

2021 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 annually on the following:

- a) Custom Performance Scorecard¹
- 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 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%				
	Number of MyAccount Customers	Increase	242,826				
	Number of Online Billing Accounts	Increase	207,995				

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				
	Lost Workday Severity Rate	Reduce	3.11				
System Reliability	Customer Average Interruption Duration Index (CAIDI)	Monitor	1.42				
	CAIDI Excluding Major Events and Loss of Supply	Monitor	0.83				
	Feeders Experiencing Multiple Sustained Interruptions	Maintain	5				
	Worst Feeder Analysis – Number of Feeders ²	Reduce	6				
	Stations Exceeding Planning Capacity	≤5%	7.7%				
	Feeders Exceeding Planning Capacity	≤10%	1.0%				
	Stations Approaching 90% of Rated Capacity	0%	1.1%				
	Feeders Approaching 90% of Rated Capacity	0%	0.1%				
Cost Control	Productive Time ³	Maintain	73%				
	Labour Allocation ⁴	Maintain	29%				
	3-Year Average Cost per Pole – Wood Pole Replacement	Monitor	\$8,099				
	3-Year Average Cost per Meter – Underground Cable	Monitor	\$50				
	Average Cost per Kilometer – Vegetation Management	Monitor	\$3,834				
	Average Cost per Pole – Pole Test and Inspection	Monitor	\$28				
Asset Efficiency	Technology Infrastructure Cost per Employee	Monitor	\$32,301				

² The number of feeders that experienced 10 or more sustained outages greater than 1 minute. Indicates areas with the most localized issues.

³ The total regular hours charged to a work order as a proportion of total regular hours.

⁴ 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.⁵

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

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				
	Bad Debt as a Percentage of Total Electricity Revenue	Monitor	0.07%				
	Cumulative Capital Additions – System Access	≥Approved Target	101.24%				
	Cumulative Capital Additions – System Renewal and System Service	≥Approved Target	107.51%				
	Cumulative Capital Additions – General Plant	≥Approved Target	52.41%				
	Annual Capital Spending per Investment Category	Monitor	see Capital Expenditures Annual Report below				

⁵ Measures responsiveness to legislative or ministerial obligations that are further to directives received through the Ontario Energy Board

CAPITAL EXPENDITURES ANNUAL REPORT

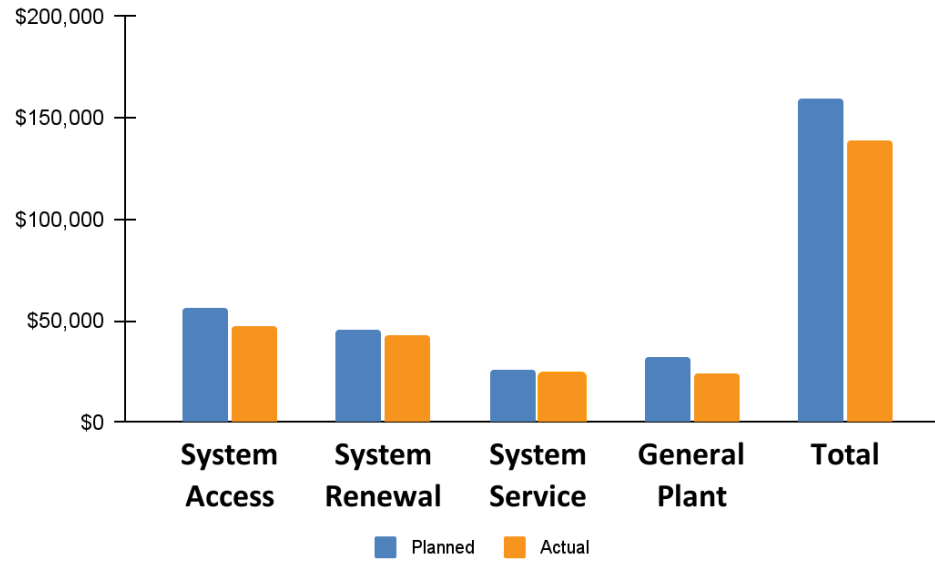
For the 2021 - 2025 rate period, Hydro Ottawa will continue to publish annual updates on the progress of capital spending in key categories. These updates track actual capital expenditures by program type (i.e. System Access, System Renewal and System Service, and General Plant) versus planned capital expenditures (Plan) detailed in the 2021 - 2025 Settlement Agreement⁶. As part of the Settlement Agreement, a \$10 million reduction to capital spending over the five years was agreed to and has been incorporated into the System Service and General Plant Plan numbers.

