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via Regulatory Electronic Submission System (RESS)

May 22, 2024

Ms. Nancy Marconi, Registrar
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th floor
Toronto, ON M4P 1E4

Dear Ms. Marconi:

**Re: OEB File No. EB-2023-0195, Toronto Hydro-Electric System Limited (“Toronto Hydro”)
2025-2029 Custom Rate Application for Electricity Distribution Rates and Charges –
Evidence Overview Presentation Exhibits KP1.1 and KP1.2**

Please find enclosed with this letter Toronto Hydro’s materials from the May 22nd Evidence Overview Presentation:

- Exhibit KP1.1 – Evidence Presentation Overview (including the Table of References)
- Exhibit KP1.2 – Evidence Presentation Look Book

Toronto Hydro identified a transposition error on slide 25 where the 2020-2024 Fleet and Equipment Services expenditures should read “\$37” rather than “\$85” and has corrected this in the above materials.

Sincerely,

Daliana Coban
Director, Regulatory Applications & Business Support
Toronto Hydro-Electric System Limited

Cc: Charles Keizer and Arlen Sternberg, Torys LLP; all intervenors

2025-2029 CUSTOM RATE APPLICATION OVERVIEW

May 22, 2024

EB-2023-0195

This record has been prepared by and under the supervision of Toronto Hydro's senior management team for the purposes of providing advice and recommendations to the institution. It contains sensitive commercial information, including material facts, material changes and/or pending policy decisions, regarding the institution that have not yet been put into operation or made public. Any unauthorized or premature disclosure of this information will prejudice Toronto Hydro's economic interests, financial interests, legal interests and competitive position. In addition, any such disclosure could give rise to a breach of law, including applicable securities laws. Any unauthorized disclosure is strictly prohibited.



AGENDA

- 1 Custom Incentive Rate Framework
- 2 Distribution System Plan
- 3 Distribution Grid Operations
- 4 Customer Service & Experience

CUSTOM INCENTIVE RATE FRAMEWORK



REGULATORY EVOLUTION

KEY CHALLENGES



Uncertainty

Although the path to Net Zero remains uncertain, all scenarios point to an inevitable increase in electricity demand. We must act now to prepare the grid for the future, and also be flexible to adapt if the path or pace of decarbonizations changes.

Performance



Performance

Balancing service quality, efficiency and financial performance outcomes in a time of change, growth and development.

Uncertainty



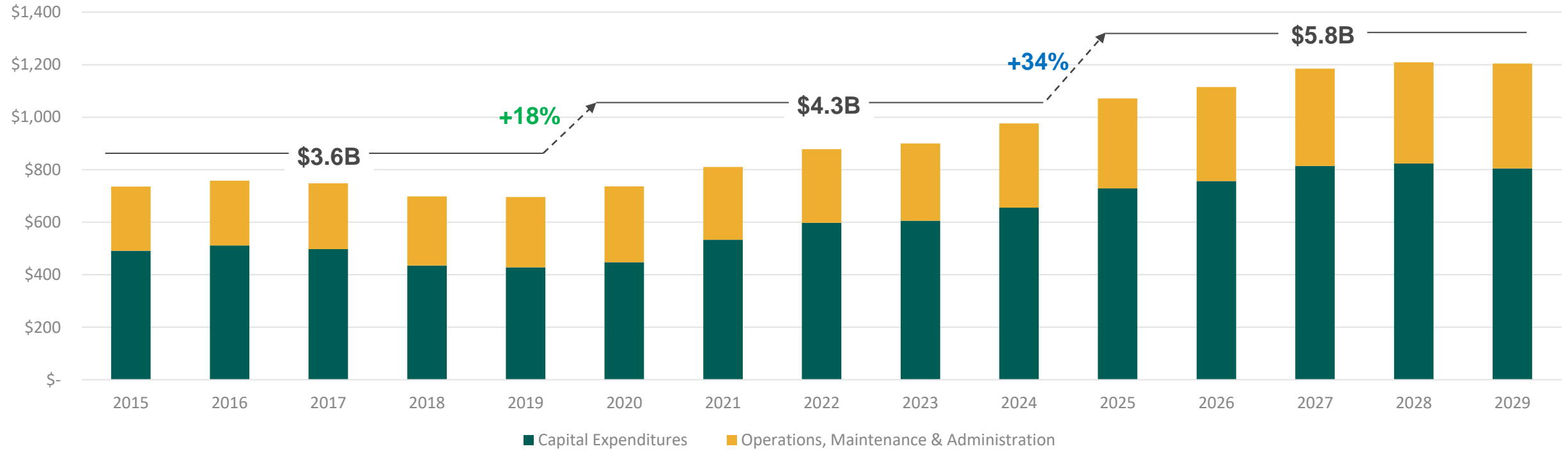
Funding

Multi-year investment needs in capital and OM&A programs to sustain, expand and modernize our grid and operations.

