

2022 OEB Custom Incentive Rate Progress Report

Hydro Ottawa Limited (“Hydro Ottawa”) uses Key Performance Indicators (“KPIs”) to measure continuous improvement in asset management planning, capital investment planning and customer-oriented performance. These indicators include quantitative and qualitative measures to monitor the effectiveness of planning processes, efficiencies in carrying out those plans, as well as identifying shortfalls as areas for continuous improvement. As part of Hydro Ottawa’s 2021-2025 (EB-2019-0261) Custom Incentive Rate (“CIR”) setting process, Hydro Ottawa committed to reporting annually¹ on the following:

- a) Custom Performance Scorecard²
- b) Capital Expenditure by capital spending program in the following categories:
 - System Access
 - System Service and System Renewal
 - General Plant
- c) Performance Outcomes Accountability Mechanism (POAM)

¹ Adjustments to prior year reporting will be completed on a go forward basis and may result in differences between previous CIR reports.

² This custom report is produced in addition to mandatory OEB reporting mechanisms that are applicable to all electricity distributors, such as the annual Electricity Utility Scorecard and RRR requirements. It includes KPIs not included in other reporting mechanisms.

CUSTOM PERFORMANCE SCORECARD

Hydro Ottawa’s Custom Performance Scorecard for the 2021-2025 rate term expands on the KPI reporting established for the 2016-2020 CIR annual report. Targets for each custom measure are informed by historical data and will be assessed over the five-year period. The Custom Performance Scorecard has been arranged in four sections to provide insight into Hydro Ottawa’s progress in the areas of Customer Focus, Operational Effectiveness, Public Policy Responsiveness and Financial Performance.

Customer Focus

The Customer Focus performance metrics are intended to measure how services provided respond to identified customer preferences.

OEB Category	Hydro Ottawa Custom Measures	Target Outcome	2021	2022	2023	2024	2025
Customer Satisfaction	Contact Centre Satisfaction Feedback	Maintain	88%	84%			
	Number of MyAccount Customers	Increase	242,826	256,721			
	Number of Online Billing Accounts	Increase	207,995	221,848			

Operational Effectiveness

The Operational Effectiveness performance metrics are designed to report on continuous improvement in productivity and cost performance, as well as to monitor system reliability and quality.

OEB Category	Hydro Ottawa Custom Measures	Target Outcome	2021	2022	2023	2024	2025
Safety	All Injury/Illness Frequency Rate	Reduce	1.17	0.74			
	Lost Workday Severity Rate	Reduce	3.11	2.40			
System Reliability	Customer Average Interruption Duration Index (CAIDI) Excluding Loss of Supply	Monitor	1.42	29.35			
	CAIDI Excluding Major Events and Loss of Supply	Monitor	1.33	1.48			
	Feeders Experiencing Multiple Sustained Interruptions	Maintain	5	4			
	Worst Feeder Analysis – Number of Feeders ³	Reduce	6	7			
	Stations Exceeding Planning Capacity	≤5%	7.7%	4.3%			
	Feeders Exceeding Planning Capacity	≤10%	1.0%	0.9%			
	Stations Approaching 90% of Rated Capacity	0%	1.1%	0.0%			
	Feeders Approaching 90% of Rated Capacity	0%	0.1%	0.0%			
	Cost Control	Productive Time ⁴	Maintain	73%	69%		
Labour Allocation ⁵		Maintain	29%	35%			
3-Year Average Cost per Pole – Wood Pole Replacement		Monitor	\$8,262	\$9,205			
3-Year Average Cost per Meter – Underground Cable		Monitor	\$50	\$60			
Average Cost per Kilometer – Vegetation Management		Monitor	\$3,834	\$3,797			
Average Cost per Pole – Pole Test and Inspection		Monitor	\$28	\$19			
Asset Efficiency	Technology Infrastructure Cost per Employee	Monitor	\$32,301	\$33,777			

³ The number of feeders that experienced 10 or more sustained outages greater than 1 minute. Indicates areas with the most localized issues.

⁴ The total regular hours charged to a work order as a proportion of total regular hours.