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.

2021's underspending to the Plan by capital program is depicted in Fig. 1 below. Underspending in the first year of the rebasing period is largely due to deferral of several projects, including the completion of the South Nepean station project.

⁶ Hydro Ottawa Limited, *2021-2025 Custom Incentive Rate-Setting Approved Settlement Proposal*, EB-2019-0261 (September 18, 2020)

Fig. 1 - DSP Cumulative Spending Compared to Plan (\$000) - 2021



	System Access	System Renewal	System Service	General Plant	Total
Planned	56,692	45,422	25,436	31,900	159,450
Actual	47,660	43,253	23,992	23,730	138,635

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. Plans are based on historical trends. See Table 1 for 2021 progress on System Access capital spending compared to the Plan. Underspending on System Expansion projects is the main contributor to 15.9% total underspending in this category.

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

Investment Category / Capital Program	Budget Program	2021			Cumulative		
		Planned	Actual	Variance	Planned	Actual	Variance
Plant Relocation & Upgrade	Plant Relocation & Upgrade	10,135	10,001	(134)	10,135	10,001	(134)
Residential Subdivision	Residential Subdivision	4,893	12,188	7,295	4,893	12,188	7,295
Commercial Development	New Commercial Development	16,078	13,096	(2,982)	16,078	13,096	(2,982)
System Expansion	System Expansion Demand	16,585	7,323	(9,262)	16,585	7,323	(9,262)
	Long Term Load Transfers	0	0	0	0	0	0
	PSPC Asset Transfer	3,530	851	(2,679)	3,530	851	(2,679)
Embedded Generation	Embedded Generation	360	247	(113)	360	247	(113)
Infill Service	Infill Service (Res and Small Comm)	4,164	3,315	(849)	4,164	3,315	(849)
	ESA Flash Notice	0	60	60	0	60	60
Corrective Renewal	Damage to Plant	0	0	0	0	0	0
Metering	Metering - Reverification	0	51	51	0	51	51
	Meter Damage / Upgrade	0	134	134	0	134	134
	Suite Metering	947	394	(553)	947	394	(553)
Total Spending		56,692	47,660	(9,032)	56,692	47,660	(9,032)

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 2021 progress on System Renewal and System Service capital spending compared to Plan. Actual spending on System Renewal and System Service was under Plan by \$3.6M in 2021. Tables 3 and 4 provide a detailed look at Budget Program spending for System Renewal and System Service.

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

Summary Investment Category / Capital Program	2021			Cumulative		
	Planned	Actual	Variance	Planned	Actual	Variance
System Renewal	45,422	43,253	(2,169)	45,422	43,253	(2,169)
System Service	25,436	23,992	(1,444)	25,436	23,992	(1,444)
Total Spending	70,858	67,245	(3,613)	70,858	67,245	(3,613)

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

Investment Category / Capital Program	Budget Program	2021			Cumulative		
		Planned	Actual	Variance	Planned	Actual	Variance
Station Assets Renewal	Station Transformer Renewal	2,365	1,207	(1,158)	2,365	1,207	(1,158)
	Station Switchgear Renewal	1,572	3,453	1,881	1,572	3,453	1,881
	Station Major Rebuild	4,725	2,645	(2,080)	4,725	2,645	(2,080)
	Station P&C Renewal	576	972	396	576	972	396
	Station Battery Renewal	84	24	(60)	84	24	(60)
	Station Minor Assets Renewal	616	417	(199)	616	417	(199)
	Station Decommission	0	353	353	0	353	353
	Station Ground Grid Renewal	0	0	0	0	0	0
OH Distribution Assets Renewal	Pole Renewal	7,999	9,122	1,123	7,999	9,122	1,123
	Insulator Replacement	0	1	1	0	1	1
	OH Transformer Renewal	0	0	0	0	0	0
	OH Switch/Recloser Renewal	0	164	164	0	164	164
UG Distribution Assets Renewal	Elbow & Insert Replacement	0	0	0	0	0	0
	Vault Renewal	496	6	(490)	496	6	(490)
	Civil Renewal	1,010	549	(461)	1,010	549	(461)
	Cable Renewal	8,972	9,666	694	8,972	9,666	694
	UG Switchgear Renewal	605	(64)	(669)	605	(64)	(669)
	Cable Rejuvenation	0	0	0	0	0	0
	UG Transformer Renewal	0	3	3	0	3	3
Corrective Renewal	Damage to Plant	1,043	551	(492)	1,043	551	(492)
	Emergency Renewal	6,607	8,575	1,968	6,607	8,575	1,968
	Critical Renewal	4,297	4,127	(170)	4,297	4,127	(170)
	Stations Plant Failure	0	0	0	0	0	0
Metering Renewal	Metering Upgrades	4,455	1,482	(2,973)	4,455	1,482	(2,973)
Total Spending		45,422	43,253	(2,169)	45,422	43,253	(2,169)

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

Investment Category / Capital Program	Budget Program	2021			Cumulative		
		Planned	Actual	Variance	Planned	Actual	Variance
Capacity Upgrades	Stations Capacity Upgrades	16,931	18,516	1,585	16,931	18,516	1,585
	Distribution Capacity Upgrades	2,860	2,201	(659)	2,860	2,201	(659)
Distribution Enhancements	Line Extension	0	1	1	0	1	1
	Distribution System Reliability	1,002	408	(594)	1,002	408	(594)
	System Voltage Conversion	0	1,387	1,387	0	1,387	1,387
	Distribution Enhancements	1,612	637	(975)	1,612	637	(975)
Grid Technologies	SCADA Upgrades	970	151	(819)	970	151	(819)
	RTU Upgrades	254	0	(254)	254	0	(254)
	Communication Infrastructure	902	591	(311)	902	591	(311)
Station Enhancements	Station Enhancements	905	99	(806)	905	99	(806)
	Station Minor Enhancements	0	0	0	0	0	0
	GT Distribution Automation	0	0	0	0	0	0
	AU Stations Automation	0	0	0	0	0	0
	Station Reliability	0	0	0	0	0	0
Metering	Remote Disconnected Smart Meter	0	1	1	0	1	1
Total Spending		25,436	23,992	(1,444)	25,436	23,992	(1,444)

General Plant:

Capital spending in Hydro Ottawa's General Plant category is 25.6% below Rate Application plan for 2021. Planned 2021 spending on major projects in the Fleet Replacement and Customer Service Programs have been impacted by COVID-related supply chain and microchip production issues. See Table 5 for 2021 progress on General Plant capital spending compared to plan.

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

Investment Category / Capital Program	Budget Program	2021			Cumulative		
		Planned	Actual	Variance	Planned	Actual	Variance
Facilities Management	Facilities Management	428	551	123	428	551	123
Fleet Replacement	Fleet Replacement	6,247	1,258	(4,989)	6,247	1,258	(4,989)
Tools Replacement	Tools Replacement	474	704	230	474	704	230
IT Life Cycle & Ongoing Enhancements	IT Life Cycle & Ongoing Enhancements	1,963	1,336	(627)	1,963	1,336	(627)
IT New Initiatives	IT New Initiatives	1,018	440	(578)	1,018	440	(578)
ERP System	ERP System	936	182	(754)	936	182	(754)
Customer Service	Customer Service	2,539	1,061	(1,478)	2,539	1,061	(1,478)
Operation Initiatives	Operation Initiatives	1,377	1,295	(82)	1,377	1,295	(82)
Hydro One Payments	Hydro One Payments	16,918	16,903	(15)	16,918	16,903	(15)
Total Spending		31,900	23,730	(8,170)	31,900	23,730	(8,170)

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 Distribution Spending Plan. 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 2021 each of the five POAM targets was met.

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				

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				

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	0.82				

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				

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				

Green ≤Target

Yellow >Target and <105% Target

Red ≥105% Target