Funding

FUNDING CHALLENGE

INVESTMENT PLAN

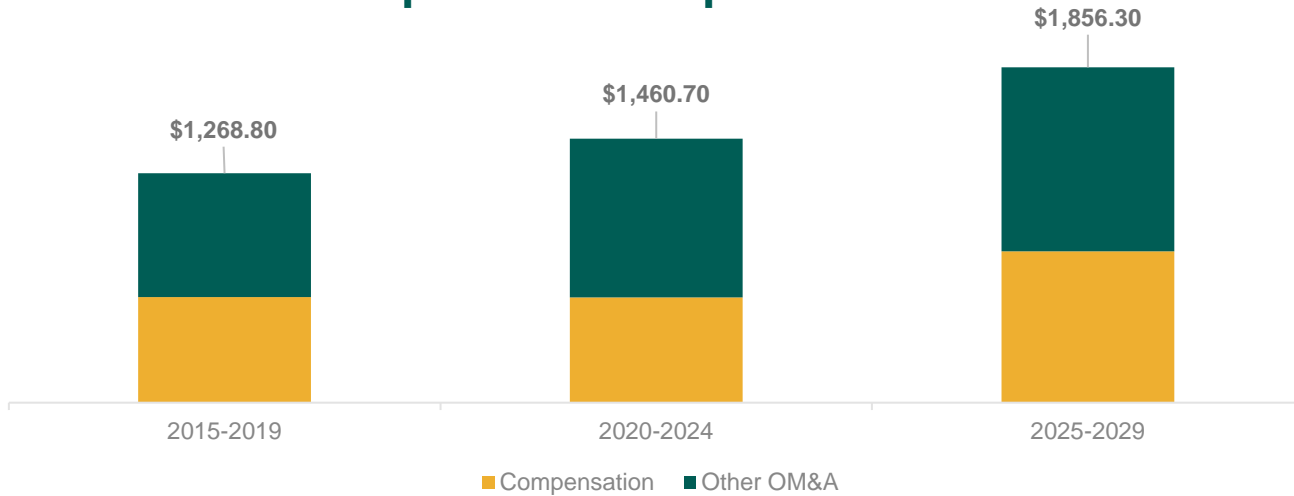


	2015-2019	2020-2024	2025-2029
OM&A	\$1,272M	\$1,461M	\$1,856M
CAPEX	\$2,364M	\$2,841M	\$3,929M
% OM&A	35%	34%	32%
% CAPEX	65%	66%	68%

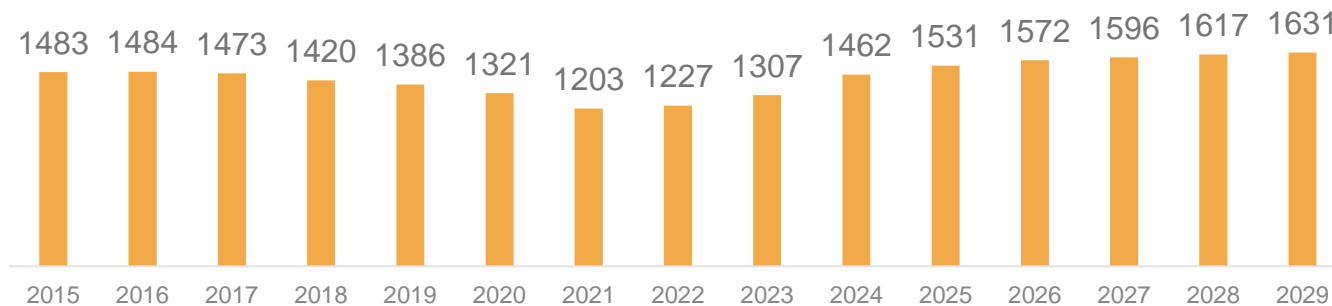
FUNDING CHALLENGE

OPERATIONS & WORKFORCE

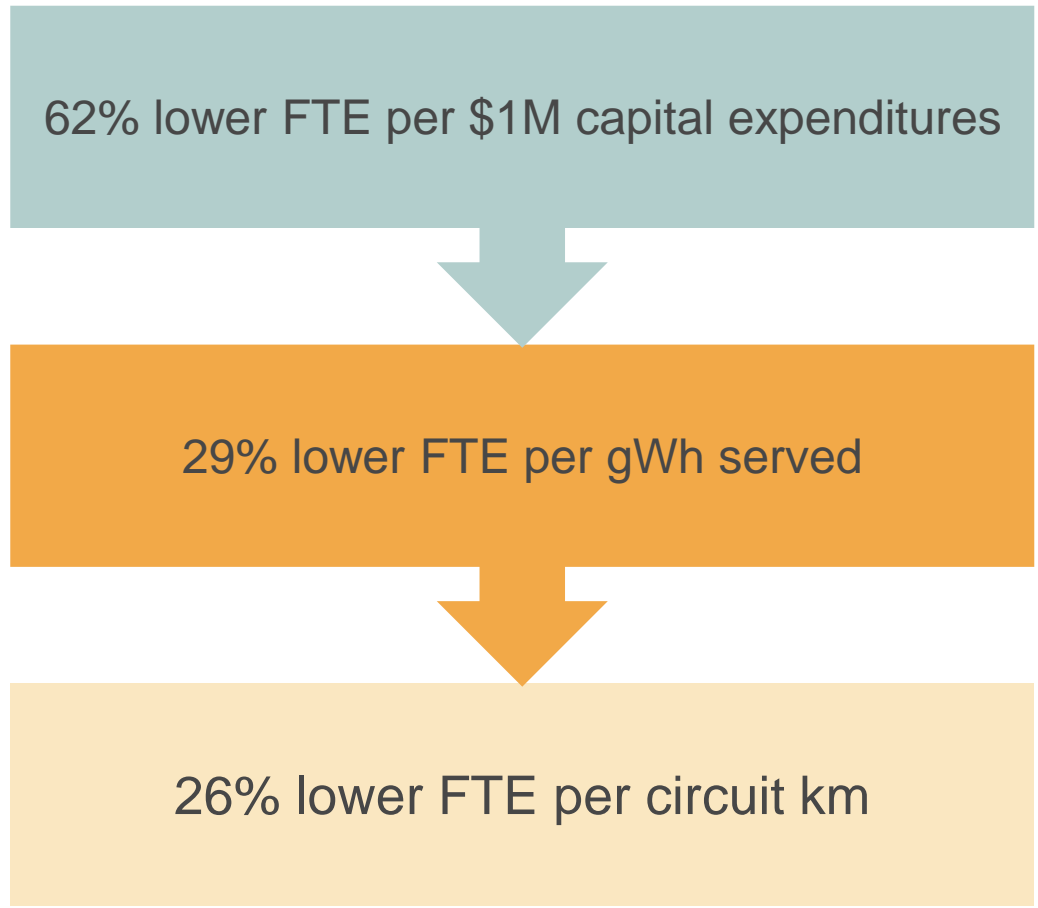
Operational Expenditures



Workforce Compliment (FTE)

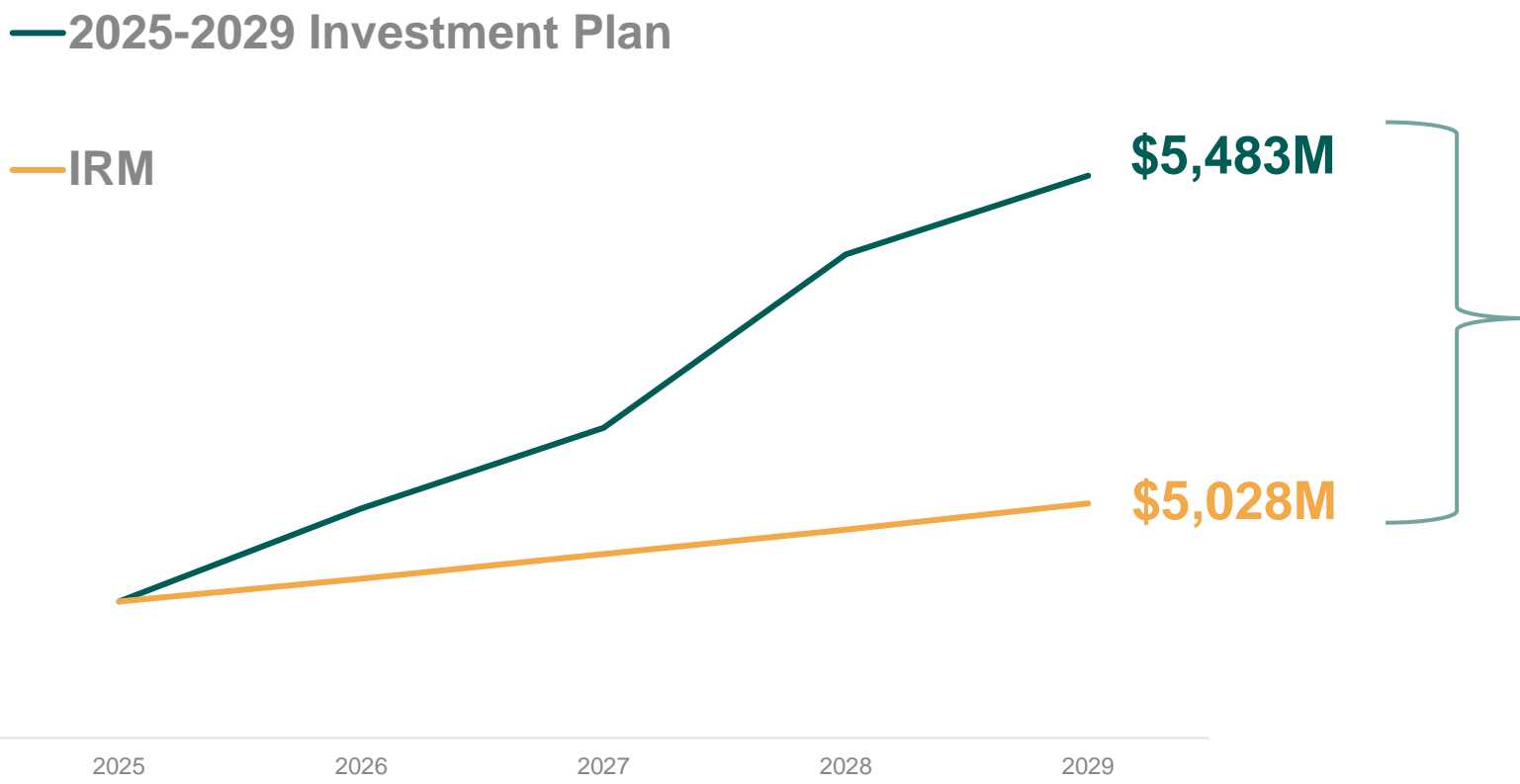


Workforce Benchmarking Ontario Peer Group



FUNDING NEEDS

CUSTOM INCENTIVE RATES



\$455 Million = the revenue deficiency that gives rise to the need for a custom incentive rate-setting mechanism

Custom Revenue Cap Index (CRCI) = I - X + RGF

Custom incentive rates are necessary to deliver the 2025-2029 investment plan and achieve customer outcomes

FUNDING NEEDS

CUSTOM RATE FORMULA

$$\text{CPCI} = I - X + C_n - S_{\text{cap}} \times (I + X_{\text{cap}}) - g$$

Price Cap becomes Revenue Cap

Revenue cap escalates revenue requirement each year, which is then allocated to rates based on the five-year load and customer forecast

X proactively reduces revenue by **0.75%** with an opportunity to earn back 0.6% through a performance incentive mechanism (PIM).

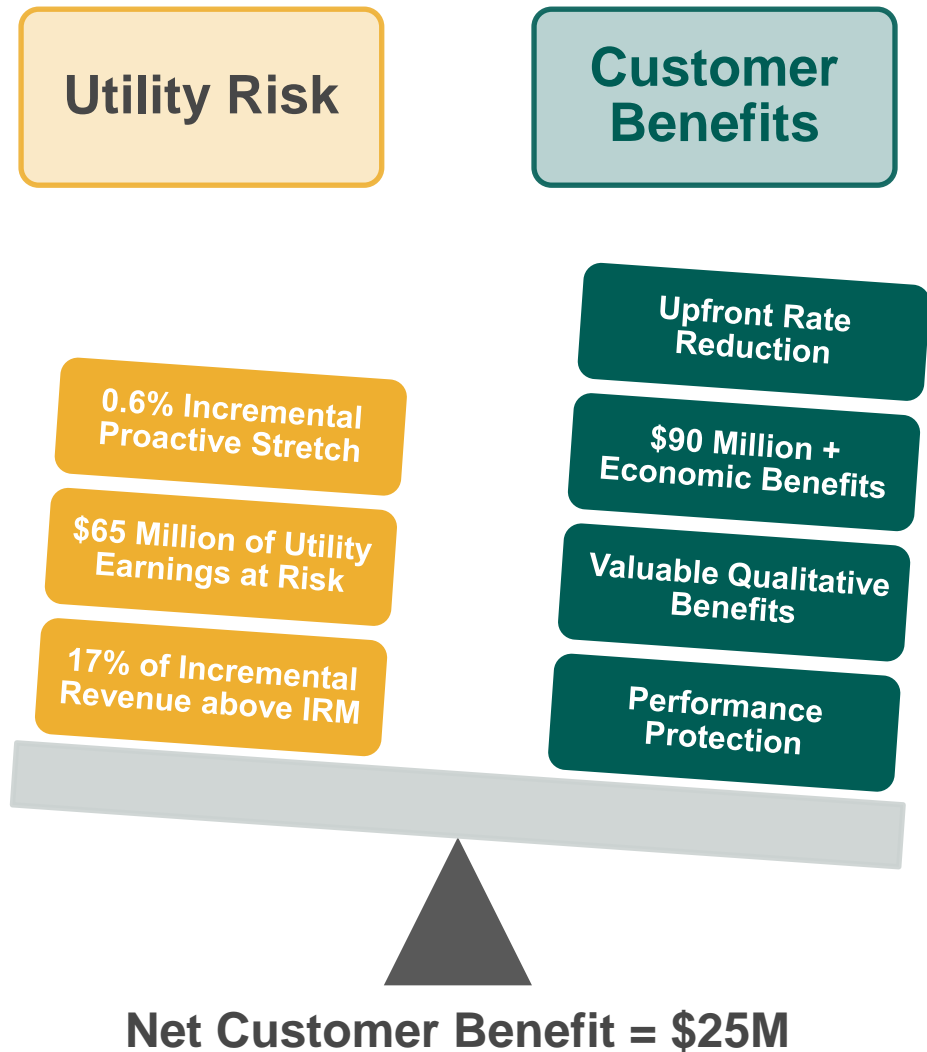
C_n is replaced by the **Revenue Growth Factor (RGF)**. RGF is established based on year-over-year increases to base revenue requirement, less a forecast of the inflation factor so that the inflation factor can be applied annually to escalate base revenue.

S_{cap} x I is no longer required as the Inflation factor now applies to the full base revenue requirement.

g is no longer required as the revenue cap allocates revenues to rates based on the five-year load and customer forecast

$$\text{CRCI} = I - X + \text{RGF}$$

PERFORMANCE RISK INCENTIVE MECHANISM



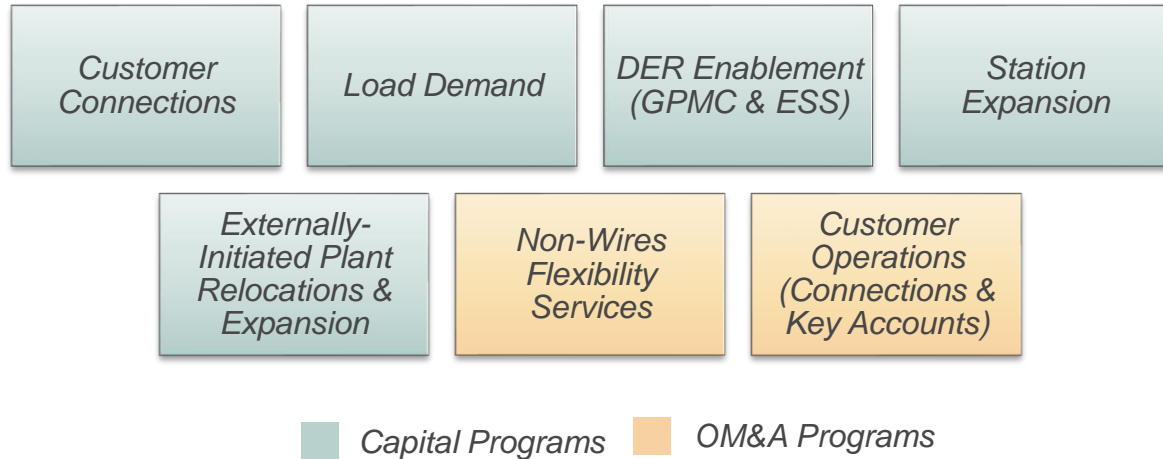
Performance	Measures	Five-Year Target	Benefits
System Reliability & Resilience	Outage Duration	46.2 minutes	\$32.5 million
	Outage Frequency	0.38 – 0.45	\$6.5 - 21.6 million
	System Security Enhancements	100%	Unquantifiable
Customer Service & Experience	New Services Connected on Time	99%	\$31.7 - 142.6 million
	Customer Satisfaction	Maintain	Unquantifiable
	Customer Escalations Resolution	98%	Unquantifiable
Environment, Safety and Governance	Total Recordable Injury Frequency (TRIF)	0.83	Unquantifiable
	Emissions Reductions.	2.5 kilo tonnes CO2	\$0.2 million
	ISO Compliance and Certification	100% by 2029	Unquantifiable
Efficiency & Financial Performance	Efficiency Achievements	\$6.9 million per year by 2029	\$16.4 million
	Grid Automation Readiness	100% by 2029	Unquantifiable
	System Capacity (Non-Wires)	30 MW	\$3.1 million

DEMAND UNCERTAINTY FLEXIBILITY MECHANISM

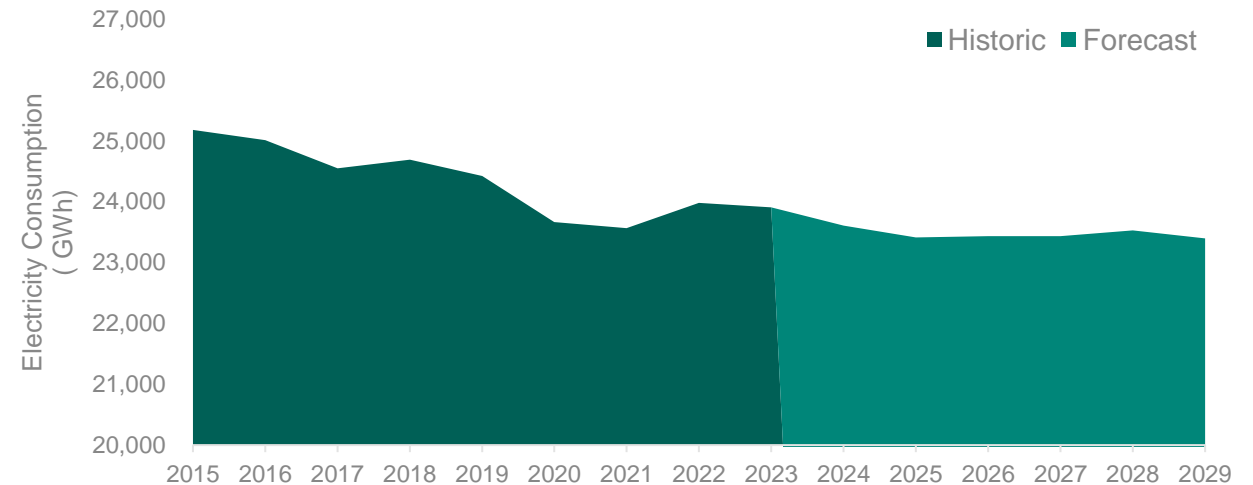


Demand-Related Variance Account (“DRVA) consists of two symmetrical sub-accounts:

Expenditures: *Forecast vs. actual revenue requirement variances in demand related programs*



Revenue: *Forecasts vs. actual revenue variances due to billing determinants (i.e. customers/kVa/kWh)*



Protect ratepayers and the utility from structural unknowns related to forecasting costs and revenues associated with the impact of energy transition and other material growth drivers (e.g. Building Homes Faster)

RATE IMPACTS

CUSTOMER ENGAGEMENT

Customer Rate Class	Rate Impacts Sub-Total A Average Monthly Increase		2018 Participation Numbers	2018 Social Permission	2023 Participation Numbers	2023 Social Permission	2018 vs. 2023 Participation Numbers	2018 vs. 2023 Social Permission
	\$	%						
Residential	\$3.41	7.0%	10,765	71%	32,187	80%	199%	+9%
Small Business	\$9.86	7.3%	396	55%	695	77%	76%	+22%
Commercial & Industrial	\$190.57	8.9%	202	73%	264	82%	31%	+9%
	\$1636.31	9.2%						
Key Accounts	\$8,729.29	9.4%	37	78%	52	96%	41%	+18%
Total Results			11,400	69%	33,198	84%	191%	+15%

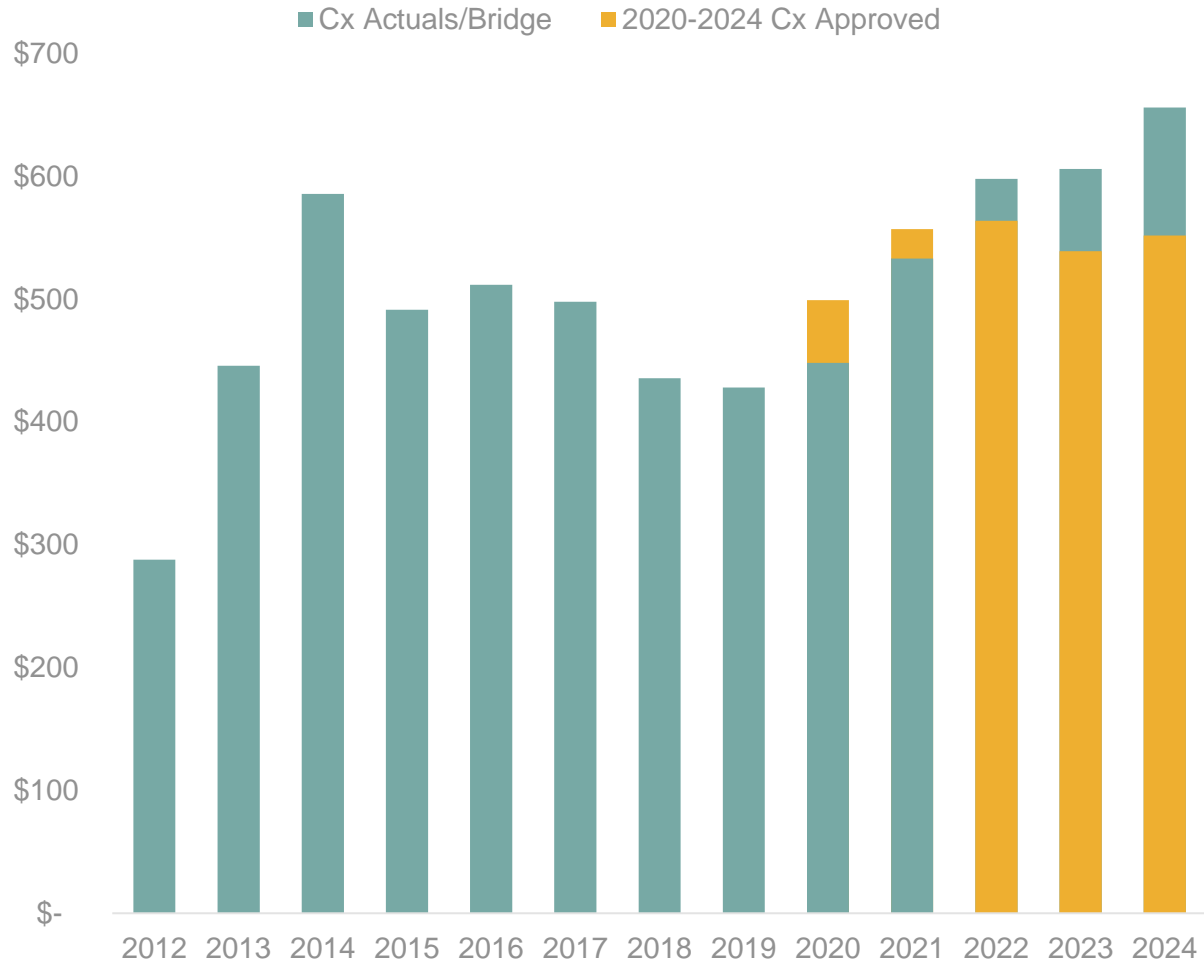
DISTRIBUTION SYSTEM PLAN



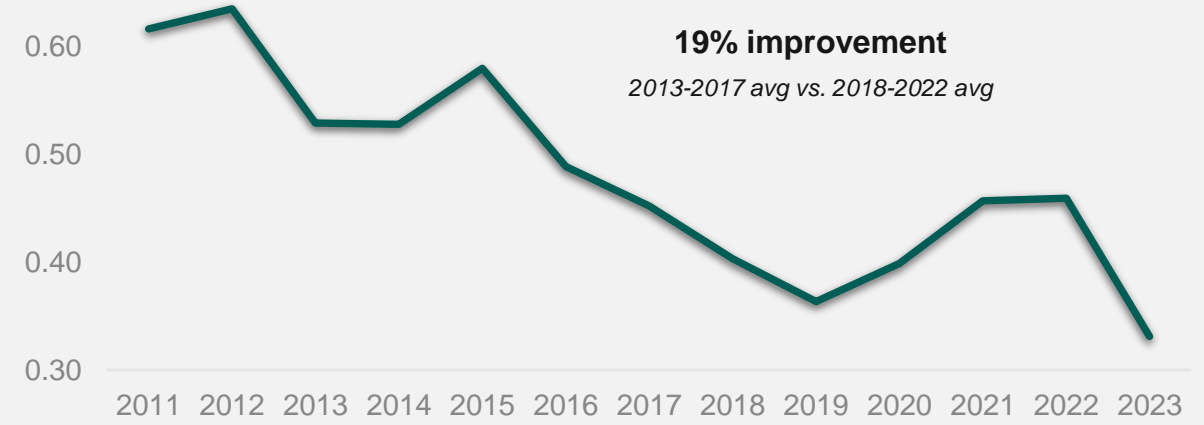
CAPITAL EXPENDITURES & HISTORICAL PERFORMANCE



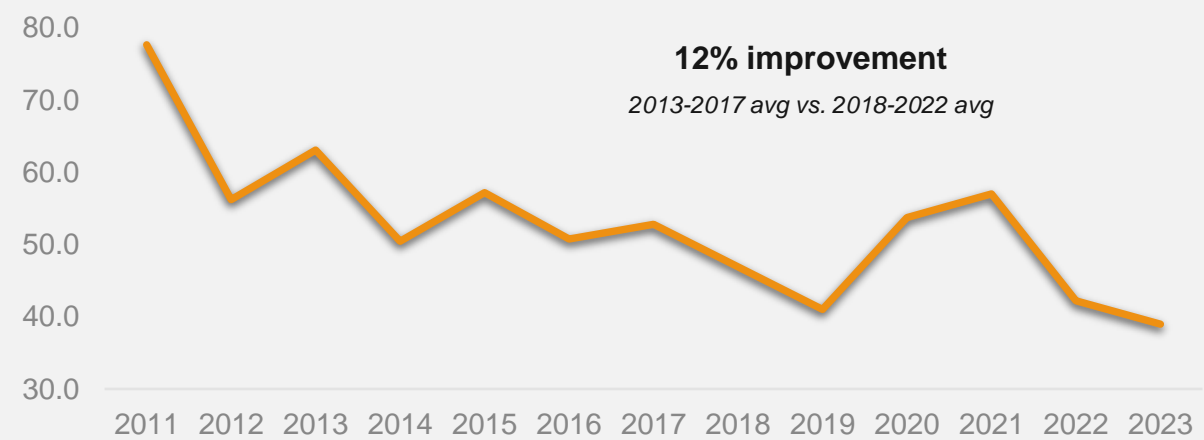
Capital Expenditures (\$ Millions)



Outage Frequency: Defective Equipment (#)










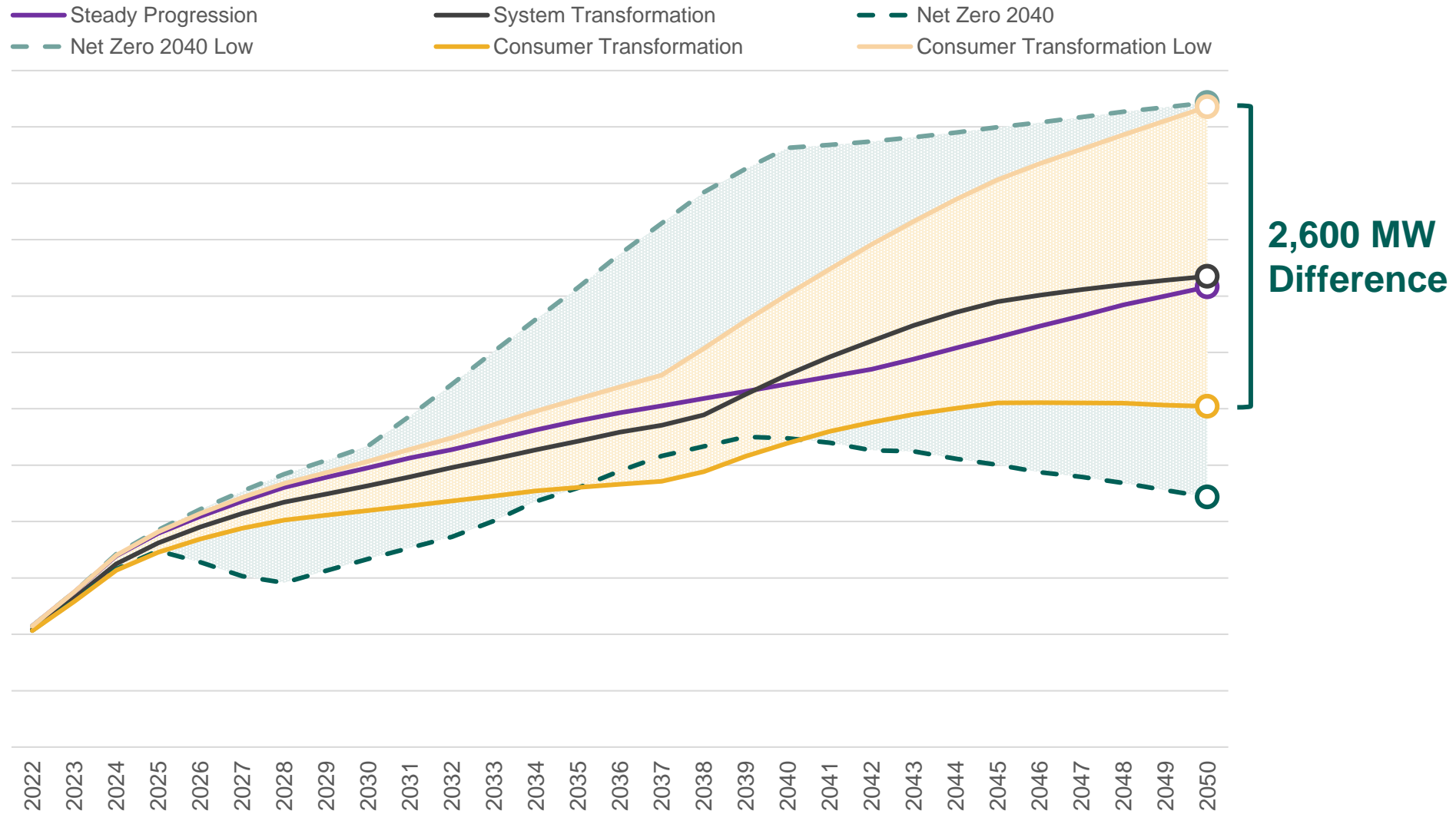
Outage Duration (mins)



PLANNING FOR FUTURE UNCERTAINTY

Demand Drivers

-  Residential Housing Stock
-  Industrial & Commercial Floorspace
-  Decarbonized Heating
-  Battery Storage
-  Distributed Generation
-  Electric Vehicles
-  Energy Efficiency



2025-2029 INVESTMENT PLAN

STRATEGIC FOCUS

Customer Needs and Priorities (Phase 1)

Price & Reliability

Top priorities. Despite a continued emphasis on price, reliability is becoming more important to low-volume customers.