⁵ The amount of labour charged to maintenance and administrative work as a proportion of total productive time.

Public Policy Responsiveness

Public Policy Responsiveness performance metrics are designed to demonstrate Hydro Ottawa’s commitment to assuring a heightened level of accountability for reporting on actions related to environmental protection.⁶

OEB Category	Hydro Ottawa Custom Measures	Target Outcome	2021	2022	2023	2024	2025
Environment	Annual Oil Spills (litres)	Reduce	804	781			
	Annual Oils Spills Costs of Remediation (\$M)	Reduce	\$1.69	\$1.97			
	Non-hazardous Waste Diversion rate	Maintain	94%	95%			
	Percentage of Green Suppliers (% of services and products procured from local suppliers)	Maintain	46%	45%			

Financial Performance

Financial Performance metrics are intended to measure continuous improvement and financial viability, and to be responsive to customer input.

OEB Category	Hydro Ottawa Custom Measures	Target Outcome	2021	2022	2023	2024	2025
Financial Metrics	OM&A per Customer	Monitor	\$239.83	\$279.71			
	Bad Debt as a Percentage of Total Electricity Revenue	Monitor	0.07%	0.18%			
	Cumulative Capital Additions – System Access	≥ Approved Target	101%	100%			
	Cumulative Capital Additions – System Renewal and System Service	≥ Approved Target	108%	102%			
	Cumulative Capital Additions – General Plant ⁷	≥ Approved Target	52%	84%			
	Annual Capital Spending per Investment Category	Monitor	see Capital Expenditures Annual Report below				

⁶ Measures responsiveness to legislative or ministerial obligations that are further to directives received through the Ontario Energy Board

⁷ General Plant includes Connection Cost Recovery Agreements (“CCRA”)

CAPITAL EXPENDITURES ANNUAL REPORT

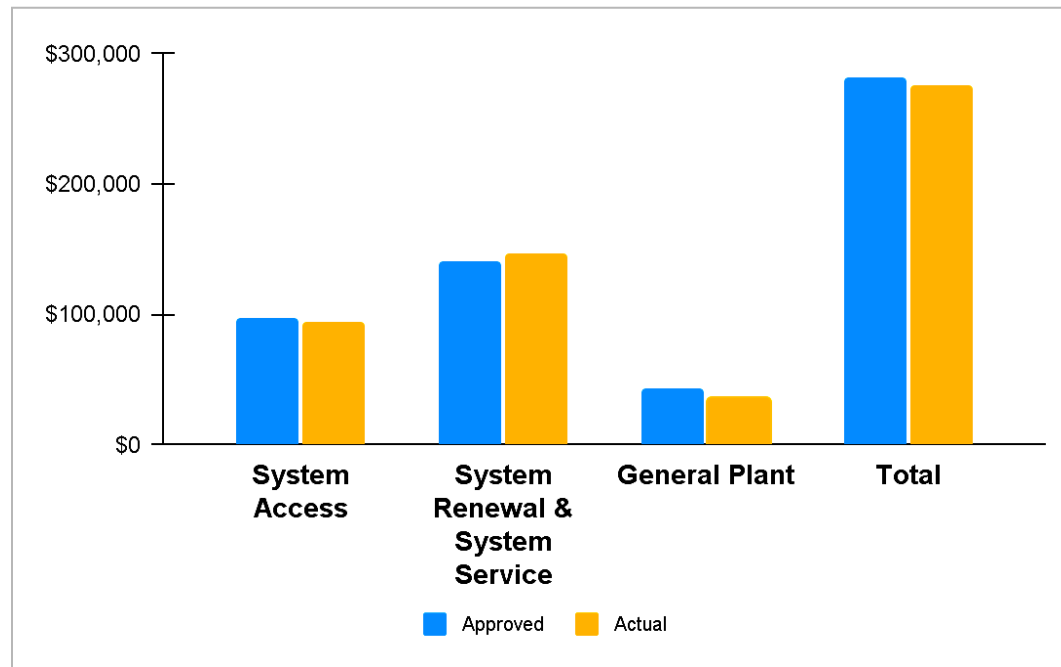
For the 2021-2025 rate period, Hydro Ottawa will continue to publish annual updates on the progress of capital spending in key categories. These updates track actual gross capital expenditures by program type (i.e. System Access, System Renewal and System Service, and General Plant) versus approved capital expenditures detailed in the 2021-2025 Approved Settlement Agreement⁸. As part of this Settlement Agreement, a \$10 million reduction to capital spending over the five years was agreed to and has been incorporated into the System Service, System Renewal and General Plant Approved amounts.

The objective of reporting on the progress of capital spending is to enhance transparency and accountability in the utility's execution of its capital programs by providing stakeholders the ability to evaluate the utility's capability to fulfill the commitments made around capital spending in its 2021-2025 Custom IR application.

⁸ Hydro Ottawa Limited, *2021-2025 Custom Incentive Rate-Setting Approved Settlement Proposal*, EB-2019-0261 (September 18, 2020)

The Distribution System Plan (DSP) cumulative actual gross capital expenditure for 2021-2022 is underspent when compared to the Approved amount. Figure 1 below provides the detail by investment categories.

Figure 1 - DSP Cumulative Gross Spending Compared to Approved Amount (\$000)



	System Access	System Renewal & System Service	General Plant	Total
Approved	97,724	141,441	43,113	282,278
Actual	94,724	146,544	35,176	276,444

System Access:

System Access capital spending is driven by customer requests. As a result Hydro Ottawa has limited control over activity in this category of spending. See Table 1 for progress on System Access capital spending compared to the Approved amounts. Underspending on System Expansion and Commercial development projects was partially offset by an overspend in Residential Subdivision projects. Overall there was a 3% total cumulative underspending in this category when compared to Approved amounts for 2021-2022.

Table 1 - Gross Capital Spending Compared to Rate Application Approved Amount - System Access (\$000)

Capital Program	Budget Program	2022			Cumulative		
		Approved	Actual	Variance	Approved	Actual	Variance
Plant Relocation & Upgrade	Plant Relocation & Upgrade	8,418	7,604	(814)	18,553	17,605	(948)
Residential Subdivision	Residential Subdivision	4,999	12,512	7,513	9,892	24,700	14,808
Commercial Development	New Commercial Development	13,465	12,963	(502)	29,544	26,059	(3,485)
System Expansion	System Expansion Demand	6,920	7,783	863	23,505	15,106	(8,399)
	Long Term Load Transfers	0	0	0	0	0	0
	PSPC Asset Transfer	1,765	2,145	380	5,295	2,996	(2,299)
Embedded Generation	Embedded Generation	296	68	(228)	656	315	(341)
Infill Service	Infill Service (Res and Small Comm)	4,221	3,623	(598)	8,385	6,937	(1,448)
	ESA Flash Notice		13	13		74	74
Metering	Metering - Reverification		22	22		73	73
	Meter Damage / Upgrade		46	46		181	181
	Suite Metering	947	284	(663)	1,894	678	(1,216)
Total Spending		41,031	47,063	6,032	97,724	94,724	(3,000)

System Renewal and System Service:

System Renewal spending is incurred for replacement and refurbishment of system assets to extend original service life. System Service spending covers modifications to Hydro Ottawa’s distribution system to ensure the system meets operational objectives while addressing future customer needs. See Table 2 for a summary of progress on System Renewal and System Service capital spending compared to the Approved amounts. Overall there was a 4% total cumulative overspending in this category when compared to Approved amounts for 2021-2022.

In May 2022, Hydro Ottawa experienced an unprecedented weather event in its service territory marking the most devastating event in the company’s history. Winds of up to 190 kilometers per hour toppled transmission towers, damaged more than 500 hydro poles and downed many kilometers of power lines. There were more than 1,000 simultaneous power outages across Hydro Ottawa’s service territory that left over 50% of Hydro Ottawa customers without power. The Derecho storm resulted in \$24M in unexpected costs including \$15.3 million in capital expenditures for Hydro Ottawa, and was the sixth most expensive natural disaster in Canadian history. The equivalent of four years of emergency asset replacements were made to Hydro Ottawa’s distribution grid over the course of a two-week period.

Table 2 - Gross Capital Spending Compared to Rate Application Approved Amount - Summary System Renewal and System Service (\$000)

Investment Category	2022			Cumulative		
	Approved	Actual	Variance	Approved	Actual	Variance
System Renewal	44,012	64,966	20,954	89,435	108,216	18,781
System Service	26,571	14,336	(12,235)	52,006	38,328	(13,678)
Total Spending	70,583	79,302	8,719	141,441	146,544	5,103

Tables 3 and 4 provide a detailed look at Budget Program spending for System Renewal and System Service.

Table 3 - Gross Capital Spending Compared to Rate Application Approved Amount - System Renewal (\$000)

Capital Program	Budget Program	2022			Cumulative		
		Approved	Actual	Variance	Approved	Actual	Variance
Station Assets Renewal	Station Transformer Renewal	0	649	649	2,365	1,856	(509)
	Station Switchgear Renewal	2,242	2,162	(80)	3,814	5,615	1,801
	Station Major Rebuild	8,342	6,382	(1,960)	13,067	9,027	(4,040)
	Station P&C Renewal	618	1,112	494	1,194	2,084	890
	Station Battery Renewal	84	44	(40)	168	68	(100)
	Station Minor Assets Renewal	785	694	(91)	1,401	1,111	(290)
	Station Decommission		1,002	1,002		1,354	1,354
OH Distribution Assets Renewal	Pole Renewal	8,044	8,189	145	16,043	17,311	1,268
	Insulator Replacement	0	0	0	0	1	1
	OH Transformer Renewal	0	0	0	0	0	0
	OH Switch/Recloser Renewal	751	66	(685)	751	230	(521)
UG Distribution Assets Renewal	Elbow & Insert Replacement	0	0	0	0	0	0
	Vault Renewal	496	459	(37)	992	465	(527)
	Civil Renewal	1,010	1,137	127	2,020	1,686	(334)
	Cable Renewal	8,453	15,366	6,913	17,425	25,032	7,607
	UG Switchgear Renewal	605	771	166	1,210	706	(504)
	Cable Rejuvenation	0	0	0	0	0	0
	UG Transformer Renewal	216	73	(143)	216	75	(141)
Corrective Renewal	Damage to Plant	1,026	1,127	101	2,069	1,678	(391)
	Emergency Renewal	4,482	21,911	17,429	11,089	30,486	19,397
	Critical Renewal	4,297	3,499	(798)	8,595	7,626	(969)
Metering Renewal	Metering Upgrades	2,561	323	(2,238)	7,016	1,805	(5,211)
Total Spending		44,012	64,966	20,954	89,435	108,216	18,781

Table 4 - Gross Capital Spending Compared to Rate Application Approved Amount - System Service (\$000)

Capital Program	Budget Program	2022			Cumulative		
		Approved	Actual	Variance	Approved	Actual	Variance
Capacity Upgrades	Stations Capacity Upgrades	6,112	1,819	(4,293)	23,043	20,335	(2,708)
	Distribution Capacity Upgrades	3,605	4,956	1,351	6,466	7,157	691
Distribution Enhancements	Distribution System Reliability	5,683	1,043	(4,640)	6,685	1,453	(5,232)
	System Voltage Conversion	3,034	220	(2,814)	3,034	1,607	(1,427)
	Distribution Enhancements	3,673	2,502	(1,171)	5,284	3,139	(2,145)
Grid Technologies	SCADA Upgrades	2,961	2,604	(357)	4,185	2,754	(1,431)
	RTU Upgrades	0	0	0	0	0	0
	Communication Infrastructure	1,044	(46)	(1,090)	1,946	545	(1,401)
Station Enhancements	Station Enhancements	459	1,238	779	1,363	1,337	(26)
	Station Reliability	0	0	0	0	0	0
Metering	Remote Disconnected Smart Meter	0	0	0	0	1	1
Total Spending		26,571	14,336	(12,235)	52,006	38,328	(13,678)

General Plant:

Cumulative capital spending in the General Plant category is 18% below the cumulative Approved amount at year end 2022. The COVID-related supply chain and microchip production issues impacted the 2021 and 2022 Fleet replacement spend. Hydro One payments are below the Approved amount. See Table 5 for the progress on General Plant capital spending compared to Approved amounts.

Table 5 - Gross Capital Spending Compared to Rate Application Approved Amount - General Plant (\$000)

Capital Program	Budget Program	2022			Cumulative		
		Approved	Actual	Variance	Approved	Actual	Variance
Facilities Management	Facilities Management	428	2,085	1,657	857	2,640	1,783
Fleet Replacement	Fleet Replacement	4,526	4,654	128	10,772	5,912	(4,860)
Tools Replacement	Tools Replacement	474	564	90	948	1,267	319
IT Life Cycle & Ongoing Enhancements	IT Life Cycle & Ongoing Enhancements	1,360	2,281	921	3,323	3,617	294
IT New Initiatives	IT New Initiatives	384	583	199	1,402	1,023	(379)
ERP System	ERP System	644	306	(338)	1,580	488	(1,092)
Customer Service	Customer Service	1,616	2,572	956	4,155	3,632	(523)
Operation Initiatives	Operation Initiatives	1,572	716	(856)	2,948	2,011	(937)
Hydro One Payments	Hydro One Payments	210	(2,318)	(2,528)	17,128	14,586	(2,542)
Total Spending		11,214	11,443	229	43,113	35,176	(7,937)

PERFORMANCE OUTCOMES ACCOUNTABILITY MECHANISM

The POAM, established for the 2021-2025 CIR rate period, supports the objectives of the Ontario Energy Board's Renewed Regulatory Framework (RRF) by establishing and monitoring outcomes-based measures and targets related to achievement of the objectives in Hydro Ottawa's 2021-2025 DSP. The purpose of this mechanism is to monitor alignment between the interests of the utility and those of its customers, while supporting the ongoing evolution of the RRF. In 2022 two of the five POAM targets were not met: SAIDI - Excluding Major Event Days and Loss of Supply and Wood Pole Replacement Unit Cost. As a result \$400K was credited to the POAM Deferral Account.

Table 6 - Metric #1

Metric	2021	2022	2023	2024	2025	
# of Service Interruptions Caused by Defective OH Equipment - Excluding Major Event Days		●	●			
	Target	115	115	115	111	111
	Actual	77	82			

Green ≤Target

Yellow >Target and <110% Target

Red ≥110% Target

Table 7 - Metric #2

Metric		2021	2022	2023	2024	2025
# of Service Interruptions Caused by Defective UG Equipment - Excluding major Event Days & Leaking Padmount Transformers		●	●			
	Target	114	114	114	110	110
	Actual	105	90			

Green ≤Target

Yellow >Target and <110% Target

Red ≥110% Target

Table 8 - Metric #3

Metric		2021	2022	2023	2024	2025
System Average Interruption Duration Index (SAIDI) - Excluding Major Event Days & Loss of Supply		●	✘			
	Target	0.91	0.91	0.91	0.89	0.89
	Actual	0.83	1.02			

Green ≤Target

Yellow >Target and <105% Target

Red ≥105% Target

Table 9 - Metric #4

Metric		2021	2022	2023	2024	2025
Wood Pole Replacement Unit Cost (\$ per Pole)		●	✖			
	Target	\$8,510	\$8,510	\$8,510	\$8,510	\$8,510
	Actual	\$8,415	\$9,951			

Green ≤Target

Yellow >Target and <105% Target

Red ≥105% Target

Table 10 - Metric #5

Metric		2021	2022	2023	2024	2025
Underground Cable Replacement Cost (\$ per Km of Cable)		●	●			
	Target	\$103,051	\$103,051	\$103,051	\$103,051	\$103,051
	Actual	\$62,244	\$101,334			

Green ≤Target

Yellow >Target and <105% Target

Red ≥105% Target