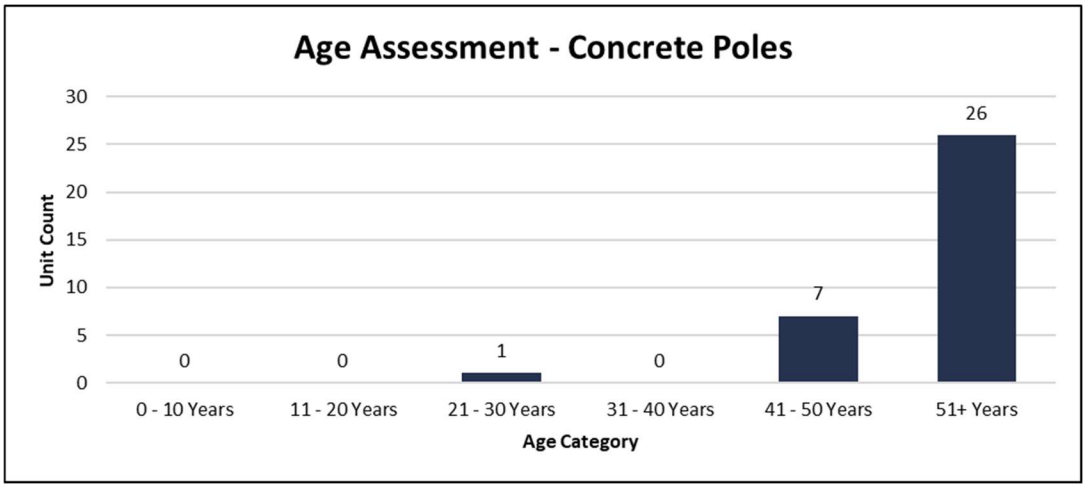

Figure 5.3-8: Concrete Poles Age Demographic

Valid HI results were calculated for all of the concrete poles. As seen in Figure 5.3-9, 59% of the concrete poles are in Very Poor condition.

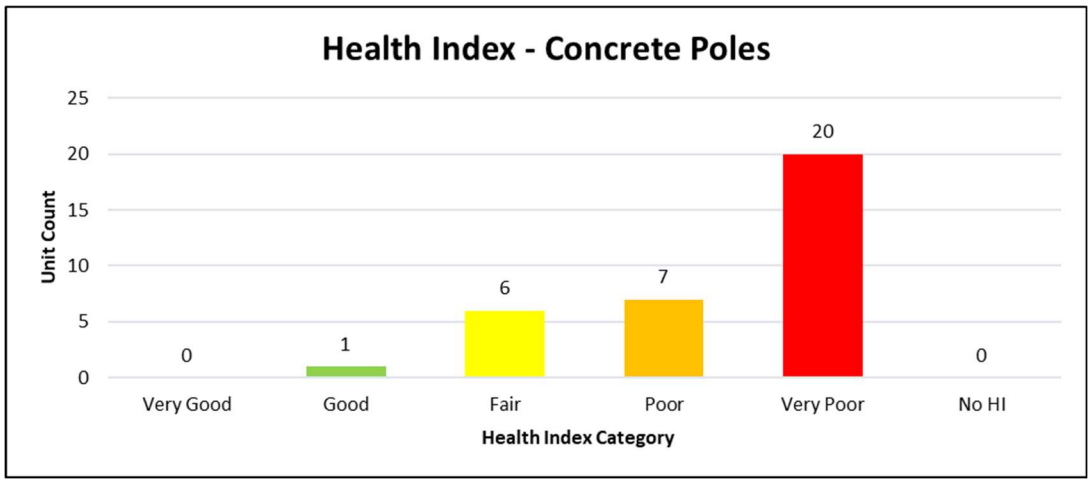

Figure 5.3-9: Concrete Poles HI Results

Overhead Conductors

Overhead distribution conductors transmit electricity from generators to TS, from TS to substations, and from substations to customer premises and are supported by poles. Although laboratory tests exist to determine the tensile strength and assess the remaining useful life of conductors, distribution line conductors rarely require testing. An appropriate proxy for estimating the tensile strength of conductors and estimating the remaining life of an asset is the use of service age.

Westario owns 290 km of OH lines throughout its distribution system, of which 198 km is three-phase and 92 km are single-phase. Unfortunately, recorded age information was only available of 2% of the conductor line, as seen in Figure 5.3-10. As such, a valid HI could not be completed for this asset.

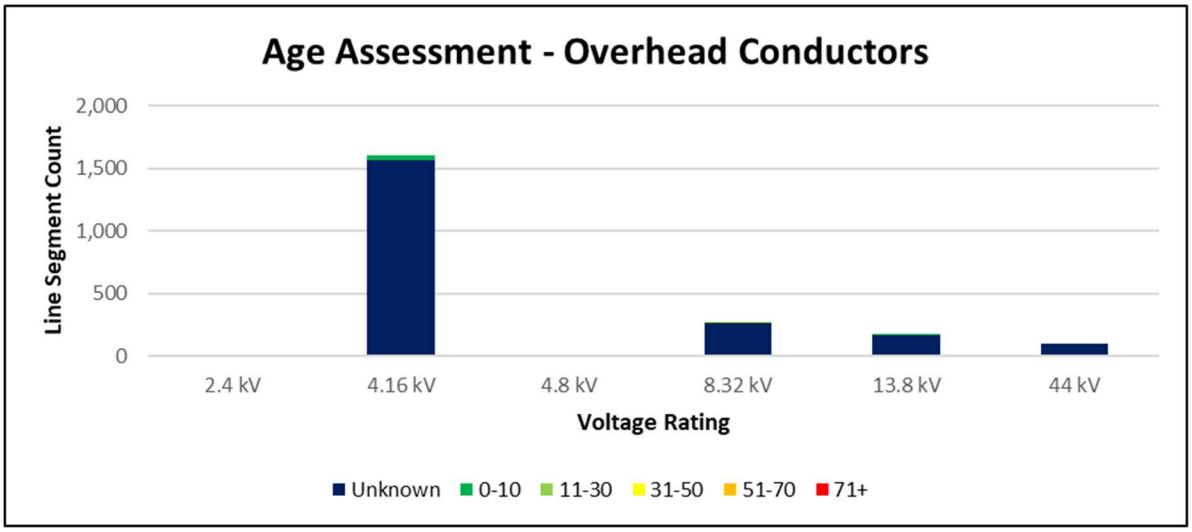

Figure 5.3-10: OH Conductors Age Demographic

Underground Cables

Underground (UG) cables transmit electricity along the electrical distribution system. Distribution UG primary cables are one of the more challenging assets in electricity systems from a condition assessment viewpoint. Although several test techniques, have become available over recent years, it is still very difficult and expensive to obtain accurate condition information for buried cables. The standard approach to managing cable systems has been monitoring cable failure rates and the impacts of in-service failures on reliability and operating costs. Service age also provides a reasonably good measure of the remaining life of cables with the lack of visual inspection for cable defects.

Westario owns 156 km of underground lines throughout its distribution system, of which 33 km is three-phase, and the remaining 123 km is single-phase. As seen in Figure 5.3-11, age information was available for only 27% of the line segments. As such, a valid HI could not be complete for underground cables.

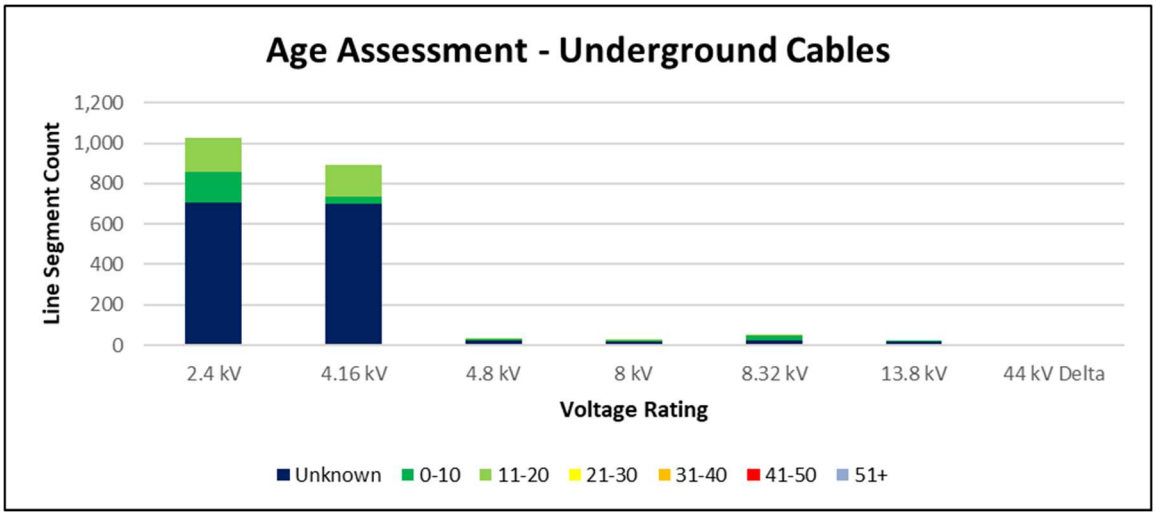

Figure 5.3-11: Underground Cables Age Demographic

Distribution Transformers

Distribution transformers are made up of a large number of units, each with a modest replacement value. Distribution transformers are generally considered to be a run-to-failure asset class with little maintenance other than visual inspections.

Westario owns 3,169 distribution transformers in its service territory, of which 1,622 are pole-mounted transformers and 1,074 are pad-mounted. The remaining distribution transformers are not defined as either pole-mounted or pad-mounted. As seen in Figure 5.3-12, the service age was available for 84% of the transformers.

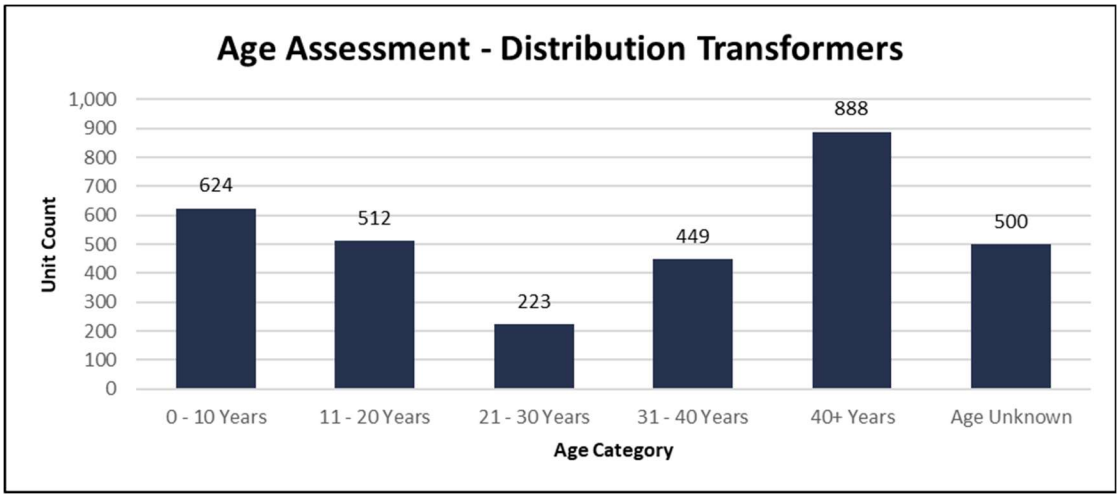

Figure 5.3-12: Distribution Transformers Age Demographic

The DAI threshold for distribution transformers was set at 66% to account for the weighting system defined for the asset class. A valid HI was not calculated for any assets with an individual DAI less than 66%. As such, valid HI were calculated for most of the transformers, with most assets in Fair or better condition. Figure 5.3-13 and Figure 5.3-14 shows the HI results of the distribution transformers.

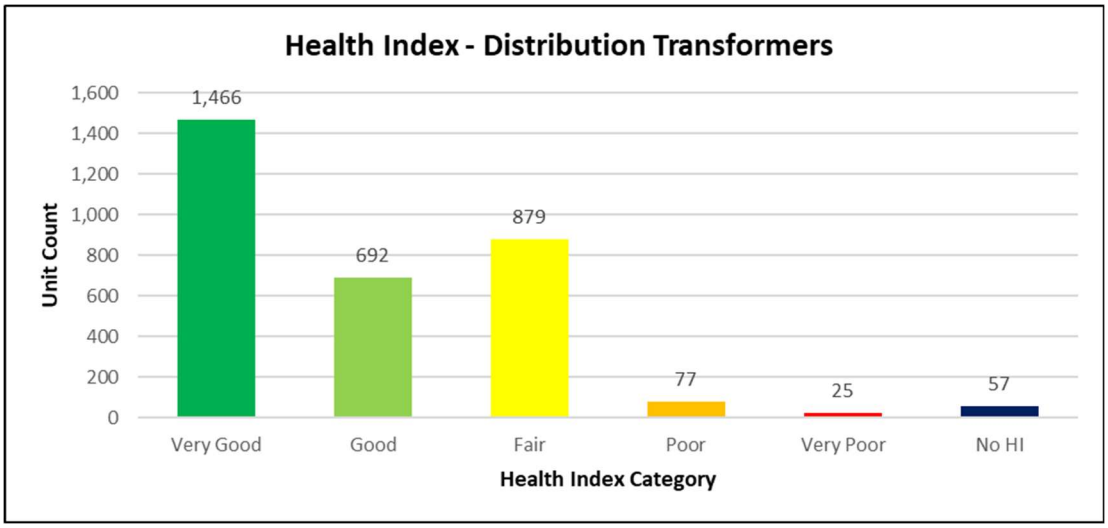

Figure 5.3-13: Distribution Transformers HI Results

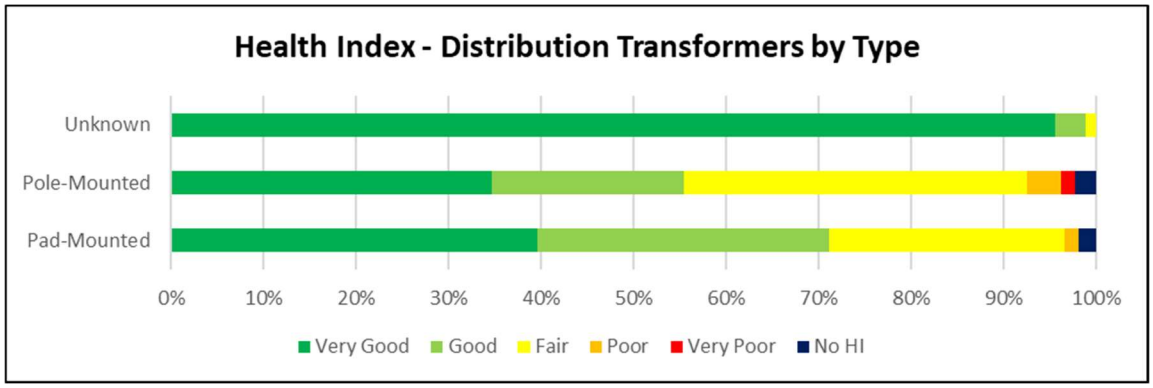

Figure 5.3-14: Transformers HI distribution by Type

Distribution Switches

Switches represent critical infrastructure for a Local Distribution Company (LDC). Westario owns a total of 290 distribution switches in its service territory. The ages for Westario's distribution switches are unknown. However, valid HI results were calculated for all of the distribution assets. As seen in Figure 5.3-15, most of Westario's distribution switches are in Very Good condition.

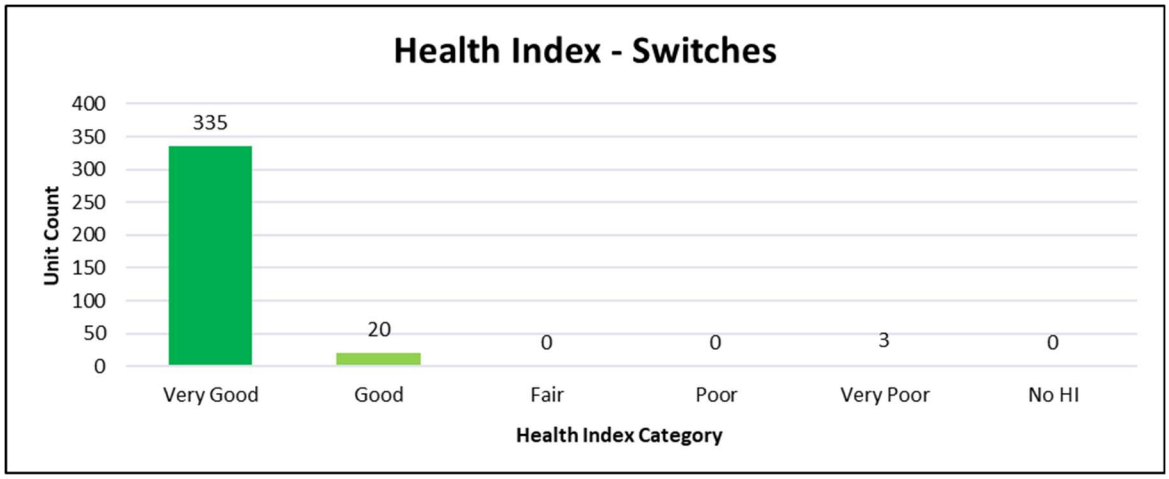

Figure 5.3-15: Distribution Switches HI Results

Switching Cubicles

Westario owns a total of 80 kabar switching cubicles within the following towns in its service territory: Hanover, Kincardine, Palmerston, Port Elgin, Southampton, Walkerton, and Wingham. Although the ages are unknown for the switching cubicles, visual inspection results are recorded annually.

Figure 5.3-16 shows the HI results for the switching cubicles. Most of the switching cubicles are in Good condition.

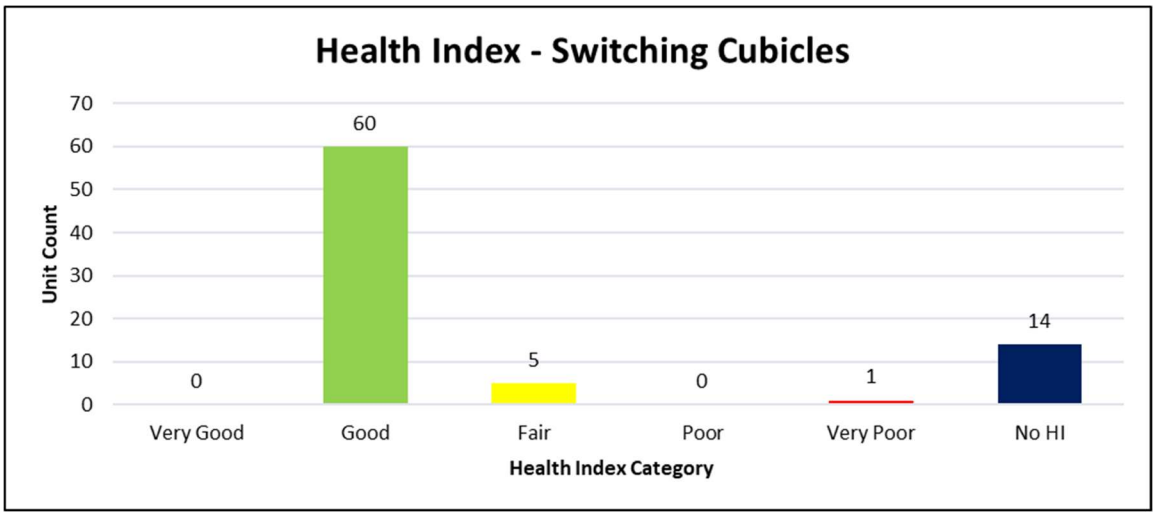

Figure 5.3-16: Switching Cubicles HI Results

Condition of Station Assets

Station Buildings

Station buildings are the major civil infrastructure components of a utility substation. Station buildings refers to the walls, roof, floors, fences, yard etc. of the station. Other civil infrastructure systems supporting a station may include support structures, security equipment, plumbing systems, and others. Buildings are inspected quarterly and are maintained as issues arise.

Westario operates a total of 27 substations in the following towns within its service territory: Hanover, Harriston, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, Walkerton and Wingham. All of the station buildings were assessed, with around half of the station buildings being in Good condition. Figure 5.3-17 presents the HI results of Westario's station buildings.

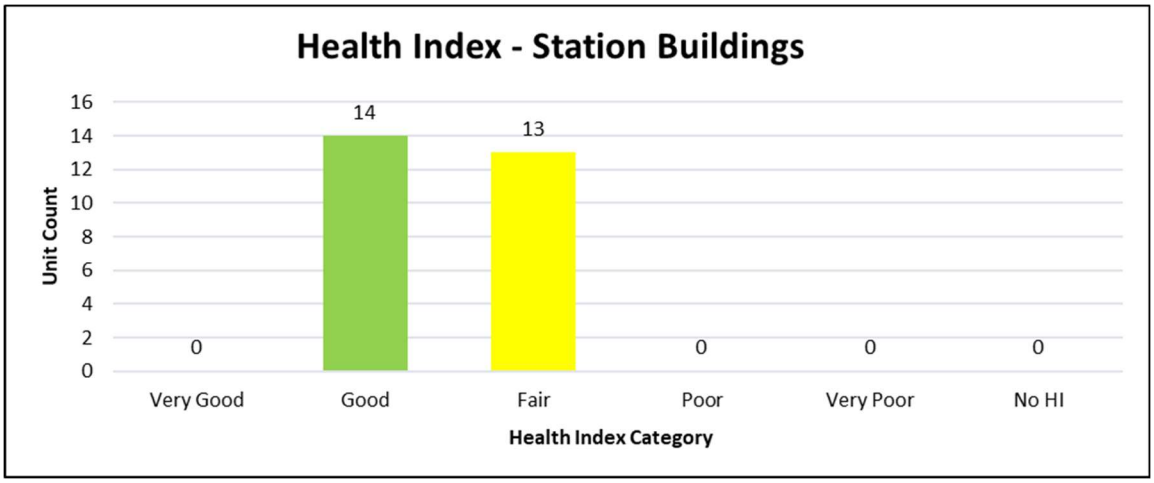

Figure 5.3-17: Station Buildings HI Results

Station Power Transformers

Station power transformers are the single most critical asset class owned by an LDC. Each transformer can be valued in the range of hundreds of thousands to millions of dollars and can affect tens of thousands of customers. As such, station power transformers are the most tested and tracked utility assets.

Westario owns a total of 29 station transformers located within following towns: Hanover, Harriston, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, Walkerton, and Wingham. As Figure 5.3-18 indicates, 41% of the station power transformers have been in service for more than 45 years.

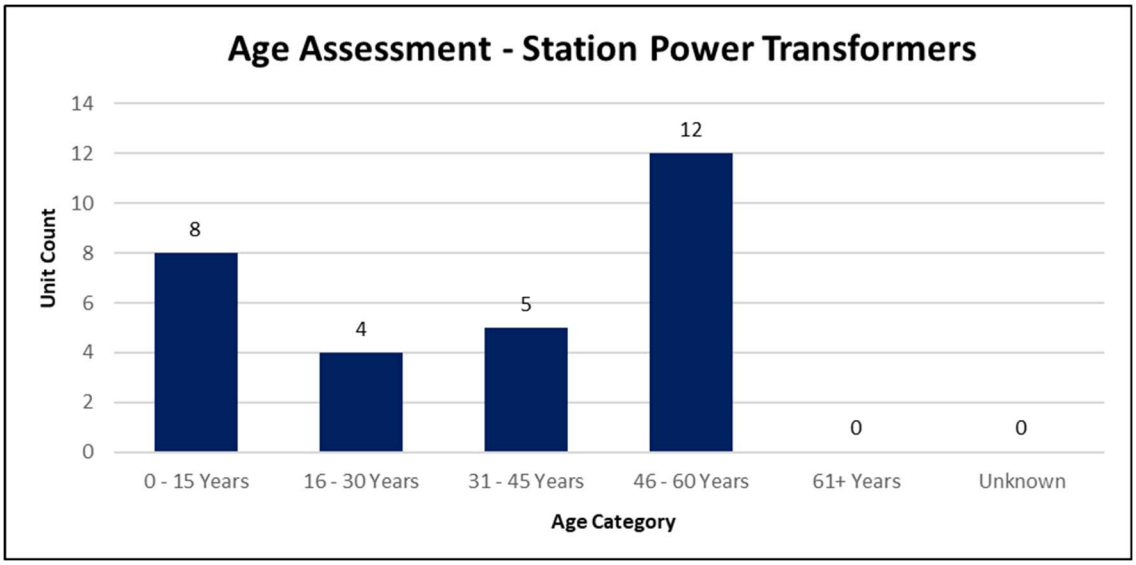

Figure 5.3-18: Station Power Transformers Age Demographic

As seen in Figure 5.3-19, all the transformers are in Fair condition or better. Since power transformers are critical assets, power transformers in Fair condition could require possible remedial work or replacement depending on the unit's criticality.

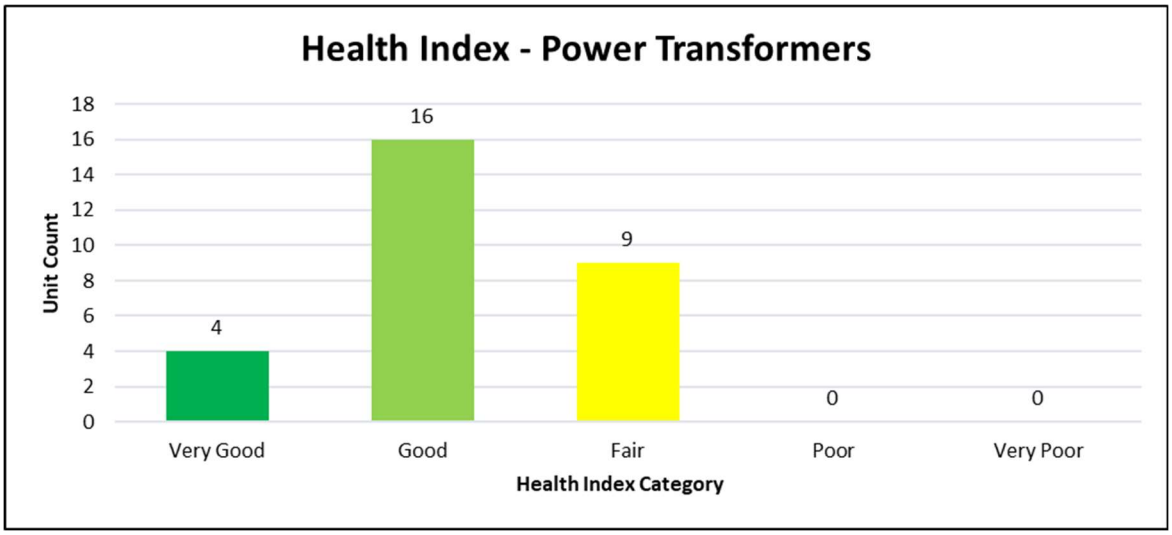

Figure 5.3-19: Station Power Transformers HI Results

Station Circuit Breakers

Station circuit breakers are critical substation assets and are the primary protective devices for maintaining public safety and protecting other station equipment. Breakers work with station relays to open, either in a fault situation, as directed by the operations center, or as part of the automation scheme.

Westario owns a total of 52 station circuit breakers located at Hanover, Harriston, Palmerston, Port Elgin, and Walkerton. The station circuit breaker population consists of both air- and vacuum- insulated breakers operating at 4.16 kV, 13.8 kV, and 44 kV. Unfortunately, ages are unknown for Westario's

station circuit breakers. However, valid HI results were calculated for 46 of the 52 circuit breakers. As seen in Figure 5.3-20, most of Westario's station circuit breakers are in Very Good to Good condition.

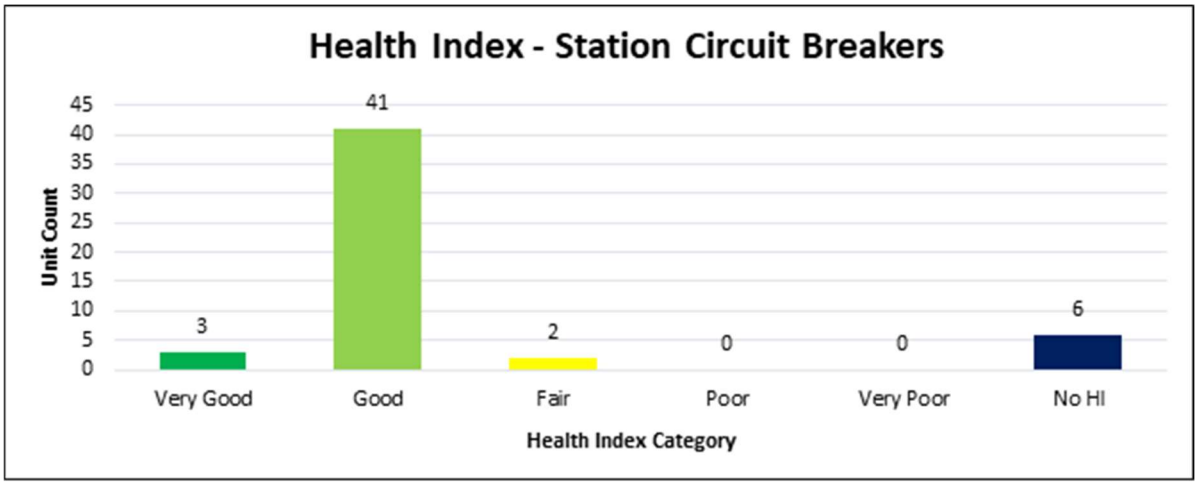

Figure 5.3-20: Station Circuit Breakers HI Results

Station Reclosers

Station reclosers are a critical dynamic protective asset that will open in a fault situation and will automatically test the line to allow itself to close if the fault was resolved.

Westario owns a total of 33 station reclosers located at Hanover, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, and Wingham. The ages of the assets are unknown, however, valid HI results were calculated for 27 of the 33 reclosers. Figure 5.3-21 presents the HI results for the station reclosures, where most of the reclosers are in Very Good to Good condition.

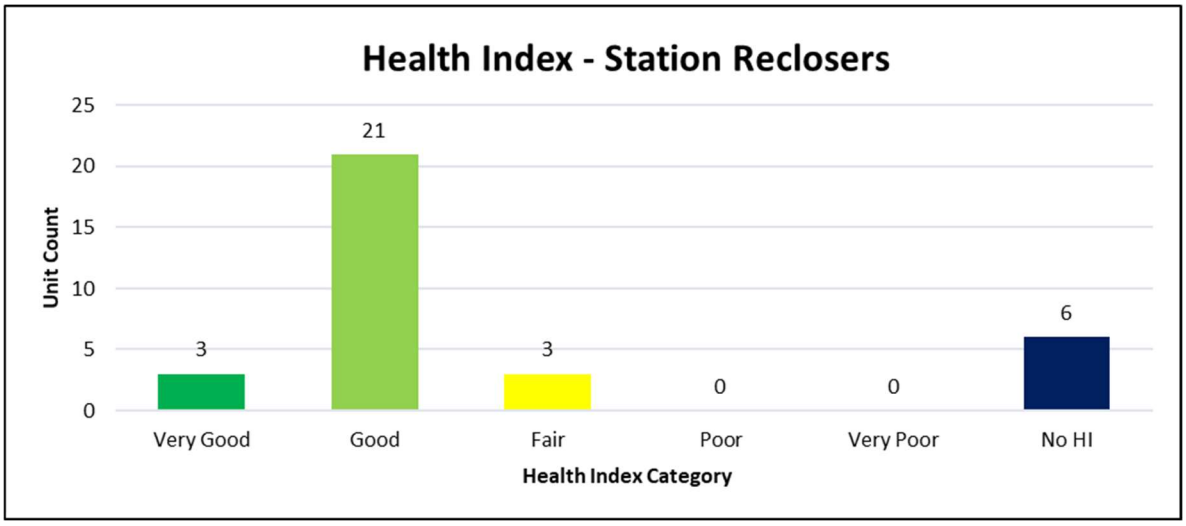

Figure 5.3-21: Station Reclosers HI Results

Station Fused Switchgear

The station fused switchgears are made up of several fused switches that provide a method to manually shut off the power, while the fuse will automatically disconnect the circuit if the amperage on the circuit exceeds the rating.

Westario owns 15 station fused switchgears around Kincardine, Southampton, and Wingham. The ages of the assets are unknown; however, valid HI results were calculated for all 15 fused switchgears. As seen in Figure 5.3-22, most of Westario's fused switchgears are in Fair to Poor condition.

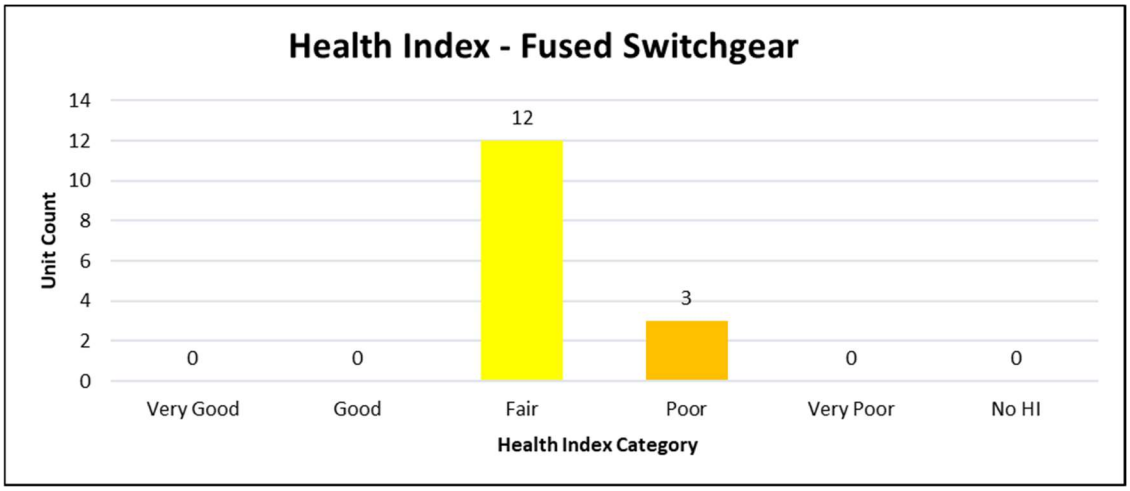

Figure 5.3-22: Station Fused Switchgears HI Results

Asset Capacity & Utilization

The following table summarizes the current system capacities and peak loads (five-year peak) for each of the communities served by Westario.

Table 5.3-6: Capacity vs. load demand

Community	Peak (kW)	Month	Year	Capacity (kW)
Clifford	1,261	Jan	2019	Hydro One Owned
Elmwood	5,372	Nov	2020	Hydro One Owned
Hanover	25,807	Mar	2018	22,601
Harriston	3,184	Jan	2018	4,654
Kincardine	18,073	Jan	2019	26,551
Lucknow	2,439	Jan	2019	4,768
Mildmay	1,629	Dec	2022	Hydro One Owned
Neustadt	1,118	Feb	2019	Hydro One Owned
Palmerston	4,050	Jan	2019	4,334
Palmerston: Customer	5,867	Jul	2021	Customer Owned
Port Elgin	12,503	Dec	2019	26,930
Ripley	1,377	Dec	2022	Hydro One Owned
Southampton	13,965	Jan	2020	5,685
Teeswater	1,557	Dec	2022	2,829
Teeswater: Customer	2,982	Jun	2022	Customer Owned
Walkerton	9,169	Jul	2018	13,726
Wingham	5,715	Sep	2018	9,250

Hanover, Southampton, Port Elgin, Wingham, Walkerton, Harriston, and Palmerston all have large customers that have their own substations. The capacity of these substations owned by customers have not been included in the capacity totals above. The Peak kW will include demand for all customers including those that have their own substations. After factoring in the customer owned substations all of the communities have available capacity to meet the forecasted load growth in their areas.

The following table demonstrates the actual energy consumption by community over the historical period.

Table 5.3-7: Actual energy consumption (kW)

Community	Yearly Peak (kW)					Change (%) from 2018 to 2022
	2018	2019	2020	2021	2022	
Clifford	11,898	11,975	11,980	12,295	12,672	6.10%
Elmwood	3,970	3,982	9,203	4,338	4,656	14.72%
Hanover	185,880	167,310	167,519	167,746	169,651	-9.57%
Harriston	31,994	31,122	31,200	30,790	32,178	0.57%
Kincardine	145,597	148,039	141,948	141,458	142,617	-2.09%
Lucknow	22,198	22,146	22,300	22,781	22,935	3.21%
Mildmay	16,778	15,964	16,484	16,414	17,348	3.28%
Neustadt	10,214	11,015	10,342	10,602	10,853	5.89%
Palmerston	42,587	43,005	43,350	44,112	43,607	2.34%
Palmerston: Customer	58,399	57,454	58,381	61,321	58,438	0.07%
Port Elgin	126,680	121,371	123,799	124,128	128,823	1.66%
Ripley	11,429	11,447	11,282	11,500	12,762	10.44%
Southampton	70,233	69,294	73,941	87,387	68,941	-1.87%
Teeswater	13,998	13,480	14,064	13,893	14,834	5.64%
Teeswater: Customer	18,718	25,122	29,490	29,458	33,241	43.69%
Walkerton	92,175	85,818	89,679	90,645	92,606	0.47%
Wingham	60,884	57,030	57,882	56,859	57,079	-6.66%

The above table shows energy consumption trends over the last five years. As can be seen, energy consumption has generally stayed consistent in most communities. Energy consumption trends in Westario's service territory are affected mostly by the weather patterns and the severity of winter weather specifically. Economic-driven growth in consumption is minimal, given the smaller scale of the local economies.

5.3.2.3 Transmission or High Voltage Assets

There should also be a statement as to whether the distributor has had any transmission or high voltage assets (> 50kV) deemed previously by the OEB as distribution assets, and whether there are any such assets that the distributor is asking the OEB to deem as distribution assets in the present application.

Westario does not have any transmission or high voltage assets in its distribution system.

5.3.2.4 Host & Embedded Distributors

A distributor should also provide a description of whether the distributor is a host distributor (i.e., distributing electricity to another distributor's network at distribution-level voltages) and/or an embedded distributor (i.e., receiving electricity at distribution-level voltages from any host distributor(s)). The distributor must identify any embedded and/or host distributor(s). Partially embedded status (i.e., where part of the distributor's network is served by one or more host distributors but where the utility is also connected to the high voltage transmission network) must be clearly identified, including the percentage of load that is supplied through the host distributor(s). If the

distributor is a host distributor, the distributor should identify whether there is a separate Embedded Distributor customer class or if any embedded distributors are included in other customer classes (such as GS > 50 kW).

Westario is an embedded distributor that receives electricity at distribution level voltages from Hydro One.

5.3.3 Asset Lifecycle Optimization Policies and Practices

Historically, Westario has taken an as-needed risk assessment approach into consideration when making decisions on asset replacements and refurbishments. With the availability of the new asset condition assessment however, which utilizes the condition assessments from the existing database information to generate a replacement plan for each asset type, a new more systematic approach is available to aid in formulating asset replacement programs. Having these results along with new information from the GIS system allows Westario to be more methodical and make a much more informed decision in replacing or refurbishing assets.

The pole-testing analysis will now allow Westario to assess which assets are most vulnerable based on all of the evaluation criteria and to pinpoint where some of these assets may be grouped for more efficient treatment. Comparing these groups of assets with risk assessments, it will now be possible to develop specific replacement programs/jobs to target multiple assets in a small geographical area and ultimately reducing the replacement costs through economies of scale.

5.3.3.1 Asset Replacement and Refurbishment Policy

An understanding of a distributor's asset lifecycle optimization policies and practices will support the regulatory assessment of system renewal investments and decisions to refurbish rather than replace system assets. Information provided should be sufficient to show the trade-off between spending on new capital (i.e., replacement) and life-extending refurbishment.

While refurbishing assets can reduce or defer the capital investments required where viable, it is not always practical or possible for all asset classes. As such, Westario assesses whether an asset should be refurbished or replaced on a case-by-case basis. If it is feasible and beneficial to have an asset refurbished, it will generally be considered. Once an asset has previously been refurbished, it would seldom be considered for another refurbishment unless necessary. The following table summarizes which asset classes would generally be considered for refurbishment by Westario.

Table 5.3-8: Asset Refurbishment Summary Table

Category	Asset Details			Refurbishment Considered
	Asset #	Asset type		Yes / No
O/H	1	Pole mount Transformers		Yes
	2	3 Phase Air Break Switches		Yes
	3	1 Phase Air Break Switches		Yes
	4	3 Phase Load Break Switches		Yes
	5	Wood Hydro Poles		No
		Insulators/Hardware		No
	6	Overhead Conductors		No
	7	Protective Relays		Yes
	8	Line Circuit Breakers/ Reclosers		Yes
U/G	9	Pad mount Transformers		Yes
	10	U/G Cables		No
Substations	11	44kV Power Transformers		Yes
	12	15kV Circuit Breakers/ Reclosers		Yes
	13	Protective Relays		Yes
	14	15kV Switchgear Assemblies		Yes
	15	Buildings		Yes
	16	15kV Primary Cables		Yes
General Plant	17	Vehicles	Trucks	Yes
			Trailers	Yes
	18	Office Building/ Garage		Yes
	19	Backup Generators		Yes
	20	Computer Equipment/ Software		No
	21	Meters		Yes
	22	Office Furniture & Equipment		Yes
	23	Tools, Shop & Garage Equipment		Yes
	24	Measurement & Test Equipment		Yes

5.3.3.1.1 Distribution Class Asset Optimization Policies and Practices

Pole Mount Transformers

Historically, Westario has not practiced refurbishing overhead transformers, nor do they generally require any maintenance. Westario has generally replaced pole mount transformers only upon failure unless the device is supplying critical loads or when carried out with the replacement of an old and deteriorated pole. However, faced with an aging population of overhead transformers with a worsening condition, Westario will require increased capital investments in its transformer replacement. Between 2018 and 2022, Westario had 34 transformers failures, with an approximate average of 7 transformers failures per year. Annually through the plan period, Westario will replace approximately pole mount

transformers that have reached the end of their useful lives, or showing degradation, to avoid increased failure rates and to maintain service quality. To optimize the useful life of its transformers, Westario uses available metering data to ensure that transformers are sized adequately for the loads they are supplying. This will help to avoid overloading and thereby reducing the life of the devices.

Switches

Westario operates many types of switches including manually gang operated switches, fused and unfused inline openers, and fused and unfused cutouts. Maintenance and refurbishment are completed to extend the useful life when possible. However, when existing load break switches become obsolete and parts for refurbishments are not available, replacement is the only option remaining. The most common refurbishment which would be considered in this case would be switch insulator replacements. This is sometimes a cost-effective alternative to complete switch replacement. Westario routinely inspects its overhead switches as part of its Distribution System Maintenance and Inspection Program.

Fully Dressed Wood Poles

Westario has completed a pole testing program that is carried out by a single contractor and is based on visual inspections and resistance tests. This effort produces a consistent assessment, and the scientific basis that is common in most LDC practices today.

Historically, Westario replaced its wood poles individually as deemed necessary during routine inspections, or in larger groups as part of distribution line upgrades. With the recently developed ACA and the results of its pole testing program, Westario intends to replace its hydro poles more strategically.

It is intended that the proposed pole testing will provide an assessment of the remaining pole strength relative to that of a new pole on a percentage basis. This information allows for a comparison of this remaining strength to the actual loading on the pole. If the required level of structural support required by the pole exceeds the allowable safety margins as per the CSA standards, then the pole can be identified and prioritized for replacement. This approach will allow Westario to clearly identify older poles that are still structurally sound and not in situations beyond their remaining physical strength. These poles can therefore be left in service until, at least, the next round of pole testing is completed.

Where groups of poor-condition poles have been identified, Westario will plan pole replacements in clusters to reduce the replacement costs per unit. As Westario's asset knowledge continues to progress with the newly integrated GIS, Westario will be in a better position to implement wood pole treatment programs to ward off deterioration. Where possible, Westario considers such components as down guys, steel crossarms, and metal stand-off brackets for reuse if they are considered fit after inspection.

Conductors

Westario does not refurbish its overhead conductors, because there are no utility standards for their refurbishment, and they are not suited for refurbishment. It does, however, inspect its overhead conductors as part of a maintenance and inspection program, and is therefore able to identify concerns and remedy them as needed. Westario will replace conductor where it has been deemed to be at risk of failure or as part of pole line upgrades.

Underground Cables

Most of Westario's service territory is served by overhead distribution lines; in general, downtown core areas and subdivisions are the only areas that are supplied by underground cables. Underground conductors will continue to be replaced as required. In some cases, there is an option of rehabilitation through the use of silicone injection. This option is evaluated for the long-term benefits between extending the typical useful life and full asset replacement. Variance in cable construction over the years means that not all cable is suited for this practice. Westario will take this into consideration when deciding the rehabilitation/replacement strategy for underground cables.

Pad Mount Transformers

The pad mount transformers in Westario's distribution system are, in general, in very good condition. This asset type is typically replaced based on a combination of asset condition and the criticality of the load. In general, pad mount transformers do not require much maintenance, but are cleaned and inspected regularly, as per Westario's Maintenance and Inspection Program. Refurbishment of pad mount transformers is a consideration to extend the typical useful life when possible.

Underground Foundations

The underground infrastructure in Westario's territory is in good condition, however, the system's fibreglass foundations have been or will need replacing in the upcoming years. Westario plans to reuse existing foundations for second lifecycles wherever possible, even though underground foundations are not typically refurbished. In the replacement of pad mount transformers, or in switching kiosks, some foundations are deemed fit for reuse. When this is the case, they are left in place for use with the new transformer. This extends the useful life of the foundation to the general maximum of 70 years.

5.3.3.1.2 Substation Class Asset Optimization Policies and Practices

Westario has historically been maintaining and refurbishing its station assets where possible in an attempt to extend the useful life of these costly assets and reduce the required capital expenses. A detailed refurbishment/replacement plan has been developed for substation assets in Section 5.3.3.2. Further details are also listed in the material narrative SR02.

Power Transformers

Power transformers are devices which generally require ongoing maintenance and testing, and are conducive to refurbishment. Based on regular "Transformer Dissolved Gas in Oil Analysis Reports", station transformers are regularly monitored for worsening test results, and the replacement strategy is modified accordingly.

Westario's current plan endeavors to refurbish/upgrade one substation per year for the period of 2023-2028. This will lower the average age of the station asset class significantly, and place Westario in a better position to manage future replacements and upgrades. The 3 remaining transformers at the Kincardine stations are scheduled for a voltage conversion replacement in 2026. Please refer to Appendix F to access the Kincardine System Study.

15 kV Switchgear Assemblies

These assets were reviewed and assessed as part of the overall substation replacement/ refurbishment plans. When found to be in acceptable condition, the switchgear will be reused or refurbished in a cost-effective manner.

Buildings

Westario's substation buildings are inspected regularly as part of its maintenance and inspection program. Many portions of the buildings, such as roofing, and doors would be considered for refurbishment to prolong the life of a building and avoid the costs of replacing such assets.

Station Reclosers

The existing station feeders employ new vacuum style reclosers, which have been installed as replacements for older style oil reclosers. These reclosers are all fairly new and are constructed to withstand tens-of-thousands of operations. Vacuum devices are relatively maintenance free, but are inspected regularly as part of the Maintenance and Inspection Program.

5.3.3.1.3 General Plant Asset Optimization Policies and Practices

Some of the assets that are considered for refurbishment include the hydro pole and reel trailers, as it is more economical to refurbish these as required than to replace outright. Typically, many projects under the general plant category are refurbishment type projects. Refurbishments such as office roof repairs and repaving of parking lot are considered as required.

Of the other small ticket items such as tools and shop equipment, most are replaced as necessary, other than hoist and saws which are often refurbished or repaired.

Items such as computers, software, printers, copiers etc. are generally used to the full extent of their useful life and then they are replaced.

5.3.3.2 Description of Maintenance and Inspection Practices

A distributor should also be able to demonstrate that it has carried out system O&M activities to sustain an asset to the end of its service life (can include references to the Distribution System Code).

Westario has divided its distribution system by area into 15 sections, by towns, each of which is thoroughly inspected on a three-year cycle. The inspection process utilizes detailed overhead and underground system inspection sheets to report any deficiencies, which are then recorded by the GIS administrator and acted upon appropriately. Westario inspects distribution transformers, switching and protective devices, overhead and underground cables and conductors, poles, civil infrastructure, and vegetation during the inspection process. These inspections primarily consist of visual inspection to detect different types of defects and signs of damages. These ongoing inspections, along with the test results, will bring attention to any issues not found in the asset condition assessment, and help optimize asset lifecycles/lifespans by pinpointing serious problems. This will allow Westario to identify and resolve the issue before it causes damages to neighbouring assets.

Westario also performs quarterly substation inspections and tri-annual maintenance by a third party. This program is critical to assist staff in identifying any issues and to remediate them as quickly as possible to ensure continuous operation of the substations, protect the assets through preventative maintenance measures, and eliminate any dangers to employees and the public. Further details on

Westario's "Distribution System Maintenance and Inspection Program" can be found within Appendix G: Asset Management Plan.

In addition to these routine inspections, Westario also employs a comprehensive 3-year cyclical vegetation management program. This program ensures that safety of both the public and distribution equipment. This type of ongoing preventative maintenance aids in extending the useful life of distribution assets and reducing the frequency of replacement and refurbishments needed by reducing the frequency and severity of faults due to vegetation contact.

Table 5.3-9: Summary of Inspection and Maintenance Activities

Assets	Category	Activity	Frequency
Overhead distribution assets	Inspections	Visual	3-year cycle
		Infrared	Annual
	Predictive maintenance	Pole testing	3-year cycle
	Preventative maintenance	Vegetation management	3-year cycle
Underground distribution assets	Inspections	Visual	3-year cycle
Station assets	Inspections	Visual	3-year cycle
	Predictive maintenance	Oil testing of Power Transformers	Annual

5.3.3.3 Processes and Tools to Forecast, Prioritize & Optimize System Renewal Spending

A distributor should explain the processes and tools it uses to forecast, prioritize, and optimize system renewal spending and how a distributor intends to operate within budget envelopes.

Forecasting

The asset assessments used to develop the results consider a multitude of factors, depending on the information available in the database for each asset type. This could include a combination of asset inspection, individual asset performance, and condition information. An ACA study was carried out by METSCO to establish the health and condition of distribution and substation assets in service. By considering all relevant information related to the assets' operating condition, the condition of all infrastructure assets was assessed and expressed on a normalized index in the form of an HI. The resulting information from the ACA study, system studies and additional inspection data was used to help forecast the renewal needs of Westario's assets over the forecast period. Additional details on the inputs and processes used to forecast System Renewal spending are included in sections **Error! Reference source not found.** and **Error! Reference source not found.** of this DSP.

Prioritization and Optimization

For prioritizing capital expenditures, a distributor should help the reviewer understand the approaches a distributor uses to balance a customer's need for reliability and capital expenditure costs.

Westario takes numerous factors into consideration when prioritizing the replacement or refurbishment of any single or group of assets. Risk consequences related to reliability, public and worker safety, power quality, operationability and maintainability etc., for each project area. Through careful

evaluation of the risks, projects are prioritized for implementation to mitigate higher-level risks during this DSP implementation period, while deferring the projects with lower-level risks or risks that can be managed through alternative cost-effective mitigation measures.

The prioritized System Renewal investments are paced for implementation based on the funding available for asset renewal and by considering the resources required for project implementation for the type of work predominantly involved. The continued performance of assets is also managed through Westario's capital investments and maintenance programs. Westario's inspection, maintenance, and testing practices described previously in section 5.3.2.2 support asset life cycle risk management by rectifying deficiencies to extend the lives of the assets and identifying the assets in the very worst condition for replacement. When maintenance and inspections are carried out and identify any issues, this is placed into a five-level "priority assessment critieria" as seen below and acted upon appropriately.

Priority 1: Replace immediately

Priority 2: Replace within one week

Priority 3: Replace within three months

Priority 4: Replace within one year

Priority 5: Replace after one year, per asset management plan

Information obtained through asset databases, maintenance and inspection records, and outage records is a critical input into prioritizing and optimizing which projects will bring the best value

Strategies for Operating within Budget Envelopes

The proposed System Renewal projects over the forecast period were identified to keep power supply reliability from deteriorating below an acceptable level and were paced for implementation based on the funding available for asset renewal and by considering the resources required for project implementation for the type of work predominantly involved. Assets with the highest consequence of failure in service have been prioritized for renewal or rehabilitation during the next five years. However, since Westario's AM process is continually being updated with new information, Westario completes investment planning on an annual basis to help inform any necessary budget adjustments for the following year. Westario understands that circumstances may change, and if needed, budgets can be re-prioritized depending on customer and system needs. For example, due to the non-discretionary nature of System Access projects, these projects will take priority if there are competing demands with System Renewal projects. Completing investment planning on an annual basis allows Westario to use the best available information to effectively plan for and manage the highest priority projects and programs over the forecast period while remaining within the approved budget envelopes. Westario also monitors the execution of projects against budgets and makes changes as required to stay within overall budget envelopes.

Risks of Proceeding / Not Proceeding

A distributor should also demonstrate that it has considered the potential risks of proceeding/not proceeding with individual capital expenditures.

Risk is factored into the selection and prioritization of capital expenditures during the prioritization process and is ultimately used to determine the prioritized list of capital projects and programs over the forecast period. It is at this stage of the process that Westario considered the risks associated with proceeding versus not proceeding with an individual capital expenditure and decides whether the capital expenditure is required during the forecast period or if it can be deferred.

Assets with unacceptably high-risk scores are monitored closely and plans are included in the project scope to alternatively maintain, refurbish, or replace the assets to reduce the risk to an acceptable level. It is noteworthy that some assets carry an inherently higher risk than others. The top projects in each category are identified in the prioritization process and scrutinized using further investigation and expert opinion to eliminate data inconsistencies and determine appropriate scopes of work.

Consideration of Future Capacity Requirements

A distributor should also be able to demonstrate that in planning the lifecycle of an asset, it has considered the future capacity requirements of the asset such that it does not need to be replaced prematurely due to capacity constraints.

Westario undertakes system studies to identify areas that may require investments to accommodate the required capacity. Westario also engages regularly with customers, developers, municipalities, MTO, the IESO, and other LDCs to share information, identify needs, identify upcoming project plans, and coordinate long-term planning such that the needs of all parties can be considered.

For example, Westario has performed system studies for Kincardine, having identified an increase in capacity requirements. This has helped identify solutions required in the Kincardine area to address these future capacity needs.

When it comes to managing its assets and planning for replacements, Westario will consider what alternatives are available. Various aspects are taken into consideration when evaluating alternatives, including potential development opportunities, and planning for increased load requirements such as electric vehicle charging stations. While like-for-like replacement may be appropriate in some cases, upgrades (such as installing a larger-sized distribution transformer or constructing a new circuit) may be pursued to address overloading issues, accommodate future load requirements, or address other identified constraints. This is considered on a case-by-case basis.

5.3.3.4 Important Changes to Life Optimization Policies and Practices since Last DSP Filing

A distributor should provide a summary of any important changes to the distributor's asset life optimization policies and processes since the last DSP filing.

The only major change since the last DSP filing is that Westario has moved from urban to rural classification. In addition, due to supply chain constraints, some of the substation maintenance activities were refocussed. However, all activities were still carried out in compliance with legislation.

5.3.4 System Capability Assessment for REG & DERs

<<Note: If the distributor has no forecast costs to accommodate and connect REG facilities, state this and delete subsections 5.3.4(a) – 5.3.4 (e)>>

A distributor should provide a list of restricted feeders by name, the feeder designation, the reason for the restriction, and number of connected customers, and explain if there are plans to improve their distribution system's ability to connect distributed energy resources.

If a distributor has incurred or expects to incur costs to accommodate and connect renewable generation facilities (e.g., connection assets, expansions and/or renewable enabling improvements, etc.) that will be the responsibility of the distributor under the DSC, and are therefore eligible for recovery through the provincial cost recovery mechanism set out in section 79.1 of the Ontario Energy Board Act, 1998, then a distributor should provide the following:

There are no costs included in this DSP to accommodate and connect REG facilities over the forecast period. Currently, Westario does not have any specific plans to accommodate DER connections in the distribution system, however Westario is aware of the technology advancements and increased market penetration of DERs. As such, Westario will continue to monitor the DER space and adjust plans to improve the distribution system accordingly. In addition, Westario does not have any restricted feeders in its distribution system.

5.3.5 CDM Activities to Address System Needs

The OEB's 2021 Conservation and Demand Management Guidelines for Electricity Distributors (the CDM Guidelines) provide updated OEB guidance on the role of conservation and demand management (CDM) for rate-regulated electricity distributors, taking into account the provincial 2021-2024 CDM Framework and previous provincial CDM frameworks and addressing the treatment of CDM activities in distribution rates.

The CDM Guidelines require distributors to make reasonable efforts to incorporate CDM activities into their distribution system planning process, by considering whether distribution rate-funded CDM activities may be a preferred approach to meeting a system need, thus avoiding or deferring spending on traditional infrastructure. CDM activities potentially eligible for distribution rate funding are not limited to energy efficiency programs and include activities that reduce instantaneous electricity demand, including demand response and energy storage.

A distributor's DSP should describe how it has taken CDM into consideration in its planning process. The degree of consideration of CDM in meeting system needs should be proportional to the expected benefits, and will likely vary across distributors, taking into account the size and resources of a distributor. CDM will not be a viable alternative for all types of traditional infrastructure investments. Distributors are encouraged to take account of learnings from CDM activities that have been undertaken by other electricity distributors, in Ontario or elsewhere.

Distributors may apply to the OEB for funding through distribution rates for CDM activities as specified in the CDM Guidelines. Any application for CDM funding to address system needs must include a consideration of the projected effects on the distribution system on a long-term basis and the forecast expenditures. Distributors must explain the proposed activity in the context of the distributor's DSP,

including providing details on the system need that is being addressed, any infrastructure investments that are being avoided or deferred as a result of the CDM activity (could include investments upstream of a distributor), and the prioritization of the proposed CDM activity relative to other system investments in the DSP.

Distributors should describe their approach to assessing the benefits and costs of CDM activity. However, the CDM Guidelines recognized that the Framework for Energy Innovation's (FEI) near-term activities include defining an approach to assessing the benefits and costs of distributed energy resources and may apply approaches from the FEI in the future.

2021 CDM Guidelines:
A distributor should explain the proposed CDM activity in the context of the DSP, including providing details on the system need that is being addressed, any infrastructure investments that are being avoided or deferred as a result of the CDM activity, and the prioritization of the proposed CDM activity relative to other system investments in the DSP.

A distributor should also provide evidence as to why the proposed CDM activity is the preferred approach (alone or in combination with an infrastructure solution) to meeting a system need, including an assessment of the projected benefits to customers relative to cost impacts.

Although Westario does consider CDM as part of its planning process, there are no CDM activities currently planned for the DSP period.

5.4 Capital Expenditure Plan

The capital expenditure plan should set out and comprehensively justify a distributor's proposed expenditures on its distribution system and general plant over a five-year planning period, including investment and asset-related operating and maintenance expenditures.

A distributor's DSP details the system investment decisions developed on the basis of information derived from its planning process. It is critical that investments be justified in whole or in part by reference to specific aspects of that process. As noted in section 5.2 above, a DSP must include information on the historical and forecast period.

This section summarizes Westario's capital expenditure plan, which has been developed to meet Westario's strategic corporate objectives. The capital expenditure plan was developed based on the planning and AM processes previously described in Section 5.3.

5.4.1 Capital Expenditure Summary

The purpose of the information filed under this section is to provide a snapshot of a distributor's capital expenditures over a 10 year period, including five historical years and five forecast years. Despite the multi-purpose character a project or program may have, for summary purposes the entire cost of individual projects or programs are to be allocated to one of the four investment categories on the basis of the primary (i.e. initial or trigger) driver of the investment. For material projects/programs, a distributor must estimate and allocate costs to the relevant investment categories when providing information to justify the investment, as this assists in understanding the relationship between the costs and benefits attributable to each driver underlying the investment. In any event, the categorization of an individual project or program for the purposes of these filing requirements should not in any way affect the proper apportionment of project costs as per the DSC.

The distributor must provide completed appendices 2-AA – Capital Projects Table and 2-AB – Capital Expenditure Summary Table along with the following information about a distributor's capital expenditures:

The capital expenditure summary provides a snapshot of Westario's capital and System O&M expenditures over the 2018 – 2028 DSP period. For summary purposes, the entire capital costs of individual projects and programs have been allocated to one of the four OEB investment categories based on the primary driver for the investment:

1. System Access
2. System Renewal
3. System Service
4. General Plant

The breakdown of plan versus actuals over the historical period, broken down by category, is provided in Table 5.4-1, and the forecast costs broken down by category are provided in Table 5.4-2. Additional details can also be found in the Chapter 2 Appendices 2-AA and 2-AB.

Table 5.4-1: Historical Capital Expenditures and System O&M

Category	Historical															Bridge Year		
	2018			2019			2020			2021			2022			2023		
	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.
	$ '000		%	$ '000		%	$ '000		%	$ '000		%	$ '000		%	$ '000		%
System Access																		
Gross Capital Spend	1,258	1,643	30.60%	1,346	1,356	0.74%	1,353	1,617	19.51%	1,359	1,349	-0.74%	1,368	2,813	105.63%	1,803	N/A	N/A
Capital Contributions	-508	-465	-8.46%	-341	-240	-29.62%	-341	-398	16.72%	-341	-480	40.76%	-341	-529	55.13%	-826	N/A	N/A
Net Capital Expenditures	750	1,178	57.07%	1,005	1,116	11.04%	1,012	1,219	20.45%	1,018	869	-14.64%	1,027	2,284	122.40%	977	N/A	N/A
System Renewal																		
Gross Capital Spend	3,232	3,220	-0.37%	2,964	3,051	2.94%	3,159	2,947	-6.71%	3,450	1,660	-51.88%	3,467	2,860	-17.51%	5,748	N/A	N/A
Capital Contributions	0	0		0	-33	-	0	-99	-	0	0	-	0	-7		0	N/A	N/A
Net Capital Expenditures	3,232	3,220	-0.37%	2,964	3,018	1.82%	3,159	2,848	-9.84%	3,450	1,660	-51.88%	3,467	2,853	-17.71%	5,748	N/A	N/A
System Service																		
Gross Capital Spend	382	437	14.40%	67	160	138.81%	70	233	232.86%	70	66	-5.71%	70	342	388.14%	510	N/A	N/A
Capital Contributions	0	0	-	0	-22	-	0	-4	-	0	0	-	0	-3	-	-30	N/A	N/A
Net Capital Expenditures	382	437	14.40%	67	138	105.97%	70	229	227.14%	70	66	-5.71%	70	339	383.86%	480	N/A	N/A
General Plant																		
Gross Capital Spend	585	948	62.05%	350	350	0.00%	590	425	-27.97%	95	476	401.56%	570	543	-4.66%	1,072	N/A	N/A
Capital Contributions	0	0	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	N/A	N/A
Net Capital Expenditures	585	948	62.05%	350	350	0.00%	590	425	-27.97%	95	476	401.56%	570	543	-4.66%	1,072	N/A	N/A
Total Expenditure, Gross	**5,457**	**6,248**	**14.50%**	**4,727**	**4,917**	**4.02%**	**5,172**	**5,222**	**0.97%**	**4,974**	**3,551**	**-28.60%**	**5,475**	**6,558**	**19.78%**	**9,133**	N/A	N/A
Total Capital Contribution	**-508**	**-465**	**-8.46%**	**-341**	**-295**	**-13.49%**	**-341**	**-501**	**46.92%**	**-341**	**-480**	**40.76%**	**-341**	**-539**	**58.06%**	**-856**	N/A	N/A
Total Expenditure, Net	**4,949**	**5,783**	**16.85%**	**4,386**	**4,622**	**5.38%**	**4,831**	**4,721**	**-2.28%**	**4,633**	**3,071**	**-33.70%**	**5,134**	**6,019**	**17.24%**	**8,277**	N/A	N/A
System O&M	1,968	1,949	**-0.92%**	2,007	2,135	**6.39%**	2,047	2,255	**10.16%**	2,088	2,056	**-1.55%**	2,130	2,654	**24.61%**	2,562	N/A	N/A

**Note: At the time of the Cost of Service submission, 2023 actuals are not available.*

Table 5.4-2: Forecast Capital Expenditures and System O&M

Category	Forecast				
	2024	2025	2026	2027	2028
	$ '000	$ '000	$ '000	$ '000	$ '000
System Access					
Gross Capital Spend	1,794	1,862	1,891	1,947	2,003
Capital Contributions	- 850	- 876	- 893	- 911	- 929
Net Capital Expenditures	913	987	999	1,034	1,075
System Renewal					
Gross Capital Spend	4,982	5,193	5,269	5,411	5,433
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	4,982	5,193	5,269	5,411	5,433
System Service					
Gross Capital Spend	353	373	377	391	406
Capital Contributions	- 31	- 32	- 32	- 33	- 34
Net Capital Expenditures	322	341	345	358	372
General Plant					
Gross Capital Spend	490	582	745	709	608
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	490	582	745	709	608
Total Expenditure, Gross	**7,619**	**8,010**	**8,282**	**8,458**	**8,450**
Total Capital Contribution	**- 881**	**- 908**	**- 925**	**- 944**	**- 963**
Total Expenditure, Net	**6,738**	**7,102**	**7,357**	**7,514**	**7,487**
System O&M	2,585	2,650	2,716	2,784	2,853

5.4.1.1 Plan vs Actual Variances for the Historical Period

An analysis of a distributor's capital expenditure performance for the DSP's historical period. This should include an explanation of variances by investment or category that exceed +/- 10%, including that of actuals versus the OEB-approved amounts for the applicant's last OEB-approved CoS or Custom IR application and DSP (the variance analysis should also include variances in planned and actual volume of work completed). A distributor should particularly explain variances in a given year that are much higher or lower than the historical trend.

Assessing and understanding the variances is an important step for Westario to promote continuous improvements in its estimation and budgeting process. The breakdown below is provided by each category for each year. Explanations for any significant variances that exceed +/- $58,000 (i.e., Westario's materiality threshold), are explained in the following sub-sections.

Westario has not historically tracked its planned versus actual volumes of work completed and as a result, this level of detail is not provided in the following sub-sections. In order to comply with the OEB's updated filing requirements, Westario will begin tracking the planned and actual volumes of work completed going forward.

Table 5.4-3: Variance Explanations - 2018 Planned vs. Actuals

Category	2018			Variance Explanations
	Plan.	Act.	Var.	
	$ '000		%	
System Access, Net	750	1,643	119.07%	System Access spending in 2018 was higher than budget due to an increase in customer demand and new developments. The initial forecast included budget for new developments under "New O/H Service Connections". However, since Westario saw a large increase in new developments, new development connections were bucketed under a new category called "New Subdivisions" to differentiate from new connections. In addition, the increase in customer demand also led to the capital pole budget being exceeded to accommodate the new developments.
System Renewal, Net	3,232	3,220	-0.37%	Minor variance.
System Service, Net	382	437	14.40%	Variance below materiality threshold.
General Plant, Net	585	948	62.05%	The 2018 General Plant spending was higher than expected in 2018 due to an update required for a metering software. When the budget was prepared for the year, it wasn't known that the existing software was reaching end of life and would no longer be supported. Additionally, two on-call pick-up trucks were replaced in 2018 and the cost of replacing the other requested vehicles in the year was higher than what had been budgeted resulting in Vehicle Replacement being $91,000 over budget.

Total Expenditure, Gross	4,949	6,248	26.25%	The variance in total gross expenditure was primarily driven by increase in System Access and General Plant categories
Capital Contributions	-508	-465	-8.46%	Variance below materiality threshold.
Total Expenditure, Net	4,441	6,713	51.16%	As noted above, overall net variance was mostly driven by System Access and General Plant expenditures.
System O&M	1,968	1,949	-0.92%	Variance below materiality threshold.

Table 5.4-4: Variance Explanations - 2019 Planned vs. Actuals

Category	2019			Variance Explanations
	Plan.	Act.	Var.	
	$ '000		%	
System Access, Net	1,005	1,356	34.93%	The actual System Access spending was higher than budget due to an increase in new developments. Similarly, an increase in customer demand and new developments also led to increased investment in capital poles.
System Renewal, Net	2,964	3,051	2.94%	Minor variance. System Renewal spending in 2019 was slightly higher than budget due to an increase in higher than expected material supply costs. Westario saw an increase expenditure due to higher supply chain costs, inflation, and cost of assets.
System Service, Net	67	160	202.99%	System Service spending in 2019 was higher than expected due to an additional PME reverification, and the installation of automated line switch replacement.
General Plant, Net	350	350	0.00%	No variance.
Total Expenditure, Cross	4,386	4,917	12.11%	As noted above, the variance in overall gross expenditure in 2019 was due to increased expenditure in all categories except General Plant.
Capital Contributions	-341	-295	-13.49%	The variance in capital contributions in 2019 is due to changes in System Access development.
Total Expenditure, Net	4,045	4,622	14.26%	Overall net variance was driven by increases in System Access, System Renewal and System Service categories.
System O&M	2,007	2,135	6.39%	Minor variance. Slightly increased O & M costs due to lower than expected material reliability (i.e. increased supply chain costs, increased labour expenses etc.)

Table 5.4-5: Variance Explanations - 2020 Planned vs. Actuals

Category	2020			Variance Explanations
	Plan.	Act.	Var.	
	$ '000		%	
System Access, Net	1,012	1,617	59.78%	In 2020, System Access spending significantly increased primarily due to increased investment in capital poles program. An entire street had to be rebuilt and a second circuit was added to back up substation 3 in Southampton.
System Renewal, Net	3,159	2,947	-6.71%	Minor variance. This was mostly due to the deferral of Fibreglass Base Replacement project to allow more time for planning and execution of a pilot project.
System Service, Net	70	233	232.86%	System Service spending in 2020 was higher than expected due to an increase in of additional residential smart meters, PME reverification required, and the installation of an automated line switch replacement.
General Plant, Net	590	425	-27.97%	The 2020 General Plant spending was lower than planned due to the delayed purchase of a single bucket truck to 2022.
Total Expenditure, Gross	4,831	5,22	8.09%	Minor variance. Slight increase in total gross expenditure due to increased spending in all categories except General Plant.
Capital Contributions	-341	-501	46.92%	The variance in capital contributions in 2020 was due to an increase in System Access development.
Total Expenditure, Net	4,490	4,721	5.14%	Minor variance. Overall net variance was driven by increases in all categories except General Plant.
System O&M	2,047	2,255	10.16%	Minor variance. Slightly increased O & M costs due to lower than expected material reliability (i.e. COVID-19 related constraints, supply chain costs , increased labour expenses etc.)

Table 5.4-6: Variance Explanations - 2021 Planned vs. Actuals

Category	2021			Variance Explanations
	Plan.	Act.	Var.	
	$ '000		%	
System Access, Net	1,018	1,349	32.51%	System Access spending in 2021 was higher than budget due to a large increase in new subdivision developments. Westario had planned for around eight (8) new subdivision connections in 2021, but actually facilitated thirteen (13) new subdivision connections.
System Renewal, Net	3,450	1,660	-51.8%	The decrease in spending was a result of the deferral of pilot project planned for the Fiberglass Base Replacement due to not receiving locates in time to complete the project. In addition, due to the complexities with COVID-19 and supply chain

				issues, a significant amount of work had to be deferred across all SR projects.
System Service, Net	70	66	-5.71%	Variance below materiality threshold.
General Plant, Net	95	476	401.56%	General Plant spending in 2021 was higher than expected due to large bucket truck purchase.
Total Expenditure, Gross	4,633	3551	-23.35%	The overall variance was primarily driven by a decrease om spending in System Renewal due to issue with supply chain and COVID-19..
Capital Contributions	-341	-480	40.76%	Minor Variance
Total Expenditure, Net	4,292	3,071	-28.45%	The overall net variance was primarily driven by a decrease om spending in System Renewal due to issue with supply chain and COVID-19.
System O&M	2,088	2,056	-1.55%	Variance below materiality threshold.

Table 5.4-7: Variance Explanations - 2022 Planned vs. Actuals

Category	2022			Variance Explanations
	Plan.	Act.	Var.	
	$ '000		%	
System Access, Net	1,027	2,813	173.90%	The significant increase in System Access spending in 2022 was due to increased investments in capital poles and new subdivision connections. Other projects under this category also saw an increase in expenditure, due to increased third-party requests.
System Renewal, Net	3,467	2,860	-17.51	The decrease in spending in 2022 was to accommodate the increase in System Access spending, whilst implementing investments to maintain reliable supply.
System Service, Net	70	342	388.14%	2022 saw an increase in the volume of metering work, thus increasing the expenditure. Additionally, Westario saw an increase in meter reverifications.
General Plant, Net	570	543	-4.66%	Variance below materiality threshold.
Total Expenditure, Gross	5,134	6,558	27.74%	As mentioned above, the variance in total gross expenditure was due to increased spending in all categories except General Plant.
Capital Contributions	-341	-539	58.02%	The variance in capital contributions in 2022 was due to an increase in System Access development.
Total Expenditure, Net	4,793	6,019	25.59%	The overall net variance was due to increased spending in System Access, System Renewal and System Service categories.
System O&M	2,130	2,654	24.61%	Increased O & M costs due to lower than expected material reliability (i.e. high inflation, supply chain costs, increased labour expenses etc.).

5.4.1.2 Forecast Expenditures

An analysis of a distributor's capital expenditures for the DSP's forecast period.

The following table and figure summarize Westario's planned capital expenditures, by investment category, over the forecast period.

Table 5.4-8: Forecast Gross Expenditures 2024-2028

Investment Category	Forecast ($ '000)					Total ($ '000)	Percent of Total
	2024	2025	2026	2027	2028		
System Access	1,794	1,863	1,892	1,945	2,004	9,498	23%
System Renewal	4,982	5,193	5,269	5,411	5,433	26,288	64%
System Service	353	373	377	391	406	1,900	5%
General Plant	490	582	745	709	608	3,134	8%
Total Capital	7,619	8,010	8,282	8,458	8,450	40,819	100%

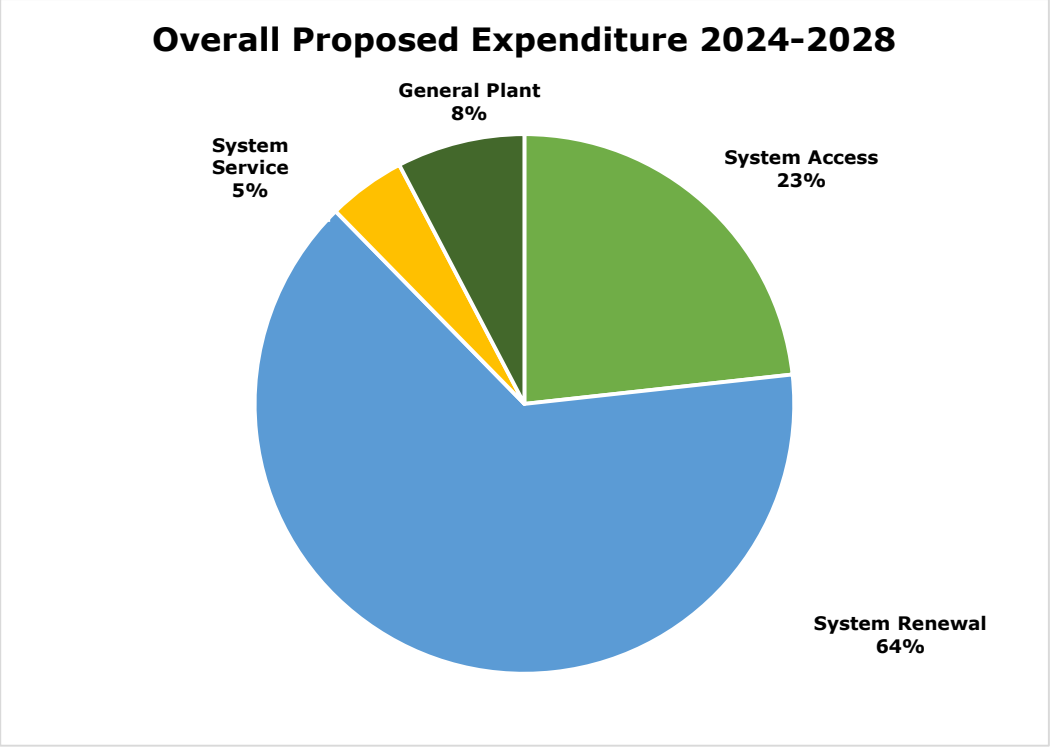

Figure 5.4-1: Forecast Gross Capital Expenditures Ratio

For the 2024-2028 forecast period, system renewal is the largest portion of the overall planned capital expenditure at 65%, followed by system access at 23%, general plant at 8%, and system service at

5% as seen in Figure 5.4 1. The following sub-sections describe the planned capital expenditures in each investment category in more detail.

The following table and figures show the ratio of capital expenditures for the forecast period by investment category.

System Access

Expenditures within the system access category are largely driven by customer service requests for new connections and/or service upgrades, and mandated service obligations. The timing of investments in this category are driven by the needs of external parties and are considered mandatory. Investments in system access are captured in the following table and figure.

Table 5.4-9: Forecast Gross System Access Expenditures

Category	Forecast					Total	Percent of Total
	2024	2025	2026	2027	2028	($ '000)	
	$ '000	$ '000	$ '000	$ '000	$ '000		
Capital Poles	810	838	852	875	899	4,274	45%
New Subdivision/Developments	437	457	464	479	495	2,332	25%
New Underground Service Connections	269	277	282	289	297	1,414	15%
Non-demarcation Customers	33	35	35	36	38	177	2%
3 Phase Customers	148	155	157	162	167	789	8%
Service Upgrades	80	83	84	86	89	422	4%
New O/H Service Connections	17	18	18	18	19	90	1%
Total Expenditure	1,794	1,863	1,892	1,945	2,004	9,498	100%

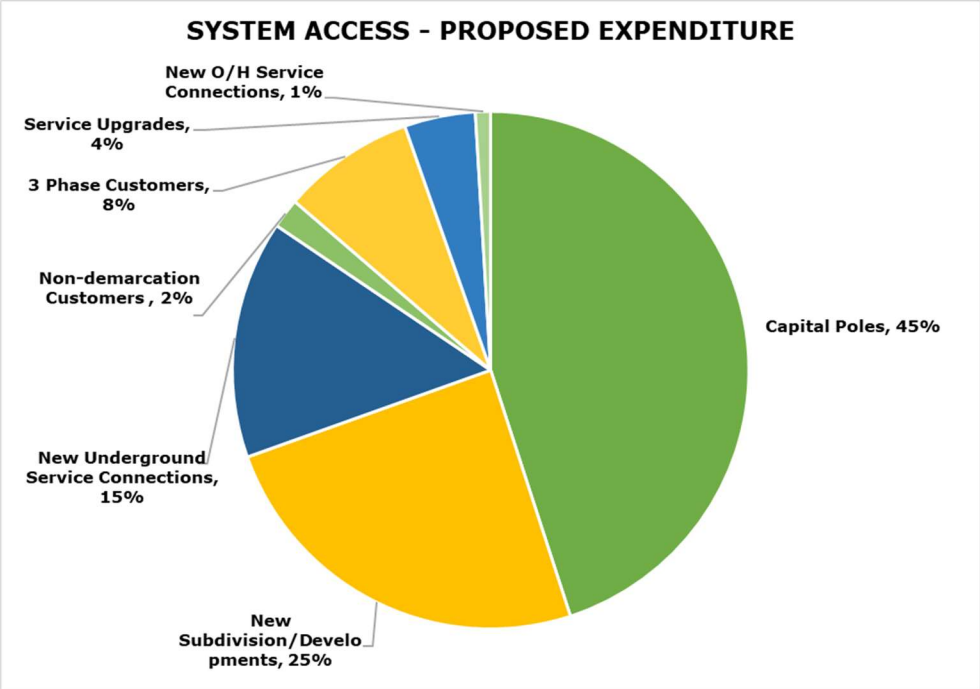

Figure 5.4-2: Forecast Net System Access Expenditures Ratio

Westario will also be tracking the planned volume of work for investments under this category moving forward. Table 5.4-10 shows the planned volume of work to be completed in the forecast year, including bridge year.

Table 5.4-10: System Access - Expected Volume of Work over Forecast Period

	Bridge Year	Forecast Years					
Projects	2023	2024	2025	2026	2027	2028	Total
Capital Poles	50	51	53	54	55	56	319
New Subdivision/Developments	9	9	10	10	10	10	58
New Underground Service Connections	210	216	223	227	232	236	1,134
Non-demarcation Customers	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3-Phase Customers	8	8	8	9	9	9	51
Service Upgrades	65	67	69	70	71	73	415
New Overhead (O/H) Services	11	11	12	12	12	12	70

Net system access investments represent 23% of Westario's overall budgeted net capital expenditures over the forecast period. During the forecast period, system access expenditures have been set to reflect the trends in recent years. The proposed expenditure level is estimated based on the historic spending levels and specific information available about planned projects at the time of preparation of this DSP.

Capital poles represents the largest portion (45%) of expenditures within this category. Capital poles could be those that are required to support new customer connections through line extensions, pole relocations, or new poles for service connection. Capital poles expenditures for 2024 primarily revolve around two projects – installations around an alternate river crossing and pole line expansion for a new industrial subdivision. An average 54 capital poles will be installed per year from 2024-2028.

New Subdivisions/ Developments, which represents the second largest driver in this category (25%) is related to the installation of new connections to developed subdivisions through customer request and demand. Although Westario experiences consistent growth and demand for new connections in its service territory, services are projected to remain consistent over the forecast period but will continue to grow in accordance with inflation. An average of ten (10) new subdivision connections per year will be installed between 2024-2028.

At 15%, New Underground Service Connections represents the next largest driver within this category. This includes connecting new residential and commercial customers through the installation of a new underground feeder, either from a pole or pad mounted transformer. New Underground Service Connections are expected to levelized over the forecast period, but costs will continue to grow in accordance with inflation. Westario expects an average of 226 new underground service connections per year from 2024-2028.

The remaining expenditures are split amongst Three-Phase Customers (8%), Service Upgrades (4%), Non-demarcation Customers (2%) and New Overhead Service Connections projects (1%). The Three-Phase Customers program accommodates new connections in the service territory for the new three-phase service growth needs such as the extension of the system to developing region. Service Upgrades involves upgrading existing residential customer services. Although changes in customer demand may influence the volume of work performed for these projects, it is expected to levelized over the forecast period, but costs will continue to grow in accordance with inflation. Non-Demarcation

Customer projects are for the capital work required for three-phase customers' secondary servicing construction whereas New Overhead Service Connections revolve around new overhead servicing requirements to new homes. The planned volume of work related to the remaining expenditures can be found in Table 5.4-10.

The level of actual investments for system access may slightly deviate year-to-year from the proposed investment levels, depending upon the number of customer requests received for services. Any such deviations will be managed accordingly, with projects delivering mandated service obligations given priority. Westario will adjust and flex its budgets each year but aim to remain within its five-year budget envelope.

System Renewal

At 65%, net system renewal investments represent the majority of Westario's net budgeted capital expenditures. System renewal investments involve replacing and/or refurbishing system assets to extend the original service life of the assets and thereby maintain the ability of Westario's distribution system to provide customers with safe and reliable electricity services. As outlined in Section 5.3.1.3, a key input into determining its system renewal projects is the ACA results and testing and inspection data. These results are a key starting point for Westario to use to determine which investments are required over the DSP period. In addition to the ACA, various other factors such as third-party infrastructure requirements also influence investments in this category. Investments in system renewal are captured in the following table and figure.

Table 5.4-11: Forecast Gross System Renewal Expenditures

Category	Forecast					Total	Percent of Total
	2024	2025	2026	2027	2028	($ '000)	
	$ '000	$ '000	$ '000	$ '000	$ '000		
Decrepit Pole Replacement	1,653	1,722	1,766	1,801	1,837	8,779	33%
Kincardine Load Balancing	1,090	1,119	1,120	1,142	1,040	5,511	21%
Substation Upgrades	1,295	1,373	1,387	1,443	1,500	6,998	27%
Fiberglass Transformer Base Replacement	230	241	244	252	261	1,228	5%
Distribution Transformer Replacement	243	254	257	265	274	1,293	5%
Infrastructure Upgrade	137	143	146	152	158	736	3%
Pole Line Upgrades	335	342	348	355	363	1,743	7%
Total Expenditure	4,983	5,194	5,268	5,410	5,433	26,288	100%

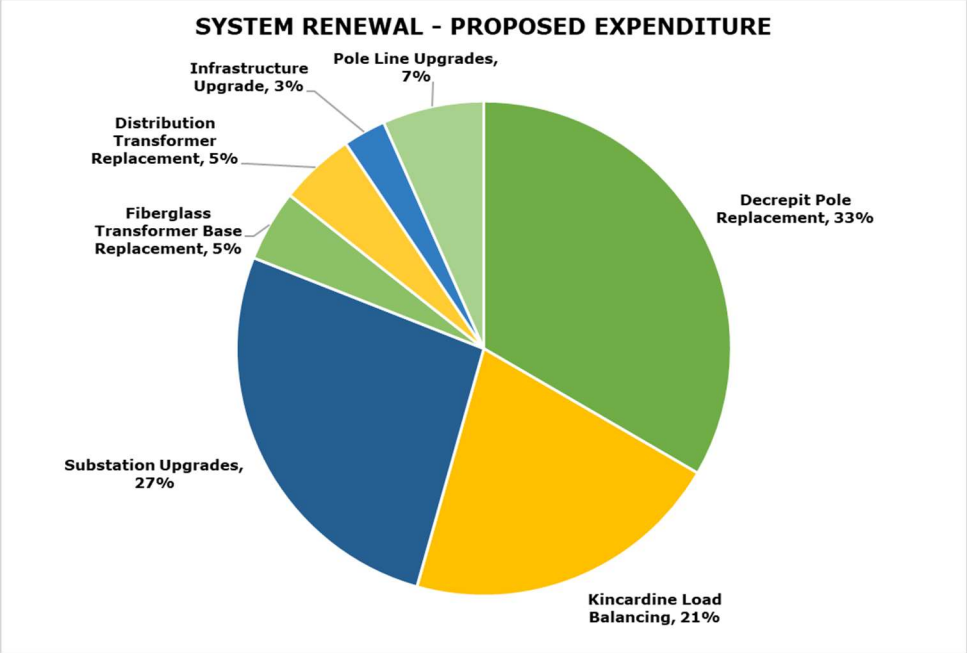

Figure 5.4-3: Forecast Gross System Renewal Expenditures Ratio

Westario will also be tracking the planned volume of work for investments under this category moving forward. Table 5.4-12 shows the planned volume of work to be completed in the forecast year, including bridge year.

Table 5.4-12: System Renewal - Expected Volume of Work over Forecast Period

	Bridge Year	Forecast Years					
Projects	2023	2024	2025	2026	2027	2028	Total
Decrepit Pole Replacement	89	110	115	120	120	120	674
Kincardine Load Balancing	30	120	120	120	120	100	610
Substation Upgrades	1	1	1	1	1	1	6
Fiberglass Transformer Base Replacement	7	12	12	12	12	12	67
Distribution Transformer Replacement	12	12	12	12	12	12	72
Infrastructure Upgrade*	1	1	1	1	1	1	6
Pole Line Upgrades*	1	1	1	1	1	1	6

**These forecast numbers are the number of projects to be carried out per year.*

Over the forecast period, Westario intends to increase the amount of capital spending on system renewal in an effort to address some of the aging infrastructure in its distribution system that poses a risk of failure.

Representing the largest portion (33%) of the expenditures within this category, Decrepit Pole Replacement program involves replacing degraded overhead distribution poles as identified in the

ACA and through Westario's pole testing program. Westario contracted wood pole testing services to review this aging asset group. This analysis, and the GIS information on customer connections helped prepare a prioritized list of poles requiring replacement and to defer the replacements of old poles that are still in good condition or where the impact of failure is low. Westario will replace an average of 117 decrepit poles per year from 2024-2028.

At 27%, Substation Upgrades represents the second largest portion of expenditures within this category. This program focuses on mitigating station failure risk by replacing/upgrading end of life substation assets such as power transformers, circuit breakers, protective relays, station switches, cables and other associated equipment. In the past few years, Westario has completed a detailed review of substation assets which helped inform the investments required under this program. Westario is planning to upgrade one (1) substation per year from 2024-2028.

Representing the next largest portion (21%) of the expenditures within this category, Kincardine Load Balancing project involves replacing four station transformers with 10 MVA, 13.8 kV transformers, and converting the distribution transformers, cables, and all associated equipment to 13.8 kV. The existing distribution system configuration in Kincardine exhibits persistent operational constraints, and as such, Westario is addressing the issue through voltage conversion. An average of 116 assets will be upgraded per year from 2024-2028. The Kincardine System Study can be found in Appendix F.

Pole Line Upgrades (7%), Fiberglass Transformer Base Replacement (5%), Distribution Transformer Replacement (5%), and Infrastructure Upgrade (3%) projects represent the remaining portion of system renewal investments over the forecast DSP period. Pole Line Upgrades are specific projects that address obsolete, end of life assets in a specific location. These projects are normally triggered by a System Access customer driven work, and Westario identifies assets that can be upgraded due to end of life criteria or obsolescence but are not funded by the third-party customer. For the Fibreglass Transformer Base Replacement project, Westario is planning to replace the existing fibreglass transformer foundations with now industry standard cement foundations. Replacement of associated pad mount transformers is also included in this project. Next, Distribution Transformer Replacement program is an annual program that involves the proactive replacement of pole mount and pad mount distribution transformers identified as nearing or at end of useful life. Lastly, Infrastructure Upgrade program primarily involves replacement of inaccessible rear lot infrastructure with standard front lot overhead or underground supply for better access. The projected volume of work for these projects can be found in Table 5.4-12.

The general increase in year-over-year expenditures for system renewal is due to Westario's aging infrastructure that poses a risk of failure. As indicated in Westario's recent ACA report, increased investments are required for renewal of a number of distribution assets that are in poor and very poor condition. The findings of the report have resulted in Westario planning on investing an increased amount of money to renewing the distribution system in the five-year forecast period.

System Service

System service spending encompasses investments which are planned to ensure the reliability of the distribution system to customers and to allow Westario to meet its operational objectives while addressing any anticipated future customer electricity service requirements. At 4%, net system service investments represent the smallest of Westario's net budgeted capital expenditures. Investments in system service are captured in the following table and figure.

Table 5.4-13: Forecast Gross System Service Expenditures

Category	Forecast					Total	Percent of Total
	2024	2025	2026	2027	2028	($ '000)	
	$ '000	$ '000	$ '000	$ '000	$ '000		
Metering	25	25	26	26	27	129	7%
Residential Meter Purchases	286	302	306	318	330	1,542	81%
Automated Distribution Switches	43	45	46	47	49	230	12%
Total Expenditure	354	372	378	391	406	1,901	100%

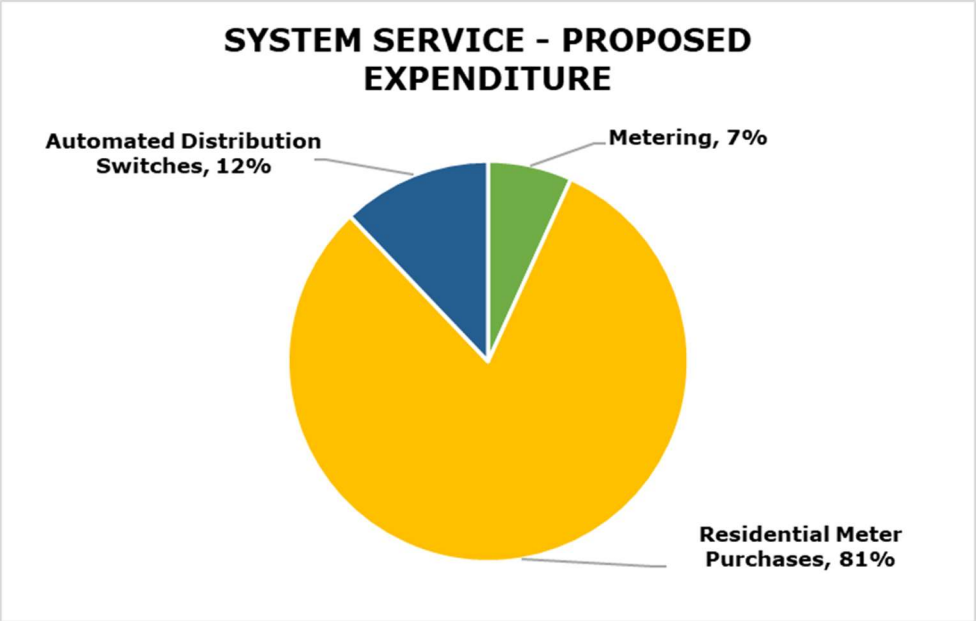

Figure 5.4-4: Forecast Gross System Service Expenditures Ratio

Westario will also be tracking the planned volume of work for investments under this category moving forward. Table 5.4-14 shows the planned volume of work to be completed in the forecast year, including bridge year.

Table 5.4-14: System Service - Expected Volume of Work over Forecast Period

	Bridge Year	Forecast Years					
Projects	2023	2024	2025	2026	2027	2028	Total
Metering	1	2	2	2	2	2	11
Residential Meter Purchases	725	747	769	785	800	816	4,642
Automated Distribution Switches	3	3	3	3	3	3	18

The projects included in this category are primarily related to Metering. Metering program includes expenditures related to the supply and installation of revenue meters that are installed at each customer service point. Residential Meter Purchases project, which falls under the overall Metering program, accounts for 81% of the expenditures in this category. An average of 784 residential meters will be purchased per year from 2024-2028, majority of which will be used for replacement. Since Westario foresees difficulties in the procurement of meters in the coming years, it is being proactive by buying extra meters for future replacements. The rest of the metering expenditures (7%) relate to primary meters upgrades. Primary meters are typically installed at the demarcation point between Hydro One and Westario. Next, Automated Distribution Switches represents 12% of the investments in this category. This project involves upgrading automated distribution switches across the distribution system. The expected volume of work for rest of the projects can be found in Table 5.4-14.

General Plant

General plant investments are modifications, replacements, or additions to Westario's assets that are not part of the distribution system; including land and buildings; tools and equipment; and electronic devices and software used to support day-to-day business and operations activities. Investments in general plant are captured in the following table and figure.

Table 5.4-15: Forecast Gross General Plant Expenditures

Category	Forecast					Total	Percent of Total
	2024	2025	2026	2027	2028	($ '000)	
	$ '000	$ '000	$ '000	$ '000	$ '000		
Vehicle Replacement	250	226	500	460	355	1,791	57%
Technology	144	149	147	150	153	743	24%
Tools & Equipment	61	62	63	64	65	315	10%
Facilities Enhancements	20	130	20	20	20	210	7%
Office Furniture and Equipment	15	15	15	15	15	75	2%
Total Expenditur	490	582	745	709	608	3,134	100%

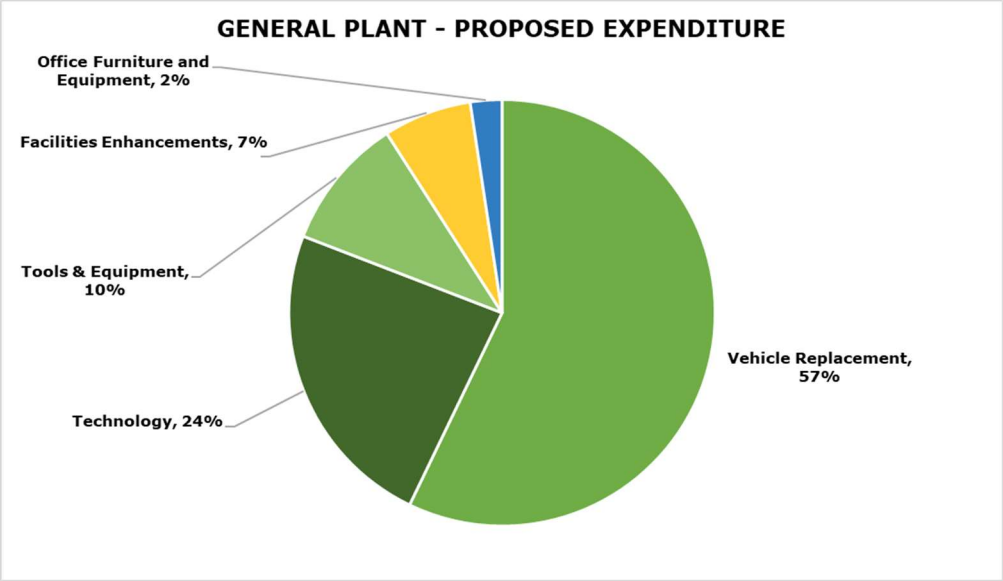

Figure 5.4-5: Forecast Gross General Plan Expenditures Ratio

Westario will also be tracking the planned volume of work for investments under this category moving forward. **Error! Reference source not found.** shows the planned volume of work to be completed in the forecast year, including bridge year.

Table 5.4-16: General Plant – Vehicle Replacement Volume of Work over Forecast Period

	Bridge Year	Forecast Years					
Projects	2023	2024	2025	2026	2027	2028	Total
Vehicle Replacement Program							
Single Bucket	1	1					2
Double Bucket	1			1			2
Dump Truck	1						1
Digger Truck			1				1
Pick Up 4x4		1	1	2		3	7
Job Trailer			1				1
Pole Trailer	1				1		2
Van				1			1

General plant investments represent 8% of Westario's overall budgeted net capital expenditures over the forecast period. Vehicle Replacement program represents the largest portion (57%) of expenditures under this category. Westario currently manages a fleet of 21 vehicles and ten (10) trailers to support the growth and operation of its system. As such, Westario will be replacing multiple fleet vehicles that will be at the end of their useful life over the forecast period. As seen in **Error! Reference source not found.**, Westario plan to replace the following vehicles over the forecast year, including the bridge year: two single bucket, two double bucket, one dump truck, one digger truck, seven pick ups, one job trailer, two pole trailers, and one van.

The Technology program represents the second largest portion (24%) of expenditures in this category. This program includes expenditures related to the computer equipment (computer hardware and software) used in all departments to maintain the 24/7 operation of the utility. Westario will be

purchasing new equipment for new staff, and/or replacing the old equipment. Investment in Technology program will improve Westario's reliability, and customer service, and help reduce operational costs. As common with all utilities, Westario replaces computer hardware and software based on the utility's needs. As such, Westario approaches this investment on a case-by-case basis and plans annually.

Tools and Equipment (10%), Facilities Enhancements (7%), and Office Furniture and Equipment (2%) make up the rest of expenditures in this category. These investments are focused on allowing Westario to perform its day-to-day operations.

Since Westario's General Plant assets are mostly in good order, some regular spending and upgrades are required to maintain operational efficiency and reliability. General plant expenditures tend to be lump summed in nature due to the fact that these assets have a service life driven by usage and maintenance practices. The minor expenditure fluctuations observed under this category are driven by one-time costs associated with the replacement of larger and more expensive equipment.

Green Button

With the issuance of Ontario Regulation 633/21 under the Electricity Act, 1998 (Green Button Regulation), the OEB requires distributors (electricity and natural gas) to make available energy usage and account information identified in the North American Energy Standards Board (NAESB) Energy Service Provider Interface (ESPI) standard that the distributor currently collects and make available to customers in the normal course of the distributor's operation. Energy usage information must be provided for an interval of one hour or less and at least 24 months of usage data must be available (unless the customer has not held an account with the distributor for that long).

Green Button is part of the Ontario government's commitment to give consumers more choice when it comes to their energy use and will enable easy, quick, and secure access to their consumption data through smartphone or computer applications so they can find customized tips to reduce energy use or switch electricity price plans to save money.

Westario is working with a third-party vendor, SilverBlaze Solutions to provide positive outcomes to its end user customers. The vendor will help Westario in the drive for certification and implementation of Green Button which ensures the solutions meet not only Westario's specific needs, but also the regulatory requirements by Q4 of 2023.

Investments with Project Lifecycle Greater than One Year

For capital investments that have a project life cycle greater than one year, the proposed accounting treatment, including the treatment of the cost of funds for construction work-in-progress.

Most of the time Westario's project cycles run on an annual basis; there are no capital investments that have a project life cycle greater than one year included in this DSP, either historically or forecast.

5.4.1.3 Comparison of Forecast and Historical Expenditures

An analysis of capital expenditures in the DSP's forecast period as compared to the historical period.

A comparison of Westario's net capital expenditures over the forecast period as compared to the historical period is provided in the following sub-sections.

Overall Capital Expenditures

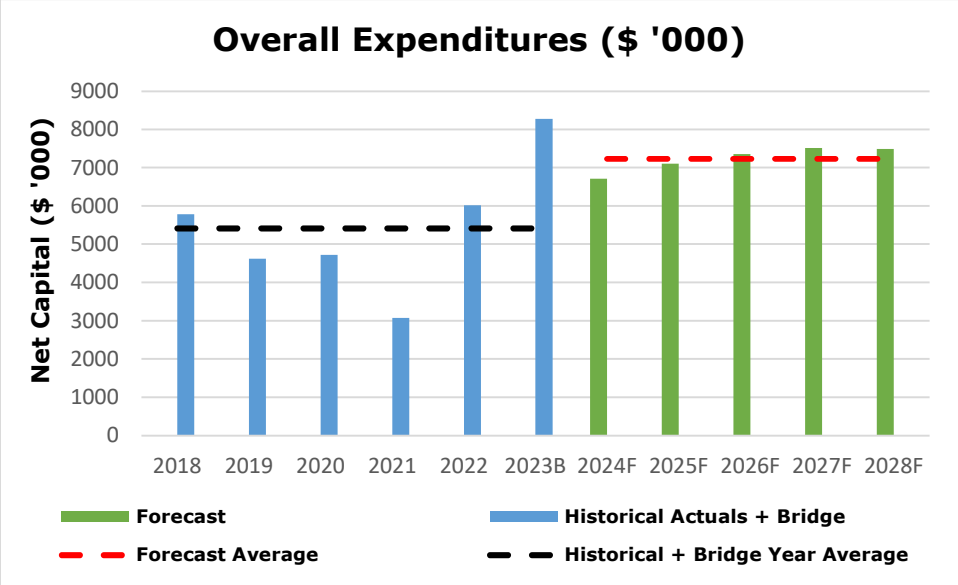

Figure 5.4-6: Overall Comparative Expenditures

The overall capital expenditure trends over the 2018 to 2028 period are shown in Figure 5.4-6. The average overall capital expenditures forecast was approximately 34% higher than the historical plus bridge year average. This is largely due to increased planned expenditures for System Renewal programs, and the impacts of increased supply chain, material and labor costs.

System Access

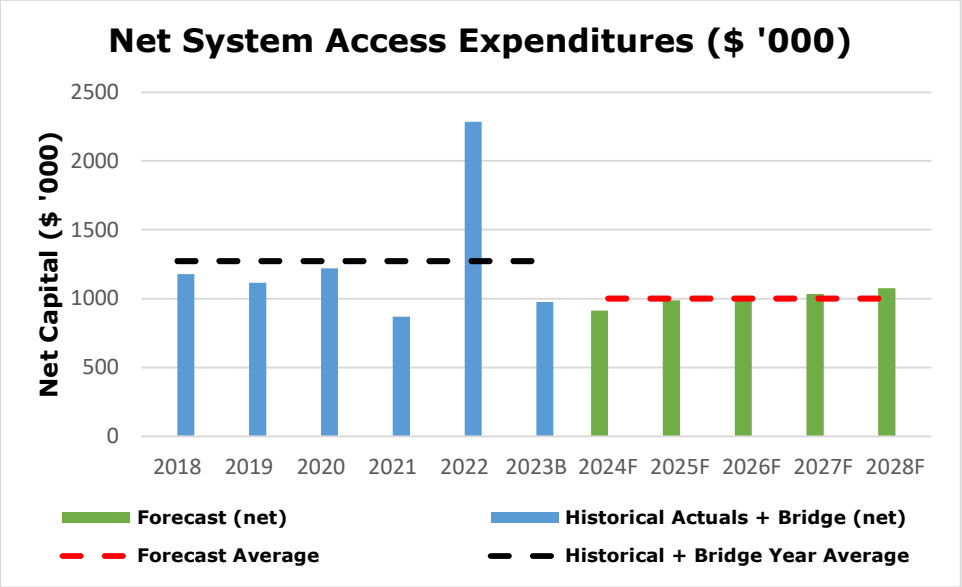

Figure 5.4-7: System Access Comparative Expenditures

The historical System Access trend is variable year over year due to the unpredictability of customer connection service requests and externally initiated subdivision and relocation projects. As shown in Figure 5.4-7, Westario's System Access forecast average is 21% lower than the historical plus bridge year average. This is primarily due to Westario's engagements with third parties to understand their plans for System Access driven projects. As with all third-party driven projects, the actual number of projects and costs may vary and change throughout the forecast period. Westario will continue to engage with its stakeholders and adjust it plans accordingly.

Historically, a gradually increasing trend in system access costs is observed from 2018 to 2021, with a sharp increase in spending in 2022. The gradual increase in spending was a result of an increase in new developments. Capital pole budget also had to be increased from 2018-2021 to accommodate the new developments. The significant jump in 2022 can be attributed to further increased investments in capital poles and new subdivision connections. The cost of equipment, material, and labour also drastically increased due to market pressures.

System Renewal

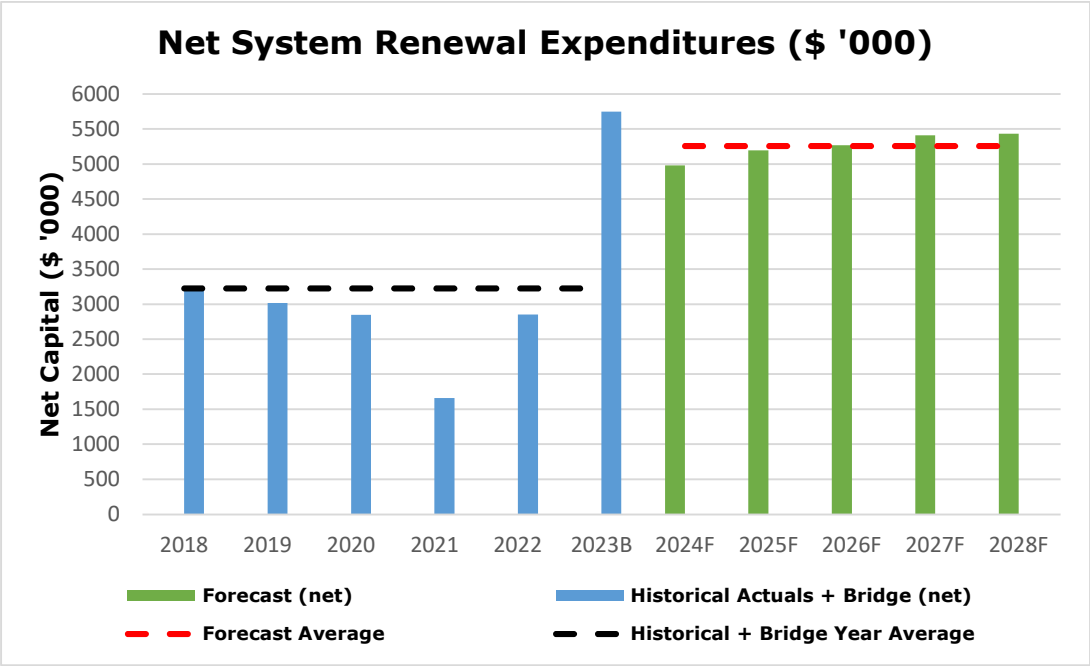

Figure 5.4-8: System Renewal Comparative Expenditures

System Renewal expenditures are impacted by planned capital investments and the objective to address any condition-based maintenance activities within the asset system to meet customer's expected performance and reliability. This includes replacing assets that are in poor and very poor condition, have reached end-of life, and/or have been identified through recent inspections to be at risk of failure in the short term (i.e., within five years). As shown in Figure 5.4-8, the forecast average for System Renewal is 63% greater than the historical plus bridge year average. This is primarily driven by costs associated with Kincardine Load Balancing project, the Fibreglass Transformer Base Replacement project, and Decrepit Pole Replacement project. Please refer to the following material narratives to learn more about these projects: SR-05C – Kincardine Load Balancing, SR-05D – Fiberglass Transformer Base Replacement and SR04 Decrepit Pole Replacement.

System Service

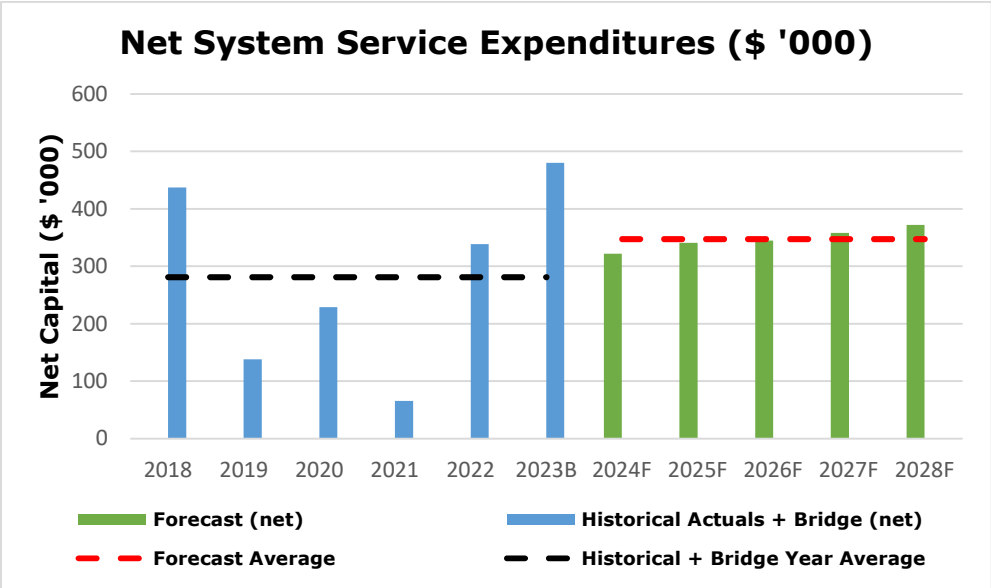

Figure 5.4-9: System Service Comparative Expenditures

As shown in Figure 5.4-9, the forecast average for System Service is 24% higher than the historical plus bridge year average. This is primarily associated with the increased spending planned for the Metering program. Additionally, low historical spending in 2021 due to COVID-19 related setbacks also contributed to the variance. COVID-19 restrictions led to reduced metering work as Westario did not have access to customer sites. Some of this work is being caught up in the forecast period. Also, supply chain, material and labour costs have also increased and are forecast to continue to increase.

General Plant

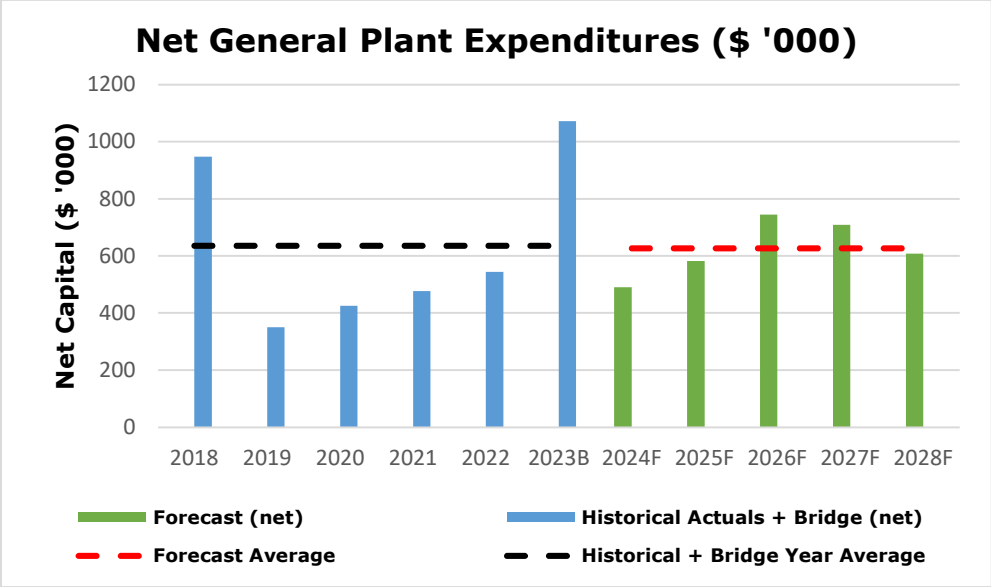

Figure 5.4-10: General Plant Comparative Expenditures

As shown in Figure 5.4-10, the forecast average for General Plant is 1% lower than the historical plus bridge year average. The large spending in 2018 and 2023 can be attributed to large expenditures under the vehicle replacement and technology programs.

5.4.1.4 Important Modifications to Capital Programs Since Last DSP

A summary of any important modifications to typical capital programs since the last DSP (e.g., changes to individual asset strategies).

Since the last DSP, Westario has made the following changes to individual asset strategies:

- Due to the ongoing forecast increase of subdivision and business requiring connection to Westario's network in the coming years, Westario has commissioned a number of systems studies that has helped identify any capacity constraints.
- To address the ongoing issues existing within the distribution system configuration in Kincardine, Westario engaged Metsco Energy Solutions (METSCO) in 2020 to conduct a study of Kincardine's existing load while factoring in future growth. As part of this study, METSCO explored the options of a voltage conversion versus adding additional substations and new overhead and underground infrastructure to add load capacity.
- Westario is proactively procuring meters and transformers ahead of time due to long lead times and supply chain issues related to delivery time.
- Westario conducted a capacity study in Walkerton, which helped identify the need for adding a pole line extension and upgrade and a substation in the area.
- Westario has increased its pole testing, which is resulting in additional pole replacements been identified.
- Westario has performed an intensive study to understand how many Gatekeeper software upgrades were required at which locations through metering.

5.4.1.5 Forecast Impact of System Investments on System O&M Costs

System O&M costs are also shown to reflect the potential impact, if any, of capital expenditures on routine system O&M. A distributor is expected to consider the reduction in O&M costs when planning capital investments. A description of the impacts of capital expenditures on O&M must be given for each year, or a statement that the capital plans did not impact O&M costs. A distributor must consider the trade-offs between capital and O&M when assessing alternative options to a capital investment.

Table 5.4-17 indicates Westario's plan to proactively invest in capital to maintain operations and maintenance (O&M) costs at current levels during the forecast period with an increase due to inflation. Without the planned capital expenditures, O&M costs would be expected to increase annually due to the increasing demand of asset repair and replacement in a reactive approach. This sound asset management planning allows Westario to keep its system O&M costs consistent over the forecast years, with increases due to inflation.

Table 5.4-17: Forecast System O&M Expenditures

Category	Bridge	Forecast ($ '000)				
	2023	2024	2025	2026	2027	2028
System O&M	2,562	2,585	2,650	2,716	2,784	2,853

5.4.1.6 Non-Distribution Activities

A statement should be provided that there are no expenditures for non-distribution activities in the applicant's budget.

There are no expenditures for non-distribution activities in Westario's budget.

5.4.2 JUSTIFYING CAPITAL EXPENDITURES

As indicated in Chapter 1, the onus is on a distributor to provide the data, information and analyses necessary to support the capital-related costs upon which the distributor's rate proposal is based.

Customer Value

Filings must enable the OEB to assess whether and how a distributor's DSP delivers value to customers, including by controlling costs in relation to its proposed investments through appropriate optimization, prioritization, pacing of capital-related expenditures and how it developed its overall capital budget envelope.

Delivering value to customers and other stakeholders is of great importance to Westario as highlighted by Westario's mission and vision statements:

- **Mission statement:** Powering people's lives.
- **Vision statement:** Growth, Community Prosperity, Excellence

In fact, Commitment is one of Westario's core values as well. As such, Westario regularly consults with its customers and stakeholder through surveys and town consultations to gather their opinions and insights on key priorities. Customer needs, preferences, priorities and expected level of service are key inputs considered when developing capital plans.

In addition, by prioritizing system access projects such as new customer connections, service requests, new subdivisions, municipality expansions, and MTO projects, Westario ensures that customer needs and requests are being met.

The scope of capital investments planned in the system renewal category has also been determined with the objective of maintaining power supply reliability while also keeping the overall investment envelope for this DSP within a range which would not result in retail rates escalations beyond the affordability of Westario's customer base. According to UtilityPULSE customer survey conducted in 2021, 84% of customers believe that Westario is a source of reliability and stability and manages the electricity system efficiently. As such, maintaining reliability is a top priority for Westario and the proposed System Renewal investments will aid in maintaining power supply reliability.

The proposed System Service investments deliver value to customers by improving grid operation performance. By investing in Metering program, Westario is ensuring that customer needs will be met over the forecast period and beyond. Westario's general plant investments are also selected and prioritized such that Westario can continue to operate safely, efficiently and support other work.

Technological Changes and Innovation

A distributor should also keep pace with technological changes and integrate cost-effective innovative investments.

There are several proposed projects that Westario is undertaking to address current issues, especially relating to technological changes and resiliency. The following activities are being undertaken at Westario:

Voltage Conversion: Kincardine Load Balancing project – Westario is upgrading the current 4.16 kV distribution system design in Kincardine with a 13.8 kV system. The existing distribution system configuration in Kincardine shows operational constraints caused by phase balances, load constraints, voltage drops and other issues. This project is necessary to mitigate reliability and safety risks associated with system design and to accommodate the existing feeder loads for future growth.

- **Technology program** – Westario is replacing and upgrading several computer hardware and software assets such as upgrading door access controller, servers, firewalls, desktops, laptops etc. Through this investment, Westario aims to improve its access to data, mitigate IT security threats to maintain a reliable and resilient grid, increase server utilization, and empower employees to be more productive.

Consideration of Traditional Planning Needs

A distributor should also integrate traditional planning needs such as load growth, asset condition and reliability.

As previously explained in Section 5.3.1, traditional planning needs, including load growth, asset condition and reliability are key inputs considered as part of Westario's AM processes.

Load growth is a direct input into Westario's planning for system access and system service type projects. Although Westario does not anticipate significant population growth over the forecast period, Westario has seen an increase in demand for new subdivision connections and service requests. As such, Westario has planned its capital budget for system access and system service investments accordingly.

Asset condition and reliability data are key inputs considered by Westario when identifying, selecting, and prioritizing system renewal expenditures. A significantly large portion of the existing infrastructure employed on Westario's supply network has, or soon will reach be at or beyond its end-of life, including condition and age. As discussed in Section 5.4.1.2, Westario intends to increase the amount of capital spending on system renewal in an effort to address some of the aging infrastructure in its distribution system that poses a risk of failure as identified in the most recent ACA. In the absence of investments into asset renewal, the existing infrastructure presents high risk of failure in service, affecting supply system reliability and public safety. However, renewal and replacement of all infrastructure components determined to be in "poor" or "very poor" condition during the next five years, would not be feasible. Hence, Westario has focused on prioritizing the investments into renewal of the most critical infrastructure components, to achieve the balance required between keeping the power supply reliability from degrading while maintaining the electricity distribution rates at affordable levels.

Overall Capital Expenditures

A distributor must not only provide information to justify each individual investment, but also the total amount of its proposed capital expenditures. A distributor should provide context on how its overall capital expenditures over the next five-years, as a whole, will achieve the distributor's objectives. Particularly, a distributor should comment on lumpy investment years and rate impacts of capital investments in the long-term.

Capital expenditure trends over the 2018 to 2028 period, for net capital expenditures and underlying investment categories are shown in Figure 5.4-11 below.

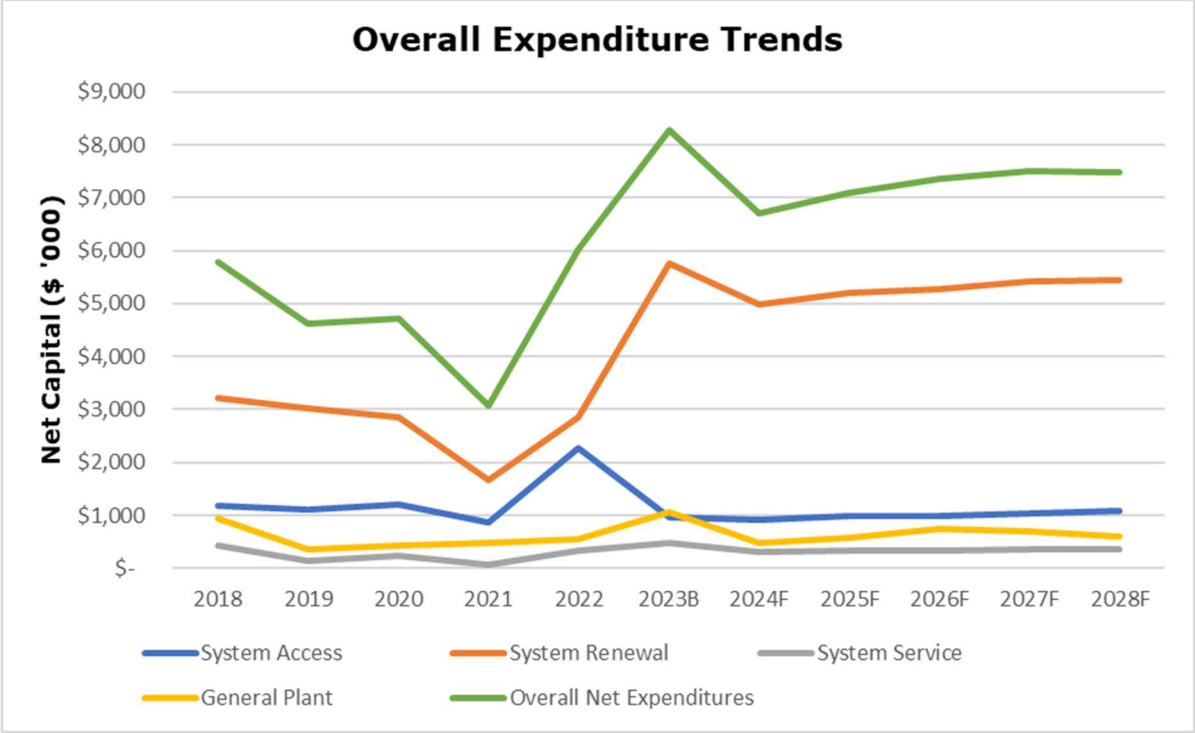

Figure 5.4-11: Overall Net Capital Expenditure Trends

Over the forecast period Westario's capital expenditures are designed to meet Westario's corporate goals. The proposed level of spending is also aimed at improving asset related performance in order

to achieve the four performance outcomes established by the OEB, while also adhering to Westario's established AM Objectives set out in Section 5.3.1.1.

Over the historical period, after the initial high expenditures in 2018, a relatively stable trend is observed from 2019-2021, which is followed by a sharp increase in net expenditures in 2022. As previously explained, the observed increase in 2018 is related to increased New Subdivision connections and Capital Poles programs, and updates to metering software. The increase in 2022 was because of increased expenditures in the Capital Poles program, increase in meter reverifications and replacements, and increased spending in Decrepit Poles program.

The forecast expenditures from 2024-2028, including the bridge year (2023) remains relatively stable and the overall increase in expenditures could be attributed to the system renewal investments planned to address end of life assets.

5.4.2.1 Material Investments

The focus of this section is on projects/programs that meet the materiality threshold set out in Chapter 2A of the Filing Requirements for Electricity Distribution Rate Applications. However, distributors are encouraged in all instances to consider the applicability of these requirements to ensure that all investments proposed for recovery in rates, including those deemed by the applicant to be distinct for any other reason (e.g., unique characteristics; marked divergence from previous trend) are supported by evidence that enables the OEB's assessment according to the evaluation criteria set out below. The level of detail filed by a distributor to support a given investment project/program should be proportional to the materiality of the investment.

For this Application, the materiality threshold is $58,000. All capital projects, proposed to be implemented during the Test Year (2024), with investments level exceeding the materiality threshold are listed in Table 5.4-18.

The first five projects in the table fall in the system access category for which meeting the regulatory obligations is the primary driver. The next seven projects fall under the system renewal category, for which system reliability and public safety are the primary drivers. The next project falls under system service category, which focuses on maintaining system operations, and the last three projects fall under general plant category, for which business operations efficiency and non-system physical plant are the primary drivers. For each of these projects/programs, a detailed write-up, highlighting the drivers, justification, and analysis, is provided in Appendix A.

Table 5.4-18: Proposed Capital Investments during Test Year – Projects over Materiality

Category	Project Code	Project Name	2024 Planned Expenditure ($ '000)
System Access	SA-01	Capital Poles	1,176
System Access	SA-03	New Underground (UG) Service	384
System Access	SA-05	Three-Phase (3-Phase) Customer Connections	304
System Access	SA-06	New Subdivisions/Developments	577
System Access	SA-07	Service Upgrades	153
System Renewal	SR-02	Substation Upgrades	1,295
System Renewal	SR-04	Decrepit Pole Replacement	1,653
System Renewal	SR-05	Distribution Transformer Replacement	243
System Renewal	SR-05C	Kincardine Load Balancing	1,090

System Renewal	SR-05D	Fibreglass Transformer Base Replacement	230
System Renewal	SR-06	Infrastructure Upgrade	137
System Renewal	SR-07	Pole Line Upgrades	335
System Service	SS-02	Meters	353
General Plant	GP-01	Technology	144
General Plant	GP-02	Vehicle Replacement	250
General Plant	GP-03	Tools and Equipment	61

Note: The figures represent gross expenditures.

Westario Power Inc.

Asset Management Plan

2018-2028

October 2023

Introduction

Utilities can make the most of their assets and create realistic plans for their future by conducting asset assessments and developing asset management plans. The content of these reports allows utilities to understand the age and condition of their assets, helping them to make informed decisions on their replacement.

Asset management planning helps utilities save on costs and increase the efficiency of their distribution systems. Efficiency can be optimized when assets are analyzed effectively, the proper data is gathered, and the appropriate planning and strategies are set in place. Then, operating in accordance with these plans, utilities can move forward providing the best possible service to their customers.

Along with its predecessors, Westario Power Inc. (henceforth Westario) has been managing the electrification of this region of Ontario, overseeing all of the distribution system assets, since electrification first occurred in the province.

This Asset Management Plan (AMP) provides an explanation of how Westario plans to manage its distribution system assets in accordance with the mandated requirements, all the while providing efficient and safe electrical supply to its customers.

Westario is open to feedback on this AMP from its stakeholders and interested parties on its approach to providing safe, cost-effective service to its customer base.

The projections and forecasts in this AMP are subject to change as they are based on assumptions and predictions. Unforeseen circumstances may occur that require Westario to divert from this plan. In all circumstances, Westario intends to adhere to the key tenets of providing safe and reliable service; in the event that unforeseeable changes occur, Westario may take actions not outlined in this plan, but that are consistent with its key values.

Westario cannot be held liable for any injuries, losses or damage that result, either directly or indirectly, from the reliance upon any information presented in this AMP.

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1 Introduction to the Asset Management Plan

Asset management planning is the process of making the best possible decisions regarding the building, operating, maintaining, renewing, replacing and disposing of infrastructure assets. The objective is to maximize benefits, manage risk, and provide satisfactory levels of service to the public in a sustainable manner.

Asset management requires a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them. It also involves setting strategic priorities to optimize decision-making about when and how to proceed with investments.

This Asset Management Plan (AMP) is intended to be a description of the thinking, the policies, the strategies and the plans that Westario uses to manage the assets.

1.1 Purpose of this AMP

The purpose of the AMP is to provide a management framework to ensure that Westario:

- Maintains service levels that will meet customer, community, and regulatory expectations for its distribution system network;
- Understands what levels of distribution system capacity, reliability, and security of supply will be required both now and in the future, and what issues will drive these requirements;
- Has programs and procedures to manage all phases of the distribution system life cycle from inception to retirement;
- Has considered the management of the distribution system in terms of the best risk management practices with the ultimate goal of minimizing identified risks;
- Has made adequate provisions to fund all phases of the distribution system asset life cycle;
- Makes decisions based on structured business strategies and models;
- Considers renewable energy generation applications, identifying how capital will be allocated to include such alternative systems into the distribution system plan;
- Has a continuously improving knowledge of its assets with respect to locations, age, condition, capacity, and attributes.

1.2 Period Covered

The planning horizon of the AMP is from 2018 to 2028. It is intended that the AMP will be reviewed on a periodic basis.

The planning horizon extends for a ten-year period, including five years of history and five years of forecast. The historical period includes the years from 2018 to 2022, with 2023 serving as the bridging year; the years of 2024 to 2028 serve as the forecast period. A high-level plan has been established for 2024 to 2028, and analysis relies on both historical trends and an effective evaluation of distribution system sustainability requirements.

There is an obvious degree of uncertainty in any predictions of the future and as such the AMP contains a level of uncertainty. The influence of government regulation, ongoing adjustments to LDC regulation by the OEB, customer growth, and the general state of the economy make for a substantial degree of uncertainty. Accordingly, Westario has established the following certainties to the timeframes of the AMP:

Table 1-1: Planning Certainty

Timeframe	Residential	Commercial/Industrial
Year 1	Moderate Certainty	Little if any certainty
Year 2	Moderate Certainty	Little if any certainty
Year 3 to 5	Some Certainty	Little if any certainty

1.3 Planning and Operating Contexts

All of Westario's distribution system assets exist within a strategic context that is shaped by a wide range of issues including Westario's vision and mission, this AMP, regulatory environment, government policy objectives, commercial pressures, and technology trends. Westario's distribution assets are also influenced by technical regulations (i.e., construction and clearance standards), asset deterioration, and various risk exposures independently of the strategic context.

1.3.1 Strategic Context

Westario's strategic context includes many issues that range from the local and Canadian economy to developing technologies. Issues that are considered to impact this AMP include:

- The prevailing regulatory environment which constrains electricity rates and rates of return, requires stable or improving reliability indices, and requires complex reporting of financial and operating performance;
- Government policy objectives;
- Local, national, and global economic cycles;
- Interest rates and the general business confidence within the communities Westario serves which influences the rates at which new customers connect to lines;
- Ensuring sufficient funds and skilled people are available in the short, medium, and long term to resource Westario's service requirements.

1.3.2 Independence from Strategic Context

While Westario's assets and asset configuration, which are relevant to its stakeholders, will be shaped by the strategic issues identified above in 1.3.1 Strategic Context, it is also important to recognize that the assets will also be influenced (and sometimes constrained) by issues independent of the strategic context. For example, the rate at which wooden poles rot is independent of the scarcity of skilled contractors. This issue may constrain the rate at which Westario replaces decrepit poles, but it does not influence the rate of rot.

Samples of issues that are independent of Westario's strategic context include:

- Asset configuration, condition, and deterioration – these parameters will limit the rate at which Westario can invest in upgrades or enhancements to the distribution system;
- The physical characteristics of electricity systems which govern such fundamental issues as voltage regulation, capacity, power flows, and faults;
- Physical risk exposures – exposure to such events as animal contacts, wind, lightning, snow/ice, motor vehicle impacts, theft of copper, and unwanted human interference are independent of strategic context;
- Health and safety requirements such as line clearances and grounding of equipment.

1.4 Key Assumptions

The development of this AMP is based on a series of key assumptions that are made as a foundation for planning and forecasting predictions of future activities, whether to maintain, replace or develop new assets (discretionary capital projects).

The key assumptions for this AMP are as follows:

- Westario is required to file a Cost of Service rate application, which includes Chapter 5: Consolidated Distribution System Plan of the Filing Requirements for Electricity Transmission and Distribution Applications, as mandated by the Ontario Energy Board in March 2013 and with the latest update in December 2022;
- Electricity growth rates are expected to increase moderately in the next five years;
- Recognition that the economy of the areas served by Westario depends on a secure and reliable supply of electricity;
- Energy efficiency initiatives and control of greenhouse gas emissions will continue to drive investments in the distribution infrastructure;

- New technologies have developed within the previous planning horizon and will continue to develop into the future. Westario has taken steps to begin to install more system automation through its device upgrades at municipal transformer stations, as well as new software systems to allow for better use of all the available data, and will continue to make investments in these areas whenever they improve efficiency and reliability and benefit Westario's customers;
- Present service levels will continue to be maintained or improved, and will remain balanced between customer count, needs, price-quality tradeoffs, and industry best practice(s).
- Westario's AMP is a strategic document to convey future distribution system development and maintenance plans to stakeholders;
- Westario's asset management systems will continue to be developed in order to process performance information to meet demand, capacity, security, and reliability levels in a timely manner;
- Use of outside line construction firms to perform distribution maintenance, replace, and install assets (as prescribed by work plans of projects) will continue;
- Compliance with relevant regulatory requirements as they pertain to electricity rates, filing requirements, health & safety, and environmental protection will be maintained;
- The requirements of our shareholders will be met by achieving the objectives set down in Westario's mission statement;
- Westario focuses its capital expenditures and projects within four categories, which include system access, system renewal, system service and general plant. All decisions are made with these categories in mind as they direct Westario's priorities;
- Where practical, a proactive replacement strategy will be performed prior to equipment failure (preventing unplanned loss of service to customers) and asset condition assessments will be completed to ensure that equipment life-cycle management is maximized;
- Asset management planning involves forecasts based on information collected from many sources. Distribution system development for the forecasted years (2024-2028) has been established; the initial two years of the forecast are relatively certain. The final three years of the forecast (2026-2028) are less certain and are based largely on current knowledge and awareness of infrastructure conditions. As the years pass, a regular review of this plan will ensure the plan is revised to meet the requirements set out.
- Review of future achievement (apart from regulatory compliance) will be centered on the following areas:
    - Health & Safety Performance
    - Customer Experience
    - System Reliability
    - Financial Performance
    - Environmental Performance

2 Background

2.1 Westario's Distribution System & Approach to Asset Management

Westario is the licensed electricity distributor serving approximately 24,201 customers in Westario's service territory which encompasses 15 communities. Westario was created by the amalgamation of eight former municipal hydro-electric commissions and currently serves the communities of Clifford, Elmwood, Hanover, Harriston, Kincardine, Lucknow, Mildmay, Neustadt, Palmerston, Port Elgin, Ripley, Southampton, Teeswater, Walkerton, and Wingham.

Westario distributes power to its customers through either direct transmission station-connected feeders or through its own municipal distribution substations which consist of primarily rural customers. Westario owns 27 municipal substations within its service territory along with one mobile substation.

Within its service territory, there are a total of five communities that are directly fed by Hydro One-owned distribution stations as there is no Westario-owned distribution station. These communities are Clifford, Elmwood, Mildmay, Neustadt, and Ripley.

The service area of Westario covers a large geographical area spanning approximately 60 kilometers east/west by 80 kilometers north/south. The service territory is non-contiguous and areas between these service territories are served by Hydro One Networks Inc.

Westario's asset management (AM) process proactively identifies, manages, and mitigates risks within its electricity distribution system, thereby allowing Westario to achieve a desired level of service for its customer base at an appropriate cost as accepted by its customers. Westario uses input data and information to enable it to determine its operating and capital expenditure plans.

To begin with, Westario first gathers data on its assets from all available sources, including Geographical Information System (GIS), outage statistics for the prior planning period, employee knowledge, maintenance inspection and test reports, as well as any manufacturer or industry issued safety bulletins. The Asset Condition Assessment (ACA) is updated as needed. In addition to asset-specific data, Westario also gathers information on customer preferences, third party infrastructure requirements and any other external factors which may influence Westario's decision making in determining the optimal plans for their system.

Next, a needs assessment is performed which allows Westario to identify high-level projects and programs that Westario could undertake over the forecast period to address the needs identified. Depending on the type of projects, below are some of the typical options considers:

- Do Nothing – This option considers whether an asset can be left in its current condition and only replaced in a reactive manner/on failure.
- Proactive Like for Like Replacement – This is a common approach Westario takes, where assets that are in poor condition, and at risk of failure, are proactively replaced. Assets are typically replaced with the same asset ensuring the latest standards are met.
- Enhancement – This is similar to the Proactive option but can be where assets no longer meet legislation or are obsolete and need upgrading/enhancement. This option is also used where assets can no longer deliver the requirements needed and need enhancement to meet the needs of customers.

Following the identification of projects and programs needed to address the identified needs, a prioritization process is undertaken. As part of this process, the outcome of the needs assessment is reviewed against a list of Westario's operational strategies that include:

- Health and safety impacts;
- Environmental impacts;
- Customer needs;
- Regulatory and legal impacts;
- End of life assessment based on Typical Useful Life and condition;
- Consideration of the run-to-failure option on the above criteria and outage statistics;
- Asset location and political impact; and
- Any efficiencies of scale that can be realized from grouping asset replacements into projects.

Then a quantifiable prioritization matrix is used to rank the proposed projects and programs. Westario has adopted a scoring matrix as outlined below when prioritizing its capital investment projects. Westario regularly reviews it and makes adjustments to the criteria and scoring. The output of this process is a prioritized list of projects and programs.

- **Prudence of Expense** describes whether the cost to perform project is or can be reasonable and defensibly justified. The conditions listed below are for guidance only. It is difficult to prepare a table to cover all possible device and field conditions.
- **Public Safety** describes the risk the general public is exposed to by the distribution system and its components. The risks may be obvious to the public, nor not.
- **Worker Safety** describes the risk Westario worker are exposed to by the distribution system and its components.
- **Environmental** describes risks to the natural environment. This includes air quality, water and soil quality, and how the condition affects the community and society.
- **Reliability** describes how the project will improve delivery of power to customers by reducing system interruptions, or improving restoration times.
- **Power Quality** describes the voltage delivered to the customer, and the presence of harmonics or "noise" on the delivered power.
- **End of Life** refers to equipment is at end of its manufacturers suggested life span.
- **Maintainability** refers to where there will be a substantial improvement in the maintainability of the system.
- **Operability** refers to a substantial improvement in the line switching, load transferring, or back-up/alternate supply of the system.

Criteria	Min Score	Min Criteria Description	Max Score	Max Criteria Description
Prudence of Expense	0	Where there is uncertainty whether the regulator will support, or interveners will reasonably. question the project's requirements the project shall receive the minimum score	15	Where the project is driven by legislative or regulatory compliance requirements or the assets are clearly necessary to supply customers, the project shall receive the maximum score
Public Safety	0	Where the project will have no impact on public safety the project shall receive the minimum score	15	Where the project is likely to eliminate a single public injury once every 10 years the project shall receive the maximum score
Worker Safety	0	Where the project will have no impact on worker safety the project shall receive the minimum score	15	Where the project is likely to eliminate a single worker injury once every 10 years, the project shall receive the maximum score
Environmental	0	Where the project will have no impact on the reduction of environmental risk the project shall receive the minimum score	10	Where the project is likely to eliminate a single environmental incident once every 10 years, the project shall receive the maximum score. **Note**: Additional consideration to be given to system losses
Reliability	0	Where the project will have no impact on system reliability, the project shall receive the minimum score	10	Where the project is likely to eliminate a single system 4 hr outage to at least 200 customers once a year, the project shall receive the maximum score. **Note**: Additional consideration to be given to multiple outage situations

Power Quality	0	Where the project will have no impact on voltage, the project shall receive the minimum score	5	Where the project will correct existing voltage concerns or problems for 200 or more customers, the project shall receive the maximum score. **Note**: Consideration also to be given to size of customers effected and the severity of the impact on the customer
End of Life	0	Where the equipment still retains 50% or more of its life expectancy, the project shall receive the minimum score	10	Where the equipment is at end of life and is not expected to be operable for more than two more years, the project shall receive the maximum score
Maintainability	0	Where there will be no improvement in the maintainability of the system, the project shall. receive the minimum score	5	Where there will be a substantial improvement in the maintainability of the system, the project shall receive the maximum score
Operability	0	Where there will be no improvement in the operability of the system, the project shall receive the minimum score	5	Where there will be a substantial improvement in the operability of the system, the project shall receive the maximum score
	0	Minimum	100	Maximum

Once a planned list of projects for the planning period has been determined, the pacing of the projects is then established on an annual basis. The pacing is primarily influenced by customer demand, compliance and regulatory requirements, and inspection timings. Lastly, the engineering department estimates project costs based on historical information and current market conditions.

2.2 Service Levels

Westario abides by the OEB prescribed levels of service and reliability standards dictated by the following:

- The Ontario Energy Board Act, 1998;
- The Electricity Act, 1998;

- The Municipal Franchises Act, 2003;
- The Statutory Powers Procedure Act, 1990;
- Chapter 15 of the 2006 Electricity Distribution Rate Handbook – Service Quality Regulation;
- Distribution System Code – Last Revised March 1, 2020;
- Filing Requirements for Electricity Transmission and Distribution Applications Chapter 5a: Small Utilities Distribution System Plan Filing Requirements as mandated by the OEB, December 16, 2021.

2.3 Historical Perspective

Westario has made a significant effort to collect operational information on the distribution assets and has been using GIS to record and maintain this information. As such, detailed information on the assets has improved. Better information allows the further development of cost-effective asset management plans that address growth, line loss minimization, reliability performance measures, and financial capabilities of the Company.

Table 1 indicates the major capital projects/activities that have been undertaken from 2018-2022. Each project has been allocated against one of the four OEB categories. Overall, Westario has spent $26.5M (Gross) over the historical period.

Table #1: 2018-2022 Capital Projects Meeting the Materiality Threshold

Category	Project Name	Gross Totals ($ '000)
System Access	Capital Poles	4,304
System Access	New Underground (UG) Service	1,191
System Access	Three-Phase (3-Phase) Customer Connections	787
System Access	New Subdivisions/Developments	1,739
System Access	Service Upgrades	523
System Renewal	Substation Upgrades	5,183
System Renewal	Decrepit Pole Replacement	4,261
System Renewal	Distribution Transformer Replacement	800
System Renewal	Infrastructure Upgrade	893
System Service	Meters	726
General Plant	Technology	290
General Plant	Vehicle Replacement	1,518
General Plant	Tools and Equipment	242

2.4 Managing Stakeholder Interests

2.4.1 Identifying Stakeholders

Westario is governed by a Board of Directors and has eight municipal shareholders and an additional shareholder Fortis Ontario. Other key stakeholders include:

- Electricity retailers, customers, and end consumers, including towns and municipalities.
- Contractors, developers and service providers, including telecommunication entities.
- Distribution Supplier – Hydro One
- Government agencies such as the OEB, and the IESO
- Landowners where Westario lines run.

Westario continues to have contact with all its stakeholders through direct customer consultations, participation in the Regional Planning Process, and regulatory interactions. The suggestions of our stakeholders provide opportunities for Westario to conduct its business and provide perspective about rates and service levels. In addition, stakeholder's key priorities are a key element in Westario's planning process.

2.4.2 Accommodating Stakeholder Interests

Stakeholder interests can be viewed from a number of perspectives, including financial stability, electricity rates, and quality of supply, safety, and compliance. Financial stability is required to ensure that shareholders and lending institutions have sufficient confidence to continue owning and investing in Westario. Electricity rates provide the means for Westario to create revenue and signal underlying costs. Not charging appropriate rates has economic implications for both Westario and its customers. Quality of supply includes emphasis on reliability with respect to the number of interruptions, the duration of interruptions, the amount of flicker, and the quality of voltage. Safety involves staff, contractors, customers, and the general public. Westario must ensure the operation of the distribution system is safe for all. Compliance with respect to financial, safety, and environmental matters needs to be adhered to.

Westario accommodates stakeholder interests as follows:

Table 3: Stakeholder Interest Accommodations

Interest	How Westario accommodates stakeholder interests
Financial Stability	Westario will accommodate stakeholders' needs for long-term viability by returning a dividend to the shareholders. In addition, it is important Westario charges rates that are reflective of the service it provides, whilst balancing the need to keep rates reasonable, minimizing fluctuations for their customers.
Electricity Rates	Westario's revenue is constrained by regulatory requirements, conservation and demand management activities, and the state of the economy. Failure to collect enough revenue to fund reliable assets will impact customers in a negative way. Conversely collecting too much revenue penalizes customers and transfers a disproportionate amount of wealth to the shareholder. Westario's pricing strategy must be cost effective and at the same time be enough to continue to balance distribution system security, capacity, reliability, and return on investment.
Quality of Supply	Westario conducts annual customer satisfaction surveys. The last surveys were done in October 2021, where customers indicated that they expect their utility to provide consistent and reliable energy, handle outages and restore power quickly, and prioritize the safe usage of electricity. For this reason, Westario will continue to effectively rebuild its infrastructure with funds available to meet these expectations.
Safety	Westario will ensure that the public is kept safe by ensuring all assets are structurally sound, live conductors have maintained at least minimum clearances, enclosures are kept locked, and touch & step potentials are kept to a minimum. Westario will ensure the safety of its staff by implementing and continuously improving its safety management program.
Compliance	Westario will disclose performance information as required by regulators and ensure that safety issues are thoroughly documented. Westario reports on its performance annually through the OEB performance scorecards and yearbook.

2.4.3 Managing Priorities

The following lists managing of priorities is listed below:

- Safety shall be first priority – Safety of staff, contractors, and the public will always be the highest priority even if this means exceeding budgets or taking additional steps to ensure both safety and regulatory compliance.
- All other interests must be managed as the situation dictates and will, out of necessity, be a balance of some proportion (not necessarily equal proportions) between the interests:
- Quality of Supply (Reliability) – Customers want value and are willing to pay for a certain level of quality.
- Financial Stability – Westario must be financially viable, or it will not exist to manage other conflicts.
- Electricity Rates – Rates reflect an appropriate balance between revenues and expenditure.
- Compliance – Other than safety. (e.g., environmental)

2.5 Accountabilities for Asset Management

Westario's accountability for asset management are reflected in the following figures describing the corporate entities and corporate organizational structure with area of responsibility.

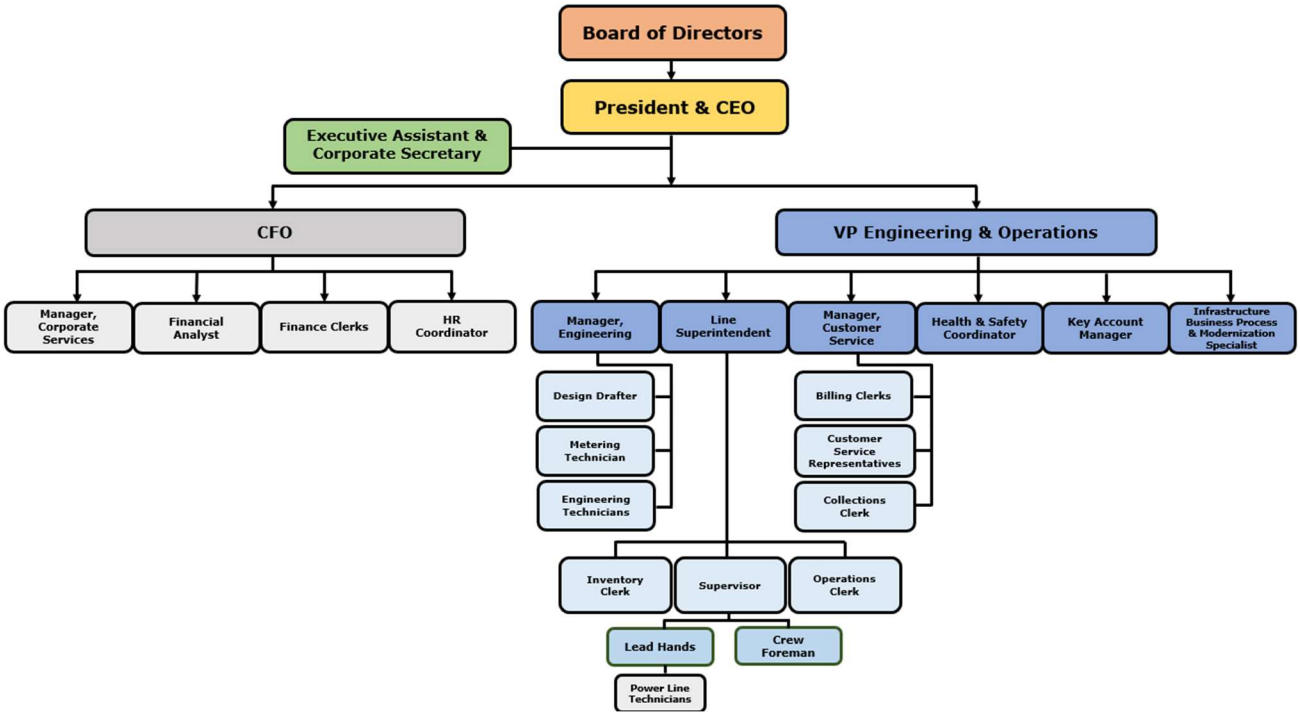


Figure 2-1: Westario Organization Chart

2.5.1 Accountability at Governance Level

Westario is governed by a Board of Directors, as appointed by each of the shareholders. Each shareholder has one representative on the Board of Directors. Directors are approved on an annual basis by the shareholders of Westario at the Annual General Meeting of Shareholders.

2.5.2 Accountability at the Executive and Management Level

The Chief Executive Officer (CEO) is accountable to the Board of Directors and the management level is accountable to the CEO through business goals, the development and execution of annual budgets, and various standards and processes that apply to the distribution system assets.

Accountability for financial and regulatory activities lies with the Chief Financial Officer. This role provides all financial reporting, assets funding provisions, and budgeting process for all phases of the AMP.

Accountability for managing the lifecycle of existing assets, the installation of new developments, and the installation of new assets lies with the VP of Operations. This role addresses long-term planning issues such as capacity and security.

Accountability for the daily continuity and restoration of electrical supply lies with the Line Superintendent. This role provides control and dispatch for electrical restoration.

2.5.3 Key Reporting Lines

The Board of Directors governs Westario's electrical distribution business and manages this overall responsibility through the CEO.

The Westario Board of Directors meets quarterly and receives quarterly reporting from management outlining financial, operational, and safety performance as well as the progress in maintenance, operational, and capital programs.

2.5.4 Westario Operating Structure

2.5.4.1 Operations Group

The Operations Department provides a seamless design to build process which includes:

- Planning and design for new capital works including all new connections to the distribution system;
- Analysis of system configuration with such inputs as growth, new connections, voltage levels, and capacity information with a view to optimize the configuration of the distribution system;
- Operating, emergency response, connection services, maintenance services, and capital construction services;
- In conjunction with contractors, collecting information required by the "Distribution System Maintenance & Inspection Program" in the management of existing assets;
- Executing the design plans;
- Producing material requirements to be utilized and warehoused.

2.5.4.2 Finance Group

The Shared Services Department provides financial reporting & analysis, budget support, accounting, rate design, and regulatory support to meet regulatory requirements.

3 Asset Management Systems

3.1 Asset Knowledge

Asset information is essential to a properly functioning asset management plan. Westario has various records, both paper and electronic, which identify asset attributes and condition data. The following table summarizes the status of the collection of asset attributes with respect to each asset category.

Table 3-1: Asset Records

Description of Asset	% Of Asset Attributes Known	% of Condition Data Collected	% of Data Entered into ESRI GIS Database
Distribution Station Transformers	100%	100%	100%
Pole Mounted Transformers	100%	100%	99%
Pad Mounted Transformers	100%	100%	99%
Poles	100%	100%	98%
Smart Meters	100%	100%	99%
Fleet	100%	100%	0%

The method of information collection and storage is a key component to successfully managing the data from all assets. Records were kept in a number of formats either paper-based files, database (RamSys), or spreadsheet (MS Excel) based. In 2015, Westario moved to a new ESRI Geographic

Information System (GIS) to record and manage all of the asset related data. Field confirmation of the data is also part of the project plan. In addition to the installation of the software system and field data collection, Westario is also reviewing all of its operational work procedures in order to integrate the GIS system into the work processes. This effort will ensure that the data stays current through normal business practices and does not become out of date and untrustworthy. At the time of the preparation of the Asset Management Plan, column 4 above in Table 5 indicates the amount of data for each asset class that has been collected and verified.

3.2 Improving and Using Asset Knowledge

Currently, asset data for poles and distribution transformers, such as global coordinates, asset number (unique ID number) and physical attributes, is available or accessible directly from the GIS system. Condition data is being collected (electronically) for poles, transformers and switchgear, and downloaded into electronic documents. This information is then analyzed and used to prepare meaningful asset condition assessments upon which replacement and development activities and budget related decisions can be made. Westario aims to continue this practice in the future.

3.3 Key Systems and Processes

In order to manage its assets, Westario uses an ESRI GIS system which shows the geographical location of the specific asset. Westario also endorses and adheres to the required practice of regular system asset inspections. Operations field staff performs regular, periodic, visual inspections of the poles, wires, switches, etc. in the distribution system. The results of these inspections are provided to the GIS system administrator for inclusion in the asset information. Problems found during these inspections are prioritized and acted upon on a schedule determined by the level of concern.

Westario's asset management processes now include regular pole testing program, system inspection enhancement, and AM data in GIS being cleaned up and verified. Pole and pad mount transformers are now inspected regularly to see whether these assets meet the conditions for replacement. In addition, the upgraded GIS tracks connectivity and provides more thorough, comprehensive, and accurate data on the utility's assets. Westario will also regularly update its asset condition assessment, on an at least every 5-year basis. For certain asset types, Westario may consider performing one-off asset condition assessments.

3.4 Key Planning Documents

3.4.1 Westario's Vision and Mission Statements

Westario's vision and mission statement is as follows:

Mission Statement:
Powering people's lives.

Vision Statement:
Growth, Community Prosperity, Excellence

Core Values:
Passion, Leadership, Commitment

3.4.2 Purpose of an Asset Strategy

The asset strategy is primarily for use by the utility to establish the optimum form of the assets required for them to deliver, within resource limits, the results and services sought by the customers and regulators. The strategy details the actions the utility proposes to undertake to manage its asset needs.

3.4.3 Asset Strategy

The asset strategy has been utilized to varying degrees since the inception of the distribution system in Ontario. The guiding principles for today's distribution system asset strategy are to:

- Maintain awareness of safety around electricity at the forefront for company, customers, and the general public;
- Exploit the availability of lines constructed for up to 44kV to improve reliability and electrical losses;
- Upgrade hardware on all distribution equipment, as maintenance and construction occur, to facilitate a seamless transition up to the 44kV feeder voltage where appropriate;
- Design the distribution system with the intent of maximizing the reduction in electrical losses;
- Maintain customer reliability through effective maintenance plans and planned replacement of assets at their end of life;
- Maintain power quality by implementing the modeling of the electrical distribution system in GIS;
- Assist the connection of renewable embedded generation by identifying the constraints and providing solutions which enable proponents to connect to the distribution system.

The implications of these guiding principles are rooted in Westario's sustainment and discretionary projects.

3.4.4 Prevailing Regulatory Environment

The Electricity Distribution Industry in Ontario is regulated under the Ontario Energy Board Act, 1998, the Electricity Act, 1998, and the Electricity Restructuring Act, 2004 all of which are administered by the Ontario Energy Board (OEB). In 2013, OEB put forth the Cost of Service rate application requirement; a significant component of this application is the Distribution System Plan which has to comply with the Chapter 5a filing requirements, with the most recent update of December 15, 2022. The necessary components for this Plan are laid out in the Filing Requirements for Electricity Transmission and Distribution Applications.

The Ontario Energy Board Act, 1998 sets out the following guiding objectives for the OEB with respect to electricity:

- To protect the interests of consumers with respect to prices and the adequacy, reliability, and quality of electricity service;
- To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

These regulatory requirements dictate or heavily influence Westario's rates, fees, and return on equity. Rates are required by legislation to be approved annually by the mechanisms specified by the OEB.

3.4.5 Government Policy Objectives

The government is focused on modernizing Ontario's electricity distribution grids by promoting and supporting the development of cutting-edge technologies that will make our systems run better and give customers more choice and control over their power use.

By using sensors, modern communications technology and powerful computer systems, a smart grid can:

- make electricity grids more efficient, reliable and resilient.
- harness data to help customers and utility companies make decisions.
- make it easier for customers to use new technologies – like electric vehicles, rooftop solar generation or energy storage.
- allow customers to track and manage energy use.
- create savings on your bill.

Westario's underlying strategic plan recognizes the basic requirement to ensure that these underpinnings are incorporated into its operational and long-term objectives of maintaining and developing an effective distribution system.

3.4.6 Annual Business Planning & Budgets

Westario has produced, or updated, a number of key documents that support the annual business planning process. These documents include the distribution system maintenance and inspection program, asset condition testing, and detailed budgets. Going forward, this AMP will also be reviewed and revised on a regular basis.

Each year Westario produces an annual budget for the year ahead, which reflects the costs of individual projects and expenditure over the forecast year. This budget is created by reviewing the DSP five-year forecast, asset and operational issues experienced in the past and anticipated for the future. This budget contributes to the long-term alignment with the strategic context and performance to budget is monitored and reported monthly.

Effective management of expenditure ensures that the annual budget reflects the fundamentals of this AMP and that longer term budgets reflect better planning and cost forecasting.

3.4.7 Risk Management

Ontario Regulation 22/04 – Electrical Distribution Safety is a key regulation which requires Westario and all other LDCs to maintain distribution standards, material standards, and construction verification programs to safeguard the public from hazards associated with the distribution system. The Electrical Safety Authority (ESA) is responsible for enforcing the regulation and this is done through a system of annual audits and regular field inspections.

Westario promotes excellence in health and safety management in order to prevent losses to people, assets, environment, and reputation. Keys to this health and safety (H&S) management system are the evaluation of risk for all workplace hazards, regular H&S meetings with staff, and feedback on losses or near losses occurring in the workplace.

In fact, Westario considers and assess the following risks when evaluating identified projects and programs required to meet customers' needs:

- Health and safety impacts
- Environmental impacts
- Customer impacts

- Regulatory and legal impacts
- Asset location and political impact

Lastly, Westario also has the following written emergency response procedures are in place to help manage system risks:

- Distribution System Emergency Preparedness Plan
- System Restoration Plan

Westario will follow all regulatory requirements and guidelines to ensure the distribution system has a low-risk impact on the environment.

4 Summary of Assets Covered

4.1 Distribution Area

Westario's distribution system covers approximately 64 square kilometers and serves fifteen communities in the region. Westario is the local distribution company (LDC) supplying electricity to the Ontario communities of:

Clifford, Elmwood, Hanover, Harriston, Kincardine, Lucknow, Mildmay, Neustadt, Palmerston, Port Elgin, Ripley, Southampton, Teeswater, Walkerton and Wingham.

These communities have a population of approximately 50,000 (current census data is not available) and had traditionally seen very slow growth. However, there has been a steady upward trend in development during the last 5 years.

All areas between communities served by Westario are serviced by Hydro One Networks. The greatest single customer population is in the Town of Saugeen Shores (Port Elgin/Southampton) representing 30% of the overall customer base. Westario currently serves approximately 24,000 customers. (A map of the service territory is shown in Appendix A.)

Typically, the rural service territory is made up of mostly residential development, with a small supporting commercial area.

The climate in this region is relatively mild compared to the broader provincial area due to its proximity to the Great Lakes. The coldest months of the year are typically January and February; the average lowest temperatures across the area are between -11° and -13°C. Record low temperatures have been as extreme as -40°C. The warmest months are July and August, with average high temperatures of 24° to 26°C. Record summer temperatures have been as high as 35° to 37°C.

This region receives its highest precipitation levels during the Fall and Winter months. While most precipitation in the months between December and March is snow, the region receives more snow than other parts of southwestern Ontario.

The Westario region has been experiencing an increased number of storms in recent years, with increased levels of severity. As storms become more frequent and more intense, they pose risks to the reliability of Westario's distribution system. There have been instances of stronger winds than previous years' storms created. This is one case where projects like tree trimming are especially important in preventing vegetation from interfering with distribution lines and causing outages.

Colder winters have created higher usage of electrical heat, which translates into higher load demands.

4.1.1 Demographics

4.1.1.1 Key Economic Activities

Westario is home to a small number of larger manufacturers in the auto parts, food processing, furniture industry, and industrial processing sectors, along with a stable base of smaller family-owned businesses that manufacture and provide services. Throughout the service territory, Westario has schools, hospitals, government, and recreation facilities. These serve the following sectors: manufacturing; business services; retail; tourism; healthcare, transportation; construction; technology; and education. The recent years growth pattern in housing starts is indicative of the trend that Westario has seen in growth of its customer base. The pattern below is consistent with Westario's experience across its service territory.

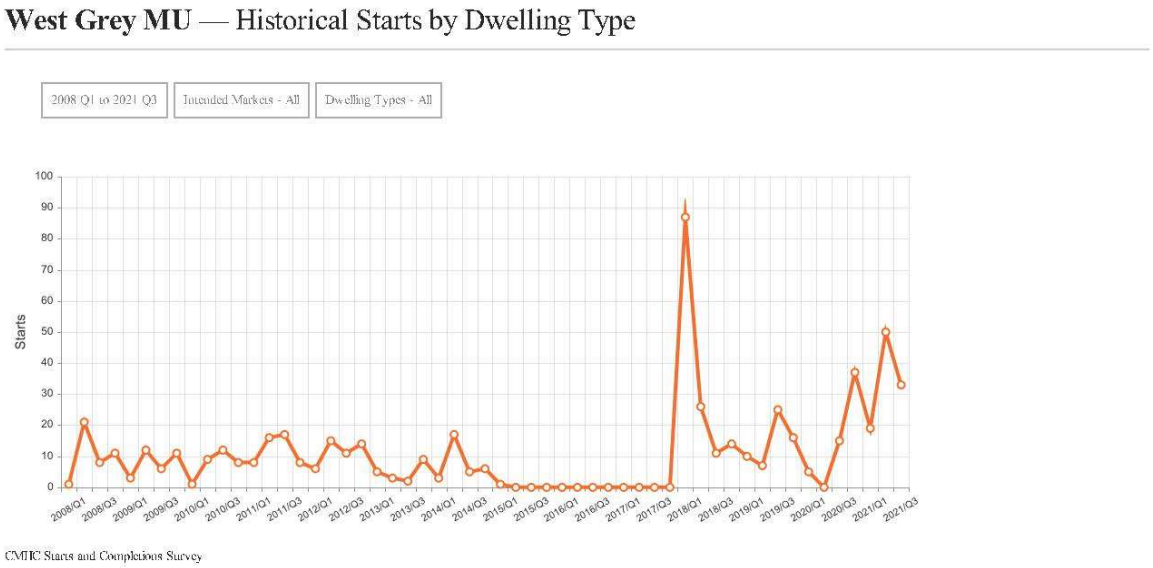


Figure 4-1: CMHC Dwelling Stats for West Grey Municipality

While not in the Westario service territory, the Bruce Nuclear Plant, located between Saugeen Shores and Kincardine on Lake Huron, employs over 4,000 people. This underpins the social and economic health and stability of the Counties of Bruce, Grey, and Huron. Currently, the Bruce Nuclear Plant is refurbishing part of its nuclear generation. It was anticipated that another 2,000 workers would be on-site at the Bruce Nuclear plant for many years, increasing the entire area's long-term prosperity and employment opportunities at that time.

More of the Westario distribution area may see the introduction of natural gas as an available fuel source for heating towards the end of the planning period. The municipalities of Kincardine and Huron-Kinloss have partnered with EPCOR Utilities to make natural gas accessible in their communities. As of 2023, natural gas is now available in Kincardine. The rate of conversions from electrical to natural gas heating will be difficult to determine. It may take some time for residents in the community to switch their main sources of heat from electrical to natural gas. The introduction of natural gas to the area serves to reduce the peak demand for electricity in the area. The magnitude of the ultimate impact on electrical consumption in the area is therefore out of Westario's control. It is expected that the impact to Westario's distribution revenues is to be small due the residential rates being fixed and the low number of large industrial customers in the area. As part of Phase 2 of the Program, EPCOR has received funding to expand the Southern Bruce natural gas distribution system to more communities in the Municipalities of Kincardine and Arran Elderslie, as well as to the Municipalities of Brockton and West Grey. It is anticipated that construction begins in 2023. Again, the impact to Westario's distribution revenues is expected to be small due the residential rates being fixed and the low number of large industrial customers in the area.

4.1.1.2 Energy & Demand Characteristics

Key energy and demand figures are separated into transformer station areas and based on historical information from 2018 to 2022:

Table 4-1: Energy and Demand Characteristics by Town

Community	Peak (kW)	Month	Year	Capacity (kW)
Clifford	1,261	Jan	2019	Hydro One Owned
Elmwood	5,372	Nov	2020	Hydro One Owned
Hanover	25,807	Mar	2018	22,601
Harriston	3,184	Jan	2018	4,654
Kincardine	18,073	Jan	2019	26,551
Lucknow	2,439	Jan	2019	4,768
Mildmay	1,629	Dec	2022	Hydro One Owned
Neustadt	1,118	Feb	2019	Hydro One Owned
Palmerston	4,050	Jan	2019	4,334
Palmerston: Customer	5,867	Jul	2021	Customer Owned
Port Elgin	12,503	Dec	2019	26,930
Ripley	1,377	Dec	2022	Hydro One Owned
Southampton	13,965	Jan	2020	5,685
Teeswater	1,557	Dec	2022	2,829
Teeswater: Customer	2,982	Jun	2022	Customer Owned
Walkerton	9,169	Jul	2018	13,726
Wingham	5,715	Sep	2018	9,250

Table 4-2 demonstrates the actual energy consumption by community over the historical period:

Table 4-2: Energy Consumption by Community

Community	Yearly Peak (kW)					Change (%) from 2018 to 2022
	2018	2019	2020	2021	2022	
Clifford	11,898	11,975	11,980	12,295	12,672	6.10%
Elmwood	3,970	3,982	9,203	4,338	4,656	14.72%
Hanover	185,880	167,310	167,519	167,746	169,651	-9.57%
Harriston	31,994	31,122	31,200	30,790	32,178	0.57%
Kincardine	145,597	148,039	141,948	141,458	142,617	-2.09%
Lucknow	22,198	22,146	22,300	22,781	22,935	3.21%
Mildmay	16,778	15,964	16,484	16,414	17,348	3.28%
Neustadt	10,214	11,015	10,342	10,602	10,853	5.89%
Palmerston	42,587	43,005	43,350	44,112	43,607	2.34%
Palmerston: Customer	58,399	57,454	58,381	61,321	58,438	0.07%
Port Elgin	126,680	121,371	123,799	124,128	128,823	1.66%
Ripley	11,429	11,447	11,282	11,500	12,762	10.44%
Southampton	70,233	69,294	73,941	87,387	68,941	-1.87%
Teeswater	13,998	13,480	14,064	13,893	14,834	5.64%
Teeswater: Customer	18,718	25,122	29,490	29,458	33,241	43.69%
Walkerton	92,175	85,818	89,679	90,645	92,606	0.47%
Wingham	60,884	57,030	57,882	56,859	57,079	-6.66%

The above table shows energy consumption trends over the last five years. As can be seen, energy consumption in general has remained consistent in most communities, with a slight increase or decrease in consumption in some communities. Energy consumption trends in Westario's service territory are affected mostly by the weather patterns and the severity of winter weather specifically. Economic-driven growth in consumption is minimal, given the smaller scale of the local economies.

Network Configuration

Westario is connected to the Ontario power transmission grid at four transformer stations which are owned by Hydro One Networks Inc. (HONI). Westario customers are supplied via seven 44kv feeder circuits which feed 27 Westario-owned sub-stations. Within the service territory of Westario, there are also multiple customer-owned distribution stations fed from the 44KV circuits.

4.2 Assets by Category

Westario has the following major assets:

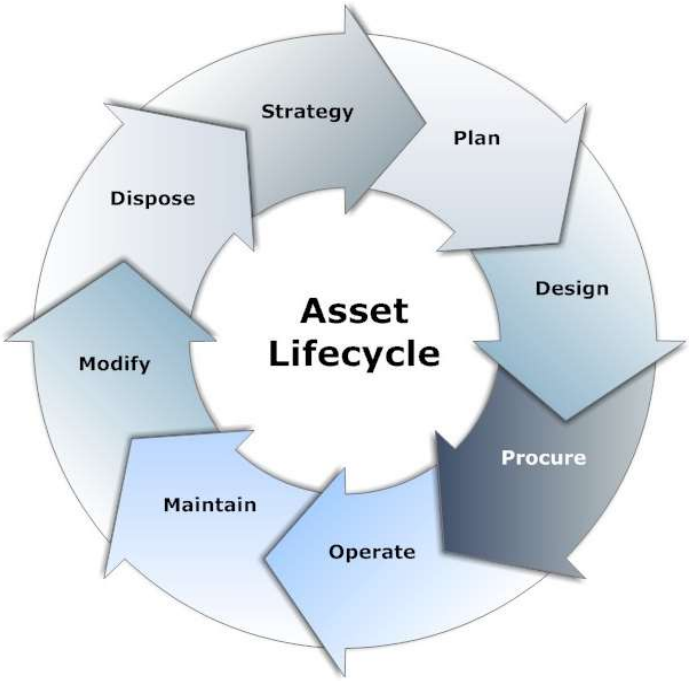
Table 4-3: Assets by Category

Asset Group	Asset Class	Population
Substation	Power Transformers	29
	Circuit Breakers (4.16 kV, 13.8 kV & 44 kV)	52
	Reclosers (3 Phase)	33
	Fused Switchgear	15
	Buildings	27
	MV Primary Cables	n/a
	HV Primary Cables (44kV)	n/a
Distribution (Overhead and Underground)	Distribution Poles (Wood)	6,638
	Distribution Poles (Steel)	1,499
	Distribution Poles (Concrete)	34
	Cross Arms	n/a
	Pole-Mount Transformers	1,622
	Pad-Mount Transformers	1,074
	Switches	290
	Km of Overhead Lines – 3 Phase	198
	Km of Overhead Lines – single phase	92
	Km of Underground Lines – 3 phase	33
	Km of Underground Lines – single phase	123
	Switching Cubicles	80
	Protective line relays	N/A
	Line circuit breakers/reclosers	N/A

5 Managing the Existing Assets

Electricity assets, like any other type of physical asset, have a lifecycle. This section describes how Westario assets are managed over their entire lifecycle from conception to retirement.

5.1 Understanding Asset Lifecycles



Definition of **Key** Lifecycle Activities that impact the AMP:

Table 5-1: Activity Definitions

Activity	Detailed Definition
Strategy/Planning and Procurement	Cost Replacement • Estimate replacement costs of key elements (structure, services, equipment, furniture) • Estimate replacement costs using life spans. • Prepare annualized costs and rates. Recurrent Costs • Identify energy costs. • Identify maintenance costs and rates. Identify Operating Budget • Annual Maintenance, Periodic, Life Cycle, Recurrent • Management and Administration Prepare plans and financial analysis for maintenance of life cycle items
Operations	Involves changing the design parameters of an asset such as changes in circuit configuration or setting a tap setting on a transformer. Does not involve a physical change to the asset. Line clearing of trees is an operations activity.

Maintenance	Involves replacing consumable components on asset assemblies but not the whole assembly. Generally, these subcomponents wear out before the whole assembly fails. For example, an insulator on a pole assembly or an arc snuffer/muffler on a gang operated load break switch.
Sustainment/Modify	Involves replacing assets in terms of the assets listed under asset categories. For example, replacing a pole in a pole line.
Disposal/Retirement	Removes an asset from the distribution system. For example, removing a redundant pole line from service. By definition retirement would be a reduction in the distribution system footprint.

5.2 Maintenance Planning

Westario manages assets with the intent of providing a safe, efficient, reliable, and cost-effective electricity distribution system.

For example, distribution transformers are manufactured with the intent that there is no need to provide regular maintenance (maintenance-free) for the duration of their lifecycle. Typically, they remain in service providing continuous service until they reach the end of their lifecycle. Westario current practice is to identify, through inspection and data analysis, those transformers that are approaching end of life with an intention of replacing prior to failure.

Some distribution assets remain in service, delivering electricity with little required maintenance. Maintenance is primarily about replacing consumable components of assets. Components wear out in a number of ways including oxidation, pitting or erosion of contact surfaces, material rot, gasket degradation, pitting of insulators, etc. Continued operations of devices which clearly exhibit component degradation will eventually lead to a failure in the distribution system. What leads to failure is a complex interaction of parameters including manufacturing of components, installation of components, age, operating hours, number of operations, loading cycles, stress due to fault events, ambient temperature, contaminants, and the maintenance performed during the life of the asset.

A number of distribution assets, such as substation equipment and transformers, do require regular maintenance. Substation transformers generally supply many hundreds or thousands of customers, and a failure would likely result in a lengthy outage and a significant number of resources to replace the failed unit. This maintenance involves regular condition testing which highlights or identifies possible problems.

The inspection and maintenance of distribution assets is detailed in Westario's "Distribution System Inspection under Ontario Regulation 22/04" attached as Appendix C. The document is continuously being updated with new information upon which maintenance or inspections of equipment are based and has been added to the GIS application. Maintenance standards in the program are built upon manufacturer's recommendations, industry regulatory requirements, industry best practices, and Westario's own experience with performing the maintenance or inspection. This document clearly describes the geographic area and frequency of programs, the specifications or standards for the work, who is responsible to carry out specific actions, the accounting job numbers associated with the work, and the forms necessary to document the field work.

The following table highlights Westario maintenance and inspection practice by asset type:

Table 5-2: Summary of Inspection and Maintenance Activities

Assets	Category	Activity	Frequency
Overhead distribution assets	Inspections	Visual	3-year cycle
		Infrared	Annual
	Predictive maintenance	Pole testing	3-year cycle
	Preventative maintenance	Vegetation management	3-year cycle
Underground distribution assets	Inspections	Visual	3-year cycle
Station assets	Inspections	Visual	3-year cycle
	Predictive maintenance	Oil testing of Power Transformers	Annual

The intent of the program is to provide base knowledge to provide enough information to make informed decisions on future maintenance. Initial intervals for maintenance may be changed based on actual experience with field data collected.

This process will allow Westario to collect information and base future intervals on the actual existing condition of the asset. In this way, the cost to perform maintenance can be optimized. The data collected from the maintenance provides valuable information upon which to base repair work, refurbishment activities and asset replacement schedules.

In addition to actual asset maintenance a number of programs exist to enhance the reliability of the assets or to identify problems with assets. These programs are as follows:

- **Pole Testing** – A scientific-based pole testing program started in 2017 on a town-by-town basis, and on a three-year rotation. This, along with a detailed assessment of the amount and voltage of the wire on the pole and the number of customers affected by a failure, will allow setting the priority of replacements among these older poles.
- **Line Clearing and Tree Trimming** – Tree contacts are a major cause of distribution system outages and momentary interruptions for Westario customers. Westario has a regular line clearing and tree trimming maintenance program. This program cycles through the service territory on a three-year basis:
    - Year 1 – Southampton and Port Elgin
    - Year 2 – Kincardine, Ripley, Lucknow, and Hanover.
    - Year 3 – Remaining towns.

5.3 Operating the Assets

Operational activities generally arise in dealing with distribution system issues when assets are not operating as normal. For example, several triggers exist as follows:

- Voltage levels are too high or too low – outside of Canadian Standards Association Voltage Variation Limits for circuits up to 1000V under “Normal Operating and Extreme Operating Conditions”;

- Fault current exceeds thresholds on protective devices such as reclosers, fuses, and breakers;
- Demand exceeds thresholds on protective devices and or the asset's current carrying capacity.
- Customer concerns about the quality or reliability of electricity being supplied to them.

6 Sustaining Existing Assets

6.1 Assets by Category

Westario's distribution assets are grouped as follows:

- Municipal Substations
- Pole Mounted Transformers
- Pad Mounted Transformers
- Poles
- Gang Operated Overhead Switches
- Pad Mounted Switchgear
- Underground Cable
- Overhead Conductor
- Meters
- General Assets
    - Fleet
    - Facilities
    - IT

6.2 Asset Condition Assessment

Westario's investment plans are informed by its asset condition assessment. In 2022 Westario commissioned an asset condition assessment (ACA). This report can be found in Appendix C. In addition to this asset condition assessment, Westario's gathers condition information through its routine inspections and testing, which are described in section 5. This information is then used to determine a health index for each asset, indicating if it is in very good, good, fair, poor, or very poor condition.

Figure 6-1 below presents the summary results of the ACA for Westario's distribution and substation assets. The HI is not calculated for any distribution asset with a Data Availability Indicator ("DAI") less than 70% (i.e., less than 70% of the condition parameters – by weight – are available for that asset) or less than 65% for station assets. The HI results for assets with a known HI were divided into ten-year bands and extrapolated to the unknown set within those bands. The age demographics and condition breakdown for each asset class is detailed further below. The complete ACA study can be found in Appendix A of this document. Westario utilizes the outputs of the ACA as a key input into it capital planning process. Where Westario has calculated valid HIs with the required data availability, it uses this information to inform which assets to potentially replace and/or repair. Where data availability is below the DAI threshold and Westario has identified the asset(s) may need attention, Westario performs further assessments, gathering further data before deciding if the asset(s) should be replaced and/or repaired.

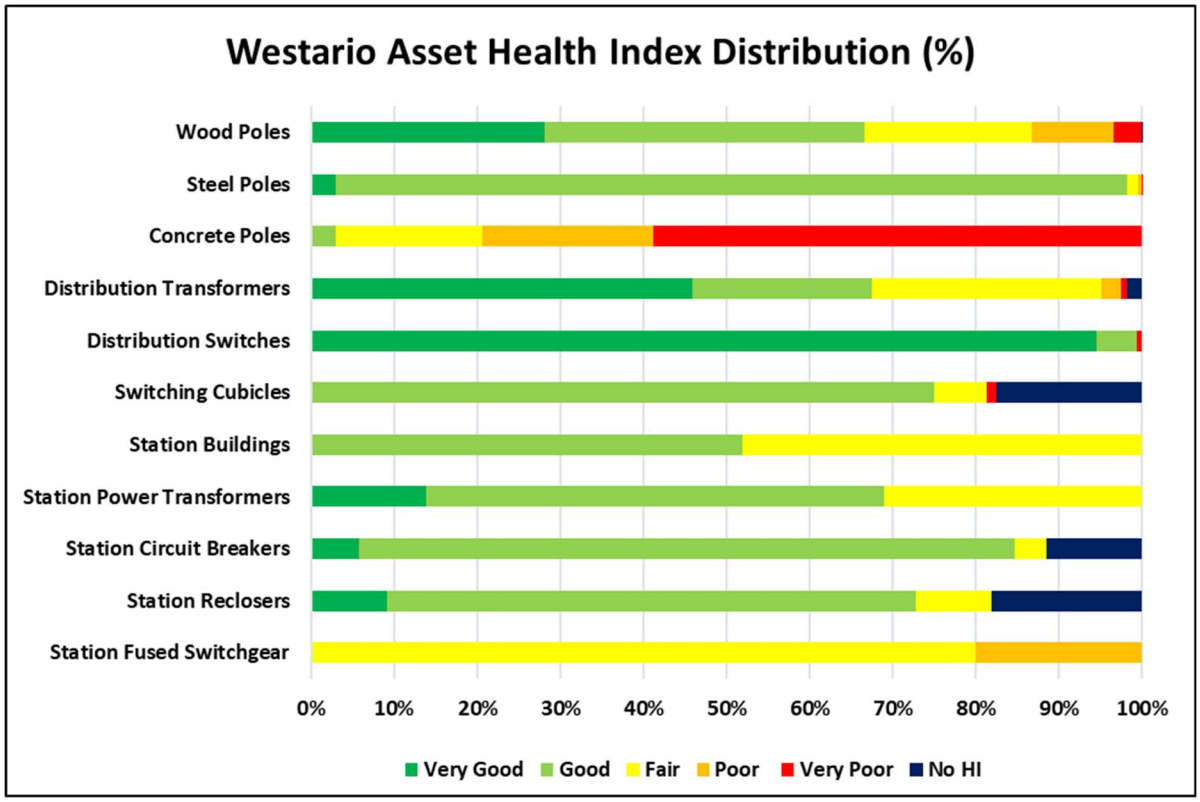


Figure 6-1: Overall Asset Condition Assessment Results

6.2.1 Condition of Distribution Assets

6.2.1.1 Wood Poles

Wood poles are an integral part of any distribution system. They are the support structures for overhead distribution system. Westario owns 6,638 wood poles distributed throughout all the towns in its service territory. It is estimated that 60% of Westario's wood poles were installed within the last 30 years. Figure 6-2 presents the age distribution for wood poles within Westario's service territory.

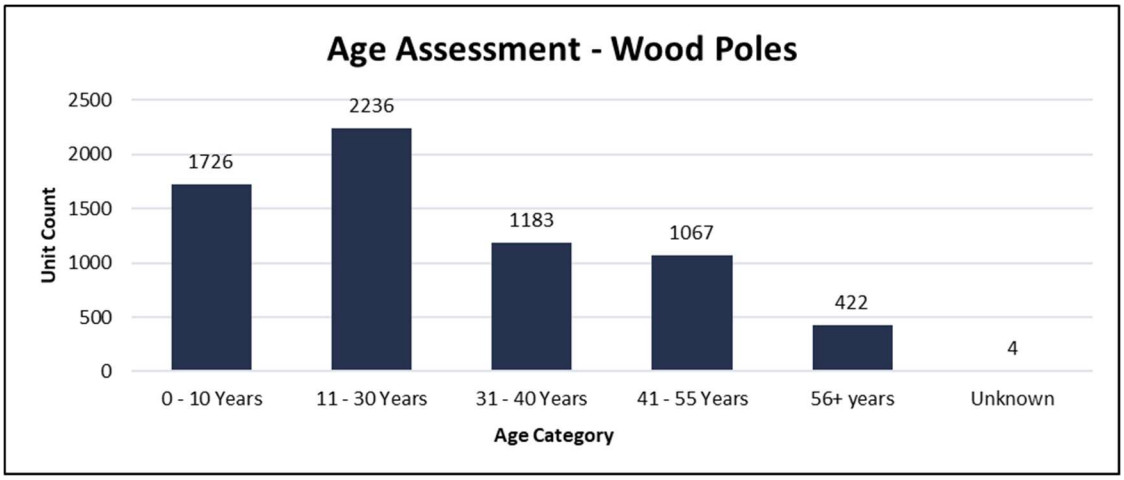


Figure 6-2: Wood Pole Age Demographic

Valid HI results were calculated for all but four wood poles. Most of Westario's wood poles that have valid HI results are in Fair or better condition, with 655 of the poles in Poor condition and 228 of the poles in Very Poor condition. Figure 6-3 presents the HI Distribution of the wood poles.

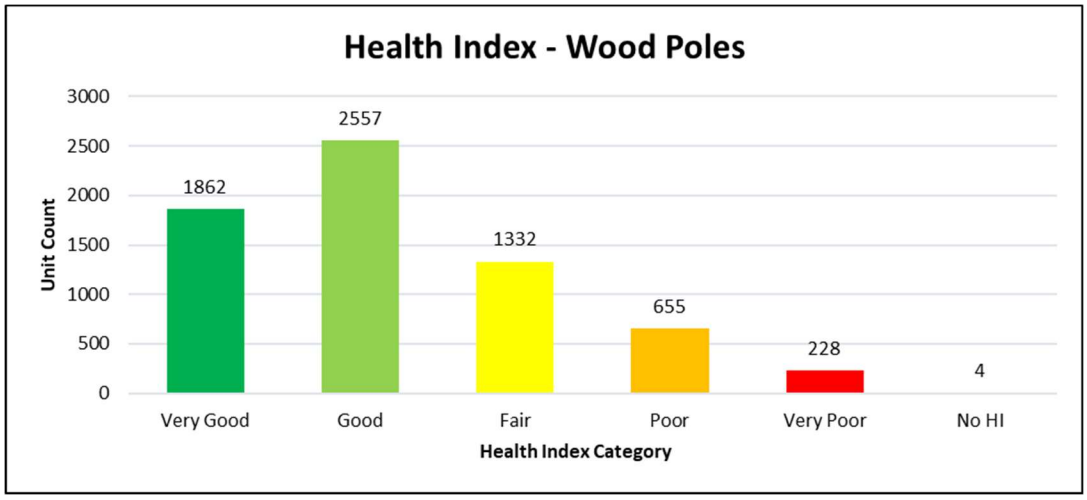


Figure 6-3: Wood Poles HI Results

6.2.1.2 Steel Poles

Steel poles have a similar use as wood poles in the distribution system. Steel poles have different degradation mechanisms than wood poles. There is no practical "pole test" for steel poles, but since poles are hollow, there are also limited opportunities for invisible degradation and interior rot. The presence of rust on steel poles compromises the pole's strength and can be identified through visual inspections.

Westario has 1,499 steel poles in its service territory. As seen in Figure 6-4, around 82% of Westario's steel poles were installed within the last 20 years.

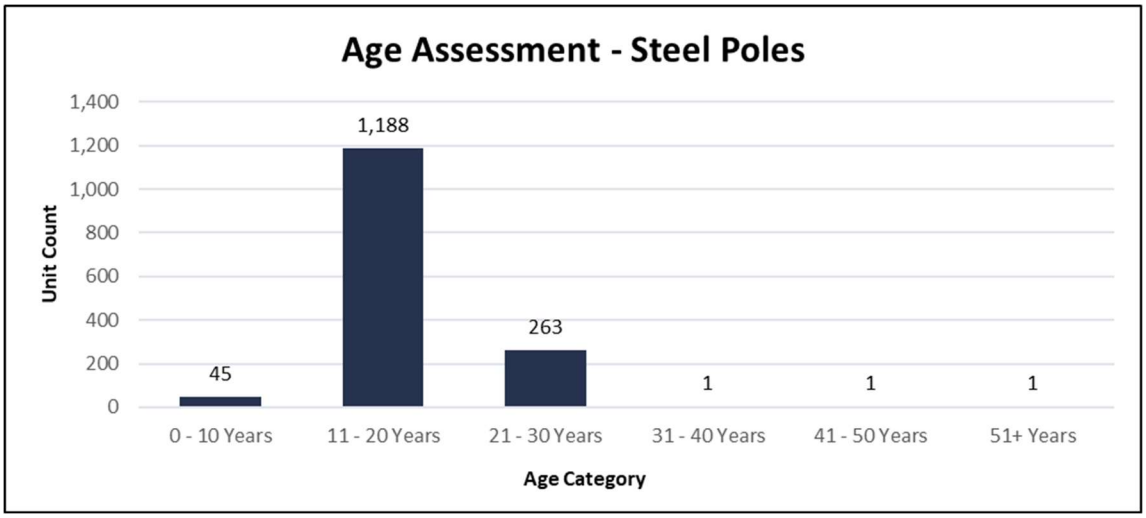


Figure 6-4: Steel Poles Age Demographic

Valid HI results were calculated for all of the steel poles. As seen in Figure 6-5, most of Westario's steel poles are in Good condition.

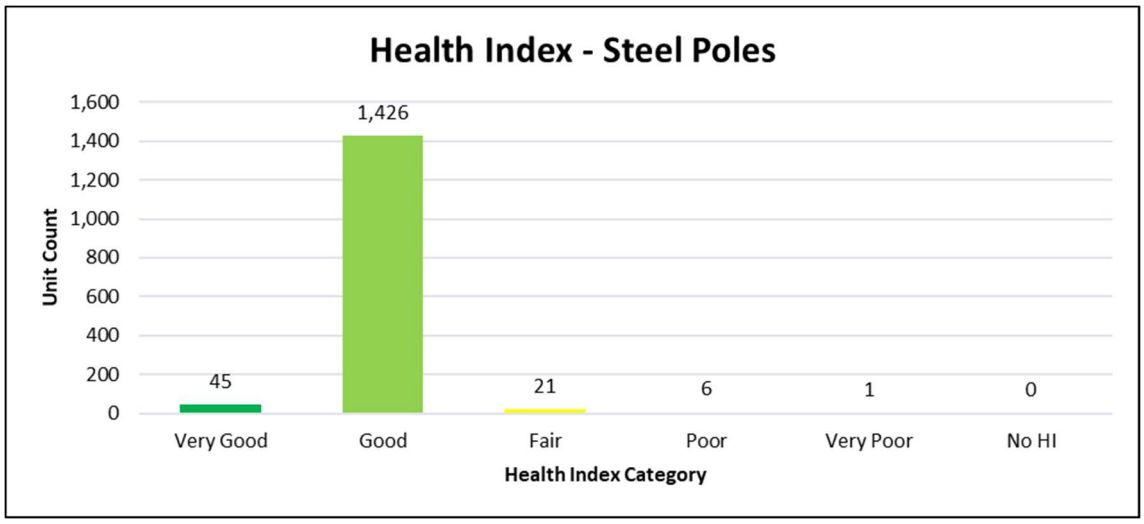


Figure 6-5: Steel Poles HI Results

6.2.1.3 Concrete Poles

Westario has a total of 34 concrete poles in its service territory, located within the following towns: Port Elgin, Southampton, and Teeswater. As seen in ***Figure 6-6***, around 97% of Westario's concrete poles are between 40 and 70 years old, with 76% poles installed more than 50 years ago.

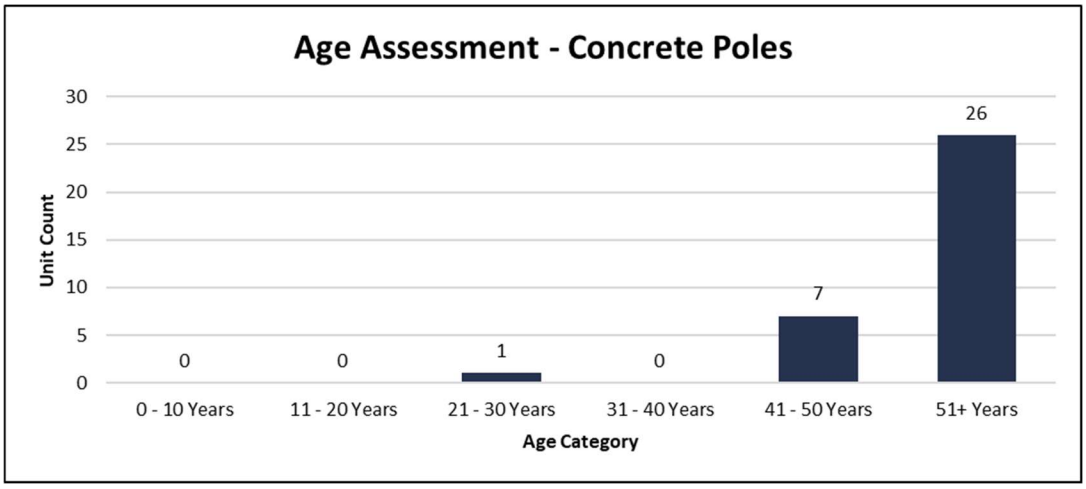


Figure 6-6: Concrete Poles Age Demographic

Valid HI results were calculated for all of the concrete poles. As seen in ***Figure 6-7***, 59% of the concrete poles are in Very Poor condition.

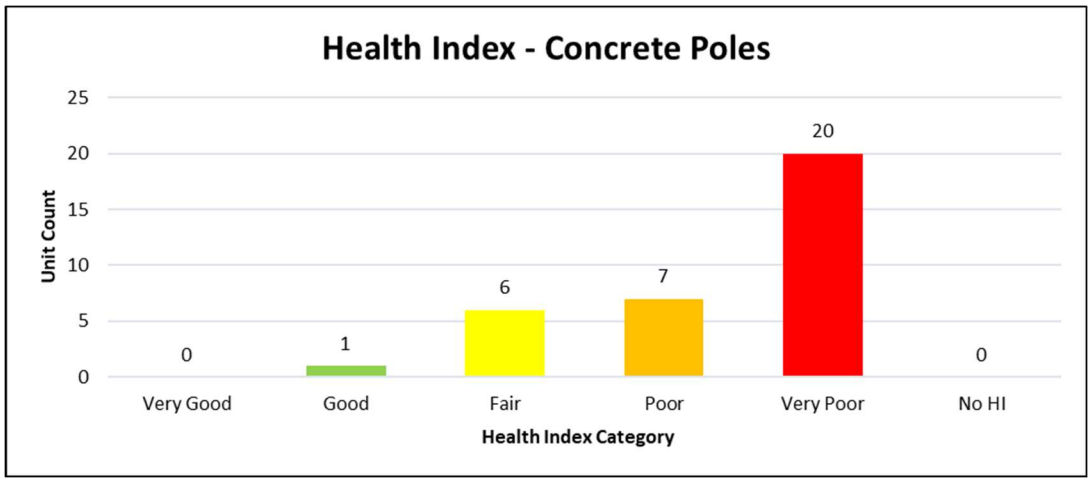


Figure 6-7: Concrete Poles HI Results

6.2.1.4 Overhead Conductors

Overhead distribution conductors transmit electricity from generators to TS, from TS to substations, and from substations to customer premises and are supported by poles. Any replacement of conductors is usually combined and based on the need to replace the associated poles. Conductor is rarely replaced on its own. Although laboratory tests exist to determine the tensile strength and assess the remaining useful life of conductors, distribution line conductors rarely require testing. An appropriate proxy for estimating the tensile strength of conductors and estimating the remaining life of an asset is the use of service age.

Westario owns 290 km of OH lines throughout its distribution system, of which 198 km is three-phase and 92 km are single-phase. Unfortunately, recorded age information was only available of 2% of the conductor line, as seen in ***Figure 6-8***. As such, a valid HI could not be completed for this asset.

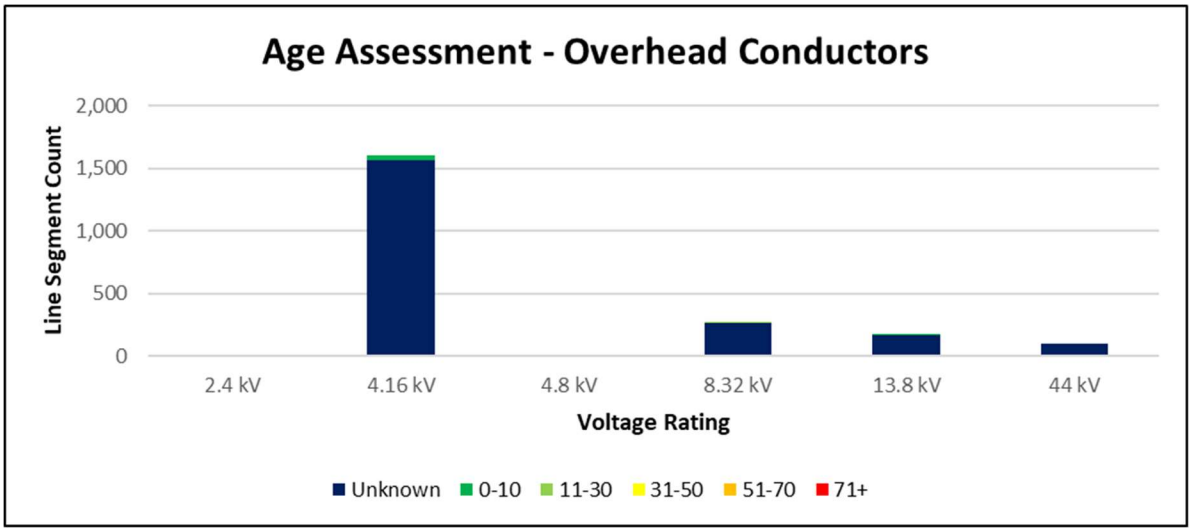


Figure 6-8: OH Conductors Age Demographic

6.2.1.5 Underground Cables

Underground (UG) cables transmit electricity along the electrical distribution system. Distribution UG primary cables are one of the more challenging assets in electricity systems from a condition assessment viewpoint. Although several test techniques, have become available over recent years, it is still very difficult and expensive to obtain accurate condition information for buried cables. The standard approach to managing cable systems has been monitoring cable failure rates and the impacts of in-service failures on reliability and operating costs. Service age also provides a reasonably good measure of the remaining life of cables with the lack of visual inspection for cable defects.

Westario owns 156 km of underground lines throughout its distribution system, of which 33 km is three-phase, and the remaining 123 km is single-phase. As seen in ***Figure 6-9***, age information was available for only 27% of the line segments. As such, a valid HI could not be complete for underground cables.

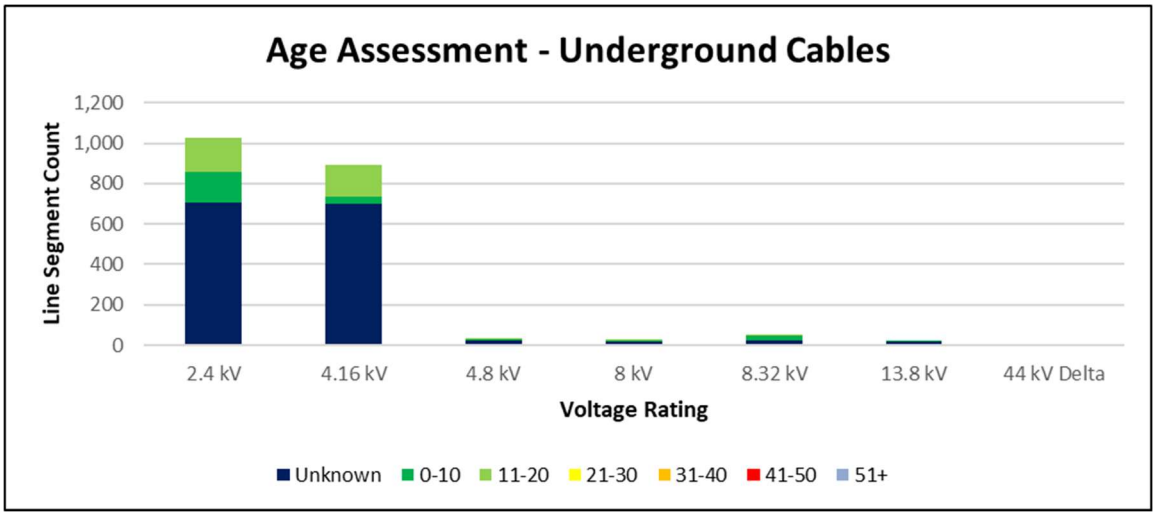


Figure 6-9: Underground Cables Age Demographic

6.2.1.6 Distribution Transformers

Distribution transformers are made up of a large number of units, each with a modest replacement value. Distribution transformers are generally considered to be a run-to-failure asset class with little maintenance other than visual inspections.

Westario owns 3,169 distribution transformers in its service territory, of which 1,622 are pole-mounted transformers and 1,074 are pad-mounted. The remaining distribution transformers are not defined as either pole-mounted or pad-mounted. As seen in ***Figure 6-10***, the service age was available for 84% of the transformers.

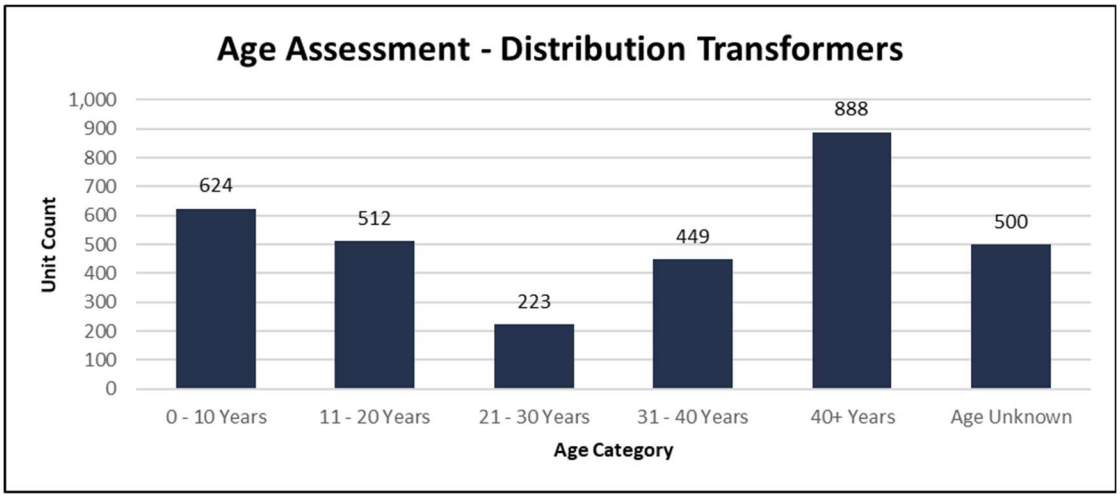


Figure 6-10: Distribution Transformers Age Demographic

The DAI threshold for distribution transformers was set at 66% to account for the weighting system defined for the asset class. A valid HI was not calculated for any assets with an individual DAI less than 66%. As such, valid HI were calculated for most of the transformers, with most assets in Fair or better condition. ***Figure 6-11*** and ***Figure 6-12*** shows the HI results of the distribution transformers.

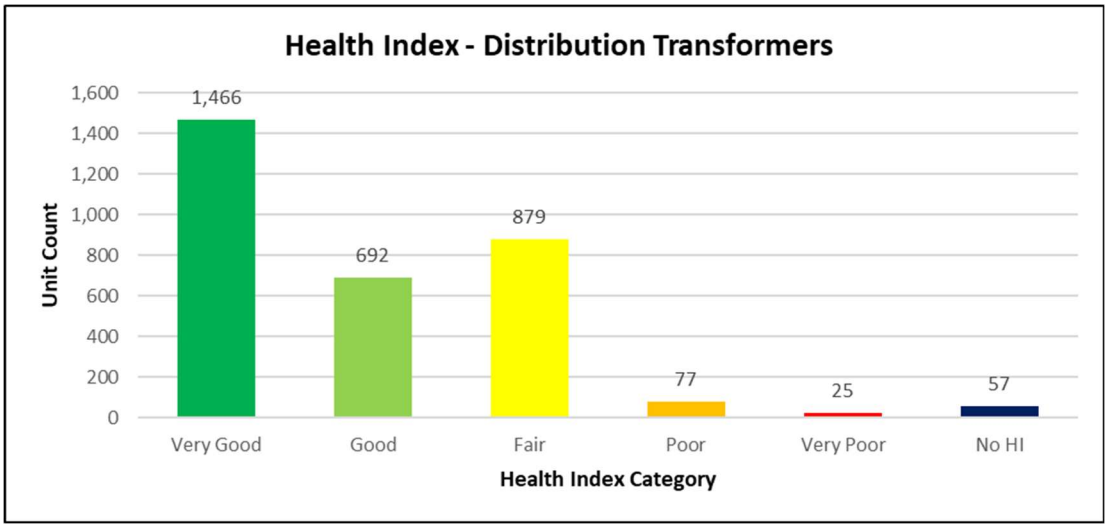


Figure 6-11: Distribution Transformers HI Results

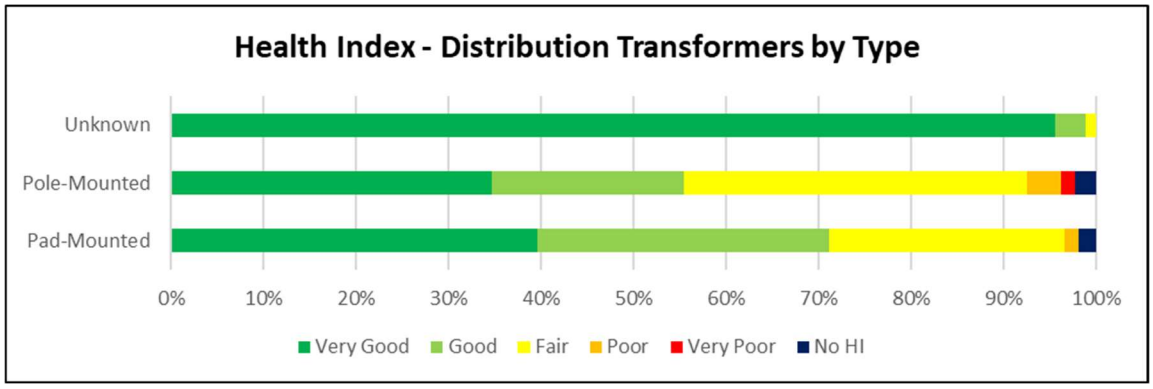


Figure 6-12: Transformers HI Distribution by Type

6.2.1.7 Distribution Switches

Switches represent critical infrastructure for a Local Distribution Company (LDC). Westario owns a total of 290 distribution switches in its service territory. The ages for Westario's distribution switches are unknown. However, valid HI results were calculated for all of the distribution assets. As seen in ***Figure 6-13***, most of Westario's distribution switches are in Very Good condition.

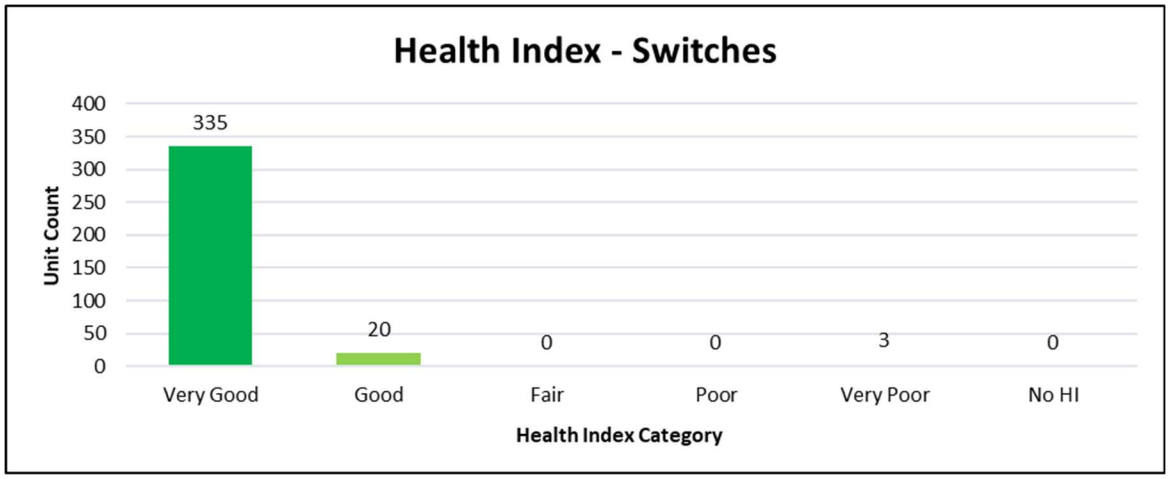


Figure 6-13: Distribution Switches HI Results

6.2.1.8 Switching Cubicles

Westario owns a total of 80 kabar switching cubicles within the following towns in its service territory: Hanover, Kincardine, Palmerston, Port Elgin, Southampton, Walkerton, and Wingham. Although the ages are unknown for the switching cubicles, visual inspection results are recorded annually.

Figure 6-14 shows the HI results for the switching cubicles. Most of the switching cubicles are in Good condition.

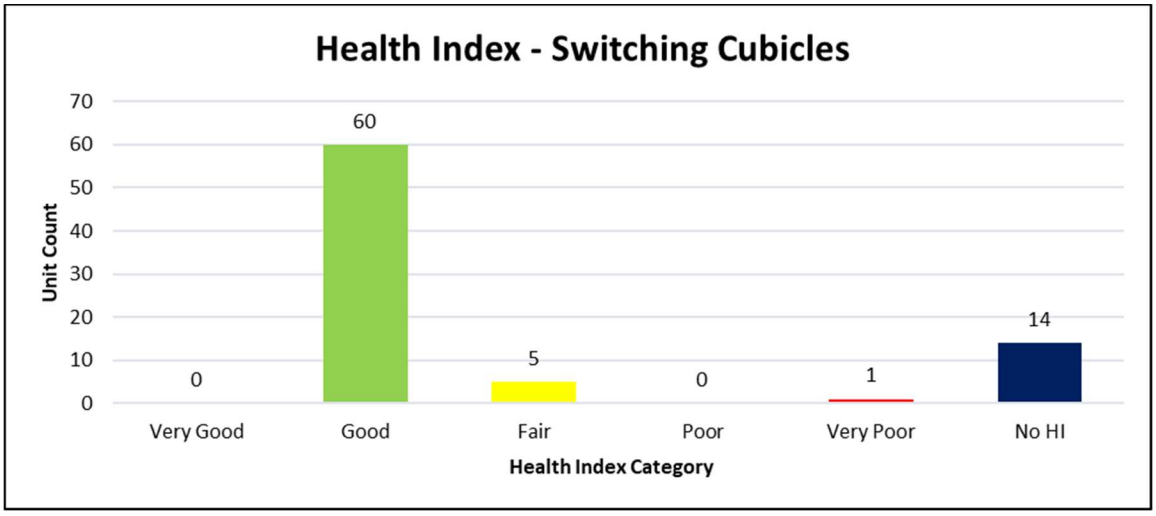


Figure 6-14: Switching Cubicles HI Results

6.2.2 Condition of Station Assets

6.2.2.1 Station Buildings

Station buildings are the major civil infrastructure components of a utility substation. Station buildings refers to the walls, roof, floors, fences, yard etc. of the station. Other civil infrastructure systems supporting a station may include support structures, security equipment, plumbing systems, and others. Buildings are inspected quarterly and are maintained as issues arise.

Westario operates a total of 27 substations in the following towns within its service territory: Hanover, Harriston, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, Walkerton and

Wingham. All of the station buildings were assessed, with around half of the station buildings being in Good condition. ***Figure 6-15*** presents the HI results of Westario's station buildings.

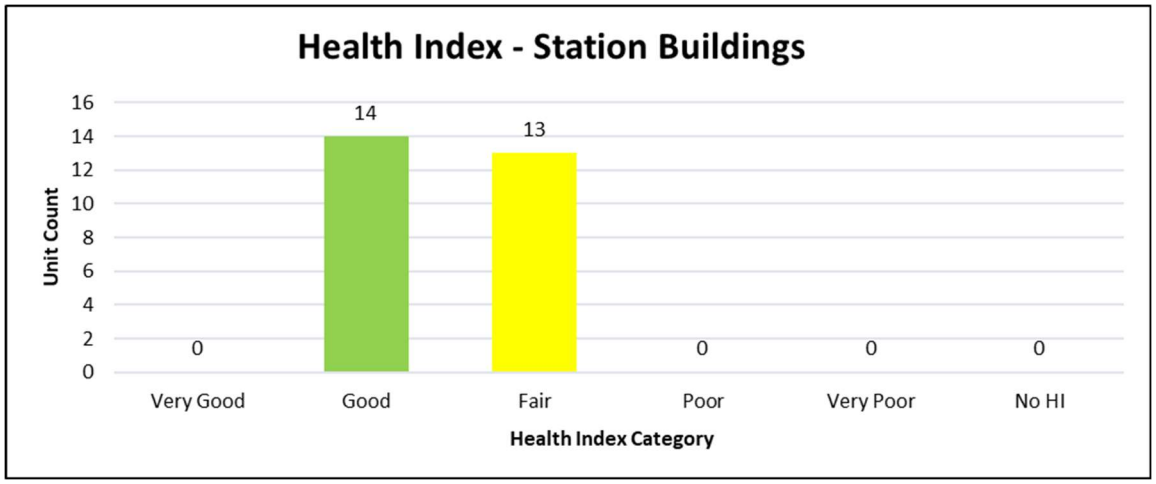


Figure 6-15: Station Buildings HI Results

6.2.2.2 Station Power Transformers

Station power transformers are the single most critical asset class owned by an LDC. Each transformer can be valued in the range of hundreds of thousands to millions of dollars and can affect tens of thousands of customers. As such, station power transformers are the most tested and tracked utility assets.

Westario owns a total of 29 station transformers located within following towns: Hanover, Harriston, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, Walkerton, and Wingham. As ***Figure 6-16*** indicates, 41% of the station power transformers have been in service for more than 45 years.

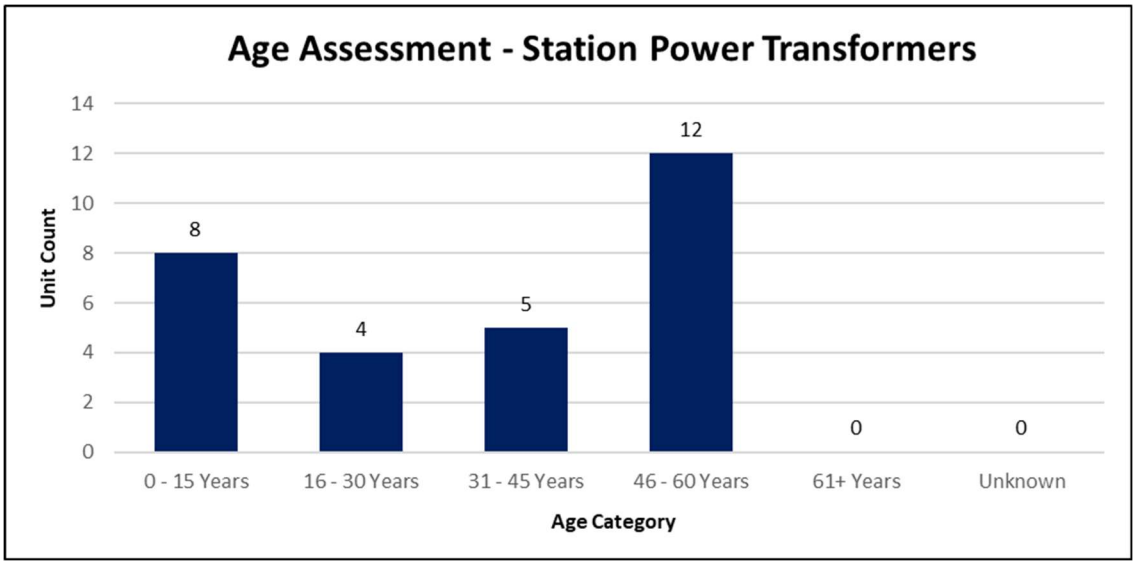


Figure 6-16: Station Power Transformers Age Demographic

As seen in ***Figure 6-17***, all the transformers are in Fair condition or better. Since power transformers are critical assets, power transformers in Fair condition could require possible remedial work or replacement depending on the unit's criticality.

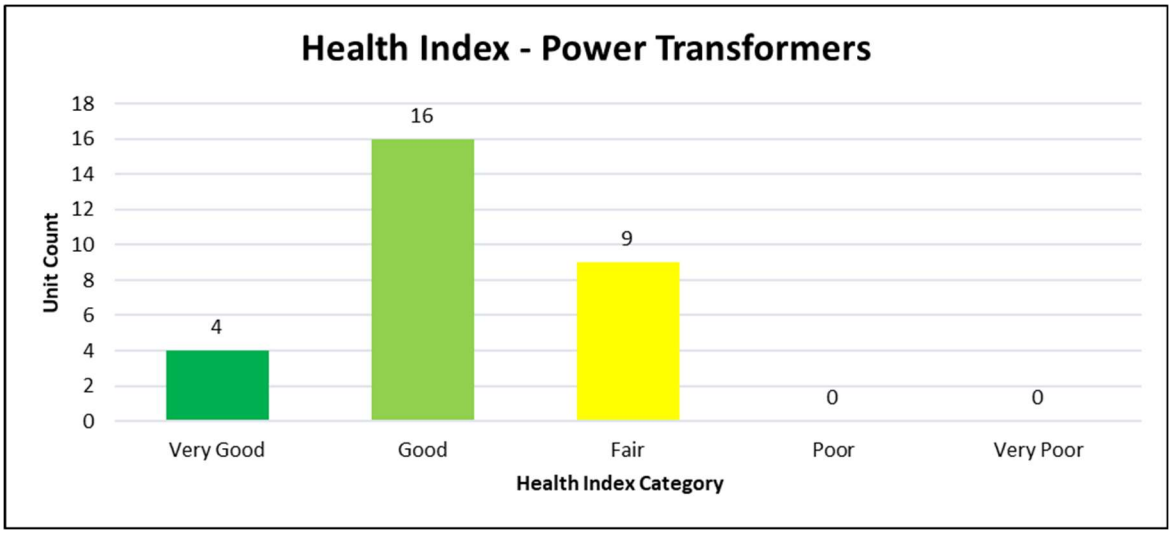


Figure 6-17: Station Power Transformers HI Results

6.2.2.3 Station Circuit Breakers

Station circuit breakers are critical substation assets and are the primary protective devices for maintaining public safety and protecting other station equipment. Breakers work with station relays to open, either in a fault situation, as directed by the operations center, or as part of the automation scheme.

Westario owns a total of 52 station circuit breakers located at Hanover, Harriston, Palmerston, Port Elgin, and Walkerton. The station circuit breaker population consists of both air- and vacuum- insulated breakers operating at 4.16 kV, 13.8 kV, and 44 kV. Unfortunately, ages are unknown for Westario's station circuit breakers. However, valid HI results were calculated for 46 of the 52 circuit breakers. As seen in ***Figure 6-18***, most of Westario's station circuit breakers are in Very Good to Good condition.

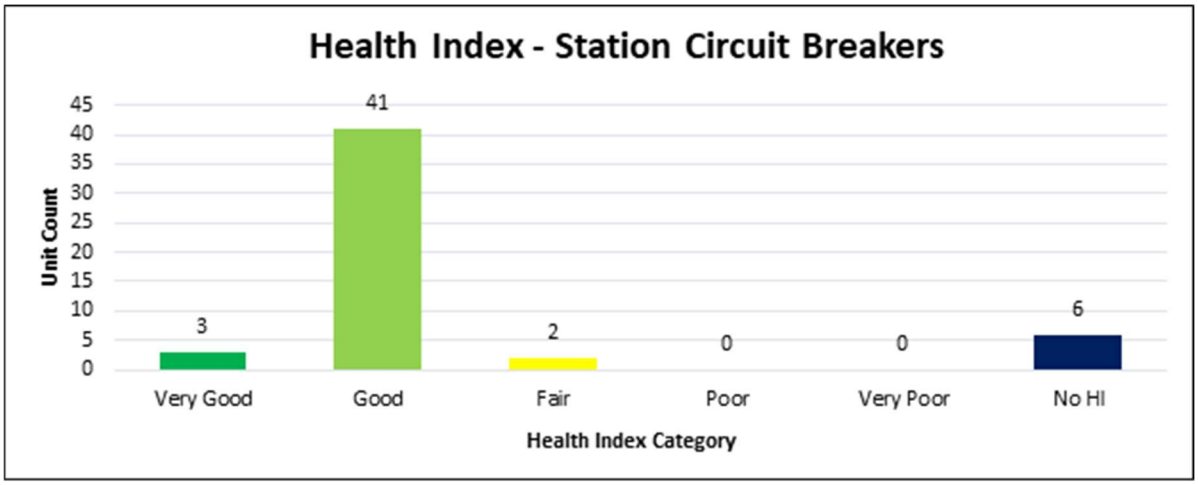


Figure 6-18: Station Circuit Breakers HI Results

6.2.2.4 Station Reclosers

Station reclosers are a critical dynamic protective asset that will open in a fault situation and will automatically test the line to allow itself to close if the fault was resolved.

Westario owns a total of 33 station reclosers located at Hanover, Kincardine, Lucknow, Palmerston, Port Elgin, Southampton, Teeswater, and Wingham. The ages of the assets are unknown; however, valid HI results were calculated for 27 of the 33 reclosers. ***Figure 6-19*** presents the HI results for the station reclosures, where most of the reclosers are in Very Good to Good condition.

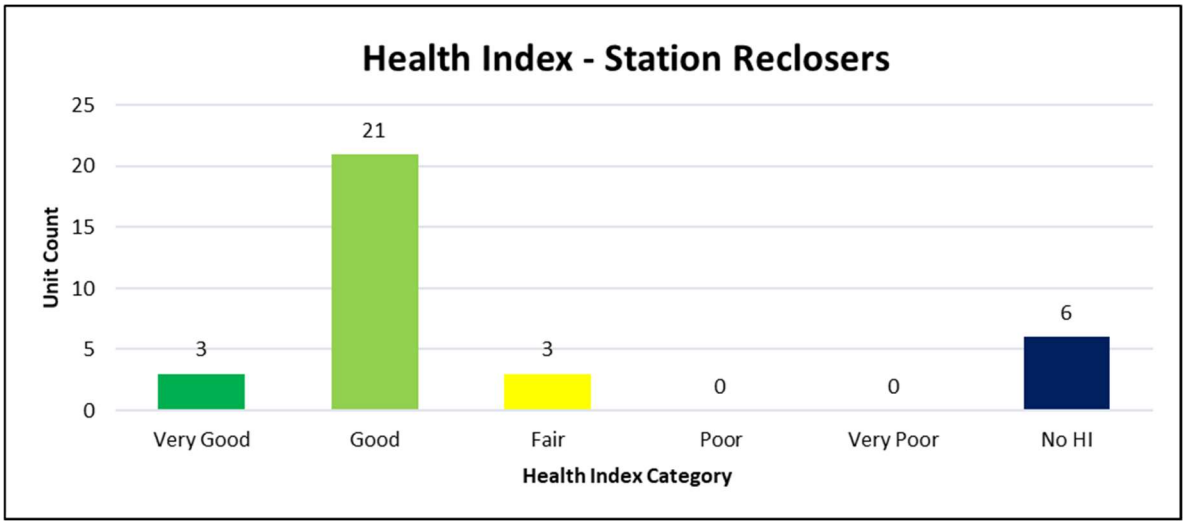


Figure 6-19: Station Reclosers HI Results

6.2.2.5 Station Fused Switchgear

The station fused switchgears are made up of several fused switches that provide a method to manually shut off the power, while the fuse will automatically disconnect the circuit if the amperage on the circuit exceeds the rating.

Westario owns 15 station fused switchgears around Kincardine, Southampton, and Wingham. The ages of the assets are unknown; however, valid HI results were calculated for all 15 fused switchgears. Going forward, any assets that are replaced will have their age recorded to ensure Westario has a

more comprehensive data set for the future. As seen in ***Figure 6-20***, most of Westario's fused switchgears are in Fair to Poor condition.

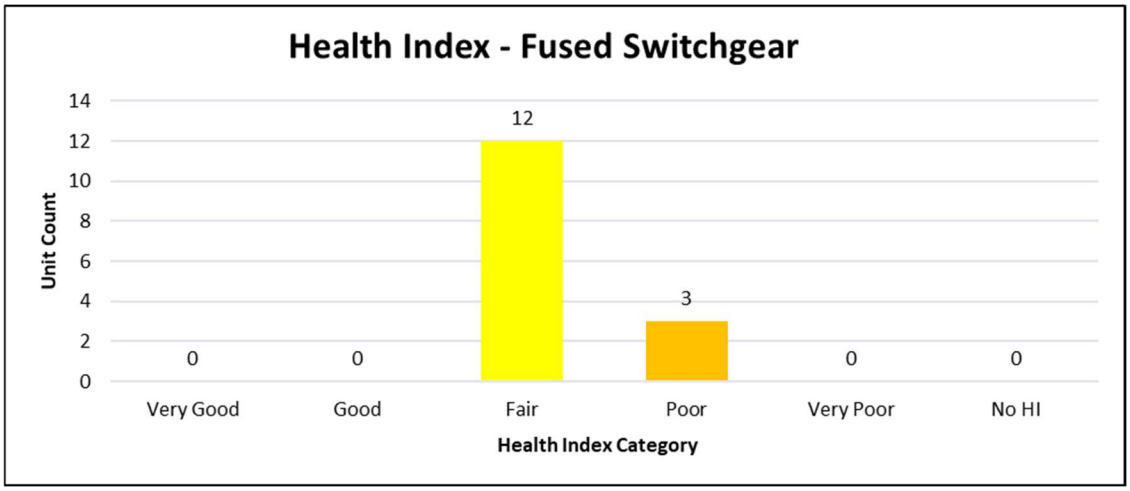


Figure 6-20: Station Fused Switchgears HI Result

6.2.3 Fleet

Full asset condition analysis is not performed on fleet vehicles. However, Westario regularly inspects and maintains its fleet, as well as track mileage usage. Westario has twelve (12) heavy duty units including bucket trucks, dump trucks and diggers for work on distribution lines. Westario has ten (12) light/medium units such as pickups and automobiles used across the organization by various roles such as line superintendent, line supervisors, lead-hand, engineering technicians, customer service representatives, etc. Westario has ten (10) miscellaneous units including pole trailers, general use trailers, reel trailers, tension machines and a forklift. These units are either used to move material around or assist in the distribution line work. The useful life for each vehicle type is shown in Table 6-1 below:

Table 6-1: Vehicle Useful Life

Vehicle Type	Useful Life
Heavy Duty Units	10[1]
Light Medium Units	10
Trailers & Miscellaneous Equipment	10

Westario controls and manages a fleet of 24 vehicles, 10 trailers and other miscellaneous equipment to support the growth and operation of its system. The tables below show the make and age of Westario's fleet by vehicle category.

[1] Note this used to be 15 years but Westario have experienced more and more trucks reaching 200,000km within 10 years, which is the usual point of replacement.

Table 6-2: Heavy Duty Units

Truck ID	Type	Year	Make	Model
13	Dump Truck	2006	Ford	F350
24	Single Bucket	2006	International	70S
15	Double Bucket	2007	Freightliner	M2
52	Single Bucket	2010	Freightliner	M2
54	Digger Truck	2011	Freightliner	M2
55	Double Bucket	2012	Freightliner	-
61	RBD/Digger	2014	Freightliner	M2-106
76	Single Bucket	2019	Freightliner	M2-106
77	Dump Truck	2018	Dodge	Ram 5500
80	Single Bucket - Service Truck	2021	Freightliner	M2-106
81	Line Supervisor Truck	2021	Dodge	Ram 1500
84	Single Bucket - Service Truck	2022	Freightliner	M2-106

Table 6-3: Light/Medium Units

Truck ID	Type	Year	Make	Model
53	Pick Up - 4x4	2011	Chevrolet	SIL
62	Pick Up - 4x4	2014	Chevrolet	Silverado
66	Pick Up - 4x4	2015	Chevrolet	Silverado
68	Van	2016	Dodge	Grand Caravan
69	Pick Up - 4x4	2016	Chevrolet	Silverado 2500H
70	Pick Up - 4x4	2016	Chevrolet	Silverado 2500H
73	Pick Up - 4x4	2018	Chevrolet	Silverado 1500H
74	Pick Up - 4x4	2018	Chevrolet	Silverado 1500H
75	Pick Up - 4x4	2018	Chevrolet	Silverado 1500H
78	Car	2018	Chevrolet	Equinox
82	Pick Up - 4x4	2022	Ram	Classic 1500
83	SUV	2022	Chevrolet	Suburban

Table 6-4: Miscellaneous Units

Equipment ID	Type	Year	Make	Model
14	Dump Trailer	2005	JDJ	-
49	Forklift	2019	JCB	940

51	Job Trailer	2010	USCG	Trail n'Sport
56	Pole Trailer	2012	PTB	141-15KE
57	Pole Trailer	2013	PTB	-
60	Cargo Trailer	2013	Stealth	LT7
63	Tensioner Trailer	2014	TSC International	DPT-30B
64	Single Reel Trailer	2014	Brooks	STRT 7106-7KE
65	Tensioner Trailer	2015	TSC International	DPT-30B
67	Single Reel Trailer	2015	Brooks	STRT 7106-7KE

By 2028, 21 vehicles (including heavy duty, light/medium and miscellaneous units) will have surpassed their useful life.

6.3 Asset Investment Strategies

As described in section 3 and 4, many factors are involved in determining the appropriate investment strategy. Westario has identified major capital projects and activities that are required for the 2024-2028 period. Table 6-5 shows the major projects that meet the annual materiality threshold of $58,000. This table shows their associated investment categories and the amounts allocated to them in capital expenditures for the forecast period.

Table 6-5: Capital Projects Exceeding the Materiality Threshold

Category	Project Code	Project Name	2024 Planned Expenditure ($ '000)
System Access	SA-01	Capital Poles	1,176
System Access	SA-03	New Underground (UG) Service	384
System Access	SA-05	Three-Phase (3-Phase) Customer Connections	304
System Access	SA-06	New Subdivisions/Developments	577
System Access	SA-07	Service Upgrades	153
System Renewal	SR-02	Substation Upgrades	1,295
System Renewal	SR-04	Decrepit Pole Replacement	1,653
System Renewal	SR-05	Distribution Transformer Replacement	243
System Renewal	SR-05C	Kincardine Load Balancing	1,090
System Renewal	SR-05D	Fibreglass Transformer Base Replacement	230
System Renewal	SR-06	Infrastructure Upgrade	137
System Renewal	SR-07	Pole Line Upgrades	335
System Service	SS-02	Meters	341
General Plant	GP-01	Technology	144
General Plant	GP-02	Vehicle Replacement	250
General Plant	GP-03	Tools and Equipment	61

The following sections go into some more detail for each project area and asset class. Further details and justification are contained within the project material narratives that are submitted as part of its Cost of Service application.

6.3.1 System Access

System access projects are all mandatory, non-discretionary type projects. Due to the nature of these projects being customer and third-party driven, it is hard to predict the exact number of projects and work that will be required over a forecast period. Westario typically uses historical averages to help predict and forecast costs and number of projects for the future. In addition, Westario regularly engages customers, developers, and town councils to understand their plans to help inform Westario's' overall plan. As these projects are all mandatory, Westario prioritizes these projects over all other projects unless an emergency or safety issue arises elsewhere.

Westario's projects fall under five categories:

6.3.1.1 Capital Poles

This program covers new poles, along with the associated attachments (transformer, insulators, conductor etc.) that are required to provide new customer connections, either through line extensions, pole relocations, or new poles for service connections. Capital poles expenditures for 2024 primarily revolve around two projects – installations around an alternate river crossing and pole line expansion for a new industrial subdivision. An average 54 capital poles will be installed per year from 2024-2028. These expenditures are driven by the rate of development in the various customer classes, and as a result are somewhat unpredictable.

6.3.1.2 New Subdivision/Developments

This program involves installation of new connections to developed subdivisions through customer request and demand. Although Westario experiences consistent growth and demand for new connections in its service territory, services are projected to remain consistent over the forecast period but will continue to grow in accordance with inflation. An average of ten (10) new subdivision connections per year will be installed between 2024-2028.

6.3.1.3 New Underground Service Connections

Most of Westario's new connections occur in newer subdivisions which typically have power delivered via underground conductor. When these services are upgraded, replaced, or vacant in-fill lots are developed, underground conductors are used. The design, materials procurement, installation, and acceptance of these assets are driven by thepace of development. Westario expects an average of 226 new underground service connections per year from 2024-2028.

6.3.1.4 Service Upgrades

Westario has seen a steady demand for customers wishing to upgrade their existing services. This trend is expected to carry on going forward. The forecast has been based on historical information as well as an insight from customers. Westario expects an average of 70 service upgrades per year from 2024-2028.

6.3.1.5 Three-Phase Customers

Three Phase customers are typically commercial customers and work is driven by customer requests. It is hard to predict the number of customer requests, and therefore Westario typically forecasts the number of three phase connections based on historical information. Westario is forecasting an average of 8 upgrades or new 3 phase implementations per year.

6.3.2 System Renewal

6.3.2.1 Poles

Westario proactively addresses decrepit poles through its decrepit pole program. Distribution poles are Westario's single form of support for low and medium voltage overhead feeders and distribution

equipment. All poles are tested over a 3-year cycle. The testing gives a reading of the structural integrity of the pole relative to a new pole. Poles that are showing less than 50% integrity of a new pole are categorized as decrepit poles. Poles that have been tested and are showing less than 25% integrity of a new pole are prioritized to be replaced.

Results from the pole testing in the last two years have indicated that many of the poles are currently assessed at less than 50% of the strength of a new pole. As indicated in section 6.2.1, around 8% and 3% of poles tested in 2022 (as part of the ACA) respectively are classed as being in poor and very poor condition.

Capital has been allocated in each year of the planning period to address the need for decrepit pole replacement, at a rate of approximately 117 poles per year from 2024 to 2028. This will allow Westario to continue to maintain its pole population such that it can maintain similar levels of reliability.

6.3.2.1.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- The life expectancy of poles ranges from 35-75 years and condition is affected by many factors such as weather, soil condition and structural loading;
- Westario's inspection procedure is regulated by the OEB. Poles will be inspected and tested on a three-year cycle to trend their remaining strength. Their condition is therefore, readily known at regular intervals allowing time for budgeting and replacement before they fail and cause an emergency response;
- A pole failure (depending on its function) can be a significant risk as the results of a failure could injure the public and result in lengthy interruptions in service to a widespread area and a large number of customers;
- Westario will proactively change poles when it makes good business sense to do so. For example, if a pole mounted transformer needs replacement and the pole shows early signs of aging, Westario may decide to replace the pole before it has reached its useful life. This is assessed on a case by case basis.

These factors have led Westario to adopt the following strategy:

- Inspect and monitor condition of poles as described earlier;
- Replace when conditions dictate replacement – thus, a proactive replacement basis;
- Continuing with the upgrades to the distribution system will eliminate a substantial amount of the older poles from the system;
- Continue with the preplanned 117 pole replacements, on average, per year. If inspections/testing reveal that pole conditions are worsening, a decision may be made to increase the number of pole replacements per year as required.

6.3.2.2 Municipal Substation

Westario owns and maintains 27 municipal substations (MS), where each is maintained once in a 3-year cycle, and all are inspected quarterly. Through this process, Westario has been able to create a prioritized list of substations that require refurbishing. This includes the refurbishment of transformers, station switchgear, breakers, fencing, grounding, that need replacing and upgrading. In addition, Westario has a strategy to install new SCADA equipment at each station it refurbishes, allowing these stations to be remotely monitored and operated. This undertaking enables Westario to adopt good utility practice.

Westario has identified several substations that are approaching the end of life. Since 2018, Westario has been replacing one station per year. Westario's current plan endeavors to replace one substation per year for the period of 2024-2028. In addition, Westario has performed system studies for Kincardine, having identified an increase in capacity requirements. This has helped identify solutions required in the Kincardine area to address these future capacity needs. Further details on the Kincardine voltage conversion project can be found in the material project narrative SR-05C, attached as part of Westario's Cost of Service application. Through Westario substation strategy, the average age of the station asset class will be significantly lowered, which will then place Westario in a better position to manage future replacements and upgrades.

6.3.2.2.1 Westario Investment Strategy

Westario's investment strategy is predicated on the following factors:

- The average age of Westario's substations is 33 years, with substations ranging from 4 – 59 years old. Forty-one (41) % of the 27 substations are greater than 45 years old and beyond their useful life;
- Testing of substation transformer oil is a very good predictor of when a transformer is reaching the end of its life and in need of replacement. Regular testing allows time to make decisions about transformer replacement, and capital investment is, therefore, based on a proactive approach. Westario also performs quarterly inspections and hires a contractor for annual gas and oil analysis to identity any emerging deficiencies;
- Asset Condition of the assets is used to help prioritize the order of investment. The poorer the condition of the assets the higher priority they are given.
- Westario uses a mobile substation to serve as a backup for any station in the system if necessary. (i.e., due to unexpected failures or to facilitate an outage at a station to carry out work)

These factors have led Westario to adopt the following strategy:

- Thorough analysis and reporting of the inspection results and close monitoring of older substations, with the poorest condition substations being addressed first;
- Due to a significant number of substations reaching end of useful life at a similar time, Westario has taken into the effect on rate impacts and has taken the decision to ensure that rate impacts are smoothed out over the forecast years. Therefore, Westario's capital budget process will include projects that upgrade or replace aging transformers and substation equipment at a rate of one substation per year.

The table below illustrates which years each station will be addressed. It should be noted that the order of these replacements could change depending on further inspections, customer driven information, or work-related issues.

Table 6-6: Substations to be Addressed.

Substation	Planned Renewal Year	Assets to be Replaced
Port Elgin MS1	2023	Substation transformer and Switchgear
Teeswater MS1	2024	Substation Transformer and Switchgear
Walkerton MS4	2025	Substation transformer and Switchgear

Port Elgin MS2	2026	Substation transformer and Switchgear
Port Elgin MS4	2027	Substation transformer and Switchgear
Hanover MS3	2028	Substation transformer and Switchgear

6.3.2.3 Pole Mounted Transformers

Westario's distribution system includes pole mount and pad mount transformers. Both pole mount and pad mount transformers are assessed based on inspection by Westario crews.

Pole mounted transformers are used to step down voltage from a primary level to a secondary utilization level on the overhead distribution system. These transformers are mounted above ground on a pole and are liquid-filled with mineral oil in a sealed tank. An industry standard[2] for the life expectancy for pole mounted transformers is 40 years.

Visual inspections are conducted annually. Transformers that are identified as showing deterioration are prioritized for replacement. According to the 2022 ACA, over 25% of pole-mount transformers are either past or will exceed their 40-year-old typical useful life (TUL) criteria by 2028.

Although some less critical distribution transformers are run to failure (e.g., those supplying a single customer), the replacement strategy proposed is to proactively replace the more critical distribution transformers (e.g., those serving a critical load or a high number of customers) when the condition or visual inspections indicates there is an increased risk of failure. Taking a proactive approach will eliminate the risk of a power outage and working after hours to replace a failed transformer, and as a result the cost per transformer will be decreased and controlled as the work can be performed during regular business hours avoiding overtime premiums. The proactive approach will also reduce outage time to customers and help provide customers with better reliability.

It should be noted, Westario does allocate capital to address those transformers that either fail unexpectantly or are identified to be part of its run to failure strategy. These are addressed under Westario's Distribution Transformer Replacement Program.

Westario proposes to replace pole mount transformers on a prioritized basis. Priority replacement will be reviewed on the basis of the safety risk and potential impact on the customer reliability indices.

6.3.2.3.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- The distribution transformer requires no maintenance;
- For some transformers, the outage impact of an individual transformer failure is limited to a very small number of customers and in some cases, due to the low-density nature of parts of the service territory, only one customer is involved. These are typically addressed as part of its capital program.
- For other transformers, where a greater number of customers are impacted, are prioritized as part of its pro-active strategy.

[2] OEB. Kinectrics Asset Depreciation Study. 2010

These factors have led Westario to adopt the following strategy:

- Determine the number of customers connected to each unit and use this to prioritize replacements based on the possible reliability impact, using GIS information.
- Inspect and monitor condition;
- Replace when conditions dictate - such as cracked bushings, leaking oil, etc.;
- Replace prior to failure, on a proactive basis;
- Closely monitor the number of failures occurring; if failure rates indicate an increasing trend, consider increasing the number of preplanned replacements to minimize the financial and operational effects of a large number of transformer replacements.
- Where minimal impact to customers is identified, use a run to failure strategy and replace it as part of its capital program.

In certain cases, distribution transformers will also be considered and prioritized for replacement as part of other ongoing programs, such as the decrepit pole program, underground infrastructure upgrade program or the fiberglass transformer base replacement, to enable cost efficiencies where possible.

6.3.2.4 Pad Mounted Transformers

Westario's distribution system includes pole mount and pad mount transformers. Both pole mount and pad mount transformers were assessed based on inspection by Westario crews.

Pad-mounted transformers are used to step down voltage from a primary level to a secondary utilization level on the distribution system. These transformers are typically mounted at grade level. Westario has a number that are installed in fiberglass housing which are planned to be replaced due to the deteriorating condition. Pad mounted transformers were installed on fiberglass foundations and are vintage from the 1970s to 1980s. These units are regularly inspected, and the foundations are degrading. The seasonal freeze-thaw cycle has begun to show on the fiberglass base structures and has led to the planned replacements. An industry standard[2] for the life expectancy for pad-mounted transformers is 40 years.

Visual inspections are conducted annually. Transformers that are identified as showing deterioration are prioritized for replacement.

Although some less critical distribution transformers are run to failure (e.g., those supplying a single customer), the replacement strategy proposed is to proactively replace the more critical distribution transformers (e.g., those serving a critical load or a high number of customers) when the condition or visual inspections indicates there is an increased risk of failure. Taking a proactive approach will eliminate the risk of a power outage and working after hours to replace a failed transformer, and as a result the cost per transformer will be decreased and controlled as the work can be performed during regular business hours avoiding overtime premiums. The proactive approach will also reduce outage time to customers and help provide customers with better reliability.

Priority replacement will be reviewed on the basis of the safety risk and potential impact on the customer reliability indices.

6.3.2.4.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- Pad mounted distribution transformers require very little maintenance. Maintenance is generally confined to replacing faded warning labels and potentially painting the units;
- The outage impact of an individual single phase pad mounted transformer failure is limited to usually 10-12 customers; the outage impact of an individual three phase pad mounted transformer failure is limited to one service site, either commercial or industrial.

These factors have led Westario to adopt the following strategy:

- Inspect and monitor condition;
- Replace when conditions dictate - such as rusted tanks and frames, cracked bushings, leaking oil, etc.;
- Replace prior to failure, on a proactive basis;
- Continue with the preplanned transformer replacements that warrant replacements as established from yearly inspections. If inspections reveal that transformer conditions are worsening, consider increasing the number of transformer replacements per year as required.

In certain cases, distribution transformers will also be considered and prioritized for replacement as part of other ongoing programs, such as the decrepit pole program, underground infrastructure upgrade program or the fiberglass transformer base replacement, to enable cost efficiencies where possible.

6.3.2.5 Infrastructure Upgrade

This program involves the proactive replacement of overhead and underground infrastructure, including poles, conductors, cables and transformers nearing or at the end of useful life. This is an annually recurring activity to replace aging assets, enhance safety, protect the environment, and improve system reliability. The types of projects that are included in this program include:

- Replacement of inaccessible rear lot infrastructure with standard front lot overhead or underground supply.
- Replacement of obsolete and end of life rear lot infrastructure with standardized assets.
- Specific, one-off projects to replace overhead or underground infrastructure in a street or location that are at risk of failure and have reached the end of life, and/or are obsolete assets.

An Infrastructure Upgrade project that funds the replacement of inaccessible rear lot infrastructure with standard front lot underground supply so that it can be accessed by Westario crews going forward.

6.3.2.5.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- Failure of infrastructure. Overhead and underground assets that are at or nearing the end of useful life and in poor or failing condition are prioritized for replacement.
- Underground assets are generally more reliable and customers in small residential streets prefer electricity infrastructure to be underground rather than overhead.
- Accessibility of infrastructure. For example, some rear-lot infrastructure is inaccessible, and therefore hard to maintain, and therefore would be prioritized for replacement and upgrade.

These factors have led Westario to adopt the following strategy:

- For inaccessible or hard to access OH rear-lot infrastructure, adopt a proactive strategy and upgrade this to standard front lot overhead or underground infrastructure.
- Replace and upgrade overhead and underground assets that are at or nearing the end of useful life and in poor or failing condition.

6.3.3 System Service

6.3.3.1 Meters

Westario uses meters for retail settlement and billing purposes for all customers connected to Westario's distribution system. Revenue meters have four primary drivers, including (a) new meters for new customers, (b) replacement of failed units, (c) reliability (elimination of meter types that have history of poor reliability) and (d) standardization. Without metering investments, Westario will not be able to accurately and correctly measure and bill customers for the electricity that they use.

Overall, these investments are required by the DSC, and are therefore customer-driven and mandatory. All maintenance activities related to meters follow the requirements of Measurement Canada guidelines, including the group sampling and reseal program. Westario has developed the metering investment program based upon historical information, forecast meters that will require replacement and customer forecast information.

6.3.3.1.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- All investments are required by the DSC and are mandatory.
- All meters are smart meters.
- Without metering investments, Westario will not be able to accurately and correctly measure and bill customers for the electricity that they use.

These factors have led Westario to adopt the following strategy:

- Replace, upgrade, reseal, calibrate meters as per the DSC guidelines.
- Follow the requirements of Measurement Canada guidelines, including the group sampling and reseal program.

6.3.4 General Plant

6.3.4.1 Fleet

Within Westario's General Plant assets are all types of vehicles, trailers, tensioners, diggers, etc. which are used for servicing the distribution assets. Many of these pieces of equipment are costly, which means that their replacement is one of the larger capital projects in Westario's asset management plan. Just like any other asset, vehicles and equipment have a life expectancy (based on age, mileage and condition), and therefore their replacement is planned and budgeted for.

This sub-category involves the purchase in three vehicle classifications: heavy duty; light/medium and trailer & miscellaneous. A vehicle is considered for replacement based on an expected life, condition, and usage. Westario has established an expected life for each class of vehicle. Replacement is

determined by achieving years of use, mileage or hours of use as per manufacturers' recommendations for replacement. Westario uses a limit of 200,000km as the point at which, in combination with age and condition, is used to assess if a vehicle requires replacement. The following Table illustrates the mileage as of December 2022:

Truck ID	Type	Odometer (Mileage) - December 2022
13	Dump Truck	120,064
15	Double Bucket	173,411
24	Single Bucket	246,715
52	Single Bucket	509,045
53	Pick Up - 4x4	219,094
54	Digger Truck	138,769
55	Double Bucket	105,266
61	RBD/Digger	105,266
62	Pick Up - 4x4	339,887
66	Pick Up - 4x4	290,061
68	Van	248,706
69	Pick Up - 4x4	148,626
70	Pick Up - 4x4	151,547
73	Pick Up - 4x4	85,989
74	Pick Up - 4x4	89,122
75	Pick Up - 4x4	93,675
76	Single Bucket	82,626
77	Dump Truck	46,132
78	Car	68,129
80	Single Bucket - Service Truck	44,140
81	Line Supervisor Truck	67,120
82	Pick Up - 4x4	5,000
83	SUV	17,127
84	Single Bucket - Service Truck	13,657

This expected life replacement approach is in keeping with industry practice and is important to assist Westario's ability to forecast vehicle spending, assist Westario in achieving a lower risk of catastrophic vehicle failure and enhancing Westario's ability to negotiate long term procurement contracts with vendors and realize savings.

6.3.4.1.1 Westario's Investment Strategy

Westario's investment strategy is predicated on the following factors:

- Vehicles categorized as heavy-duty are essential to the day-to-day operation of the utility;
- Due to the large service territory that requires a drive time of up to an hour, Westario's vehicle utilization tends to be high in comparison to other utilities of similar size;

- Westario's fleet management strategy links in the utility's other strategic priorities and also link in with the utility's environmental aims;
- The operations department, including the vehicle drivers, offers a broad perspective on the strategic direction of fleet management. Regular communication and consultation with these groups of users contribute to the strategy by being well-informed;
- Westario also looks outside the utility to consider the benefits of working with external bodies to provide the most effective and efficient fleet;
- As much as possible, Westario will try to reduce the number and length of journeys by adopting a well-planned and efficient scheduling process. This produces financial savings, reducing the impact on the environment and reducing the risk of accidents.

Appendix A: Map of Service Areas

Appendix B: Distribution System & Inspection under Ontario Regulation 22/04

Third Party contractors perform distribution system inspection per the DSC and ESA Reg. 22/04 for three-year cycle on a town by town basis per year. This inspection scope includes Pole-mounted Transformers, Pad-mounted Transformers, HV/LV Overhead switches, HV/LV UG switches, overhead conductor and poles.

Year 1 – Southampton and Port Elgin
Year 2 – Kincardine, Ripley, Lucknow, and Hanover.
Year 3 – Remaining towns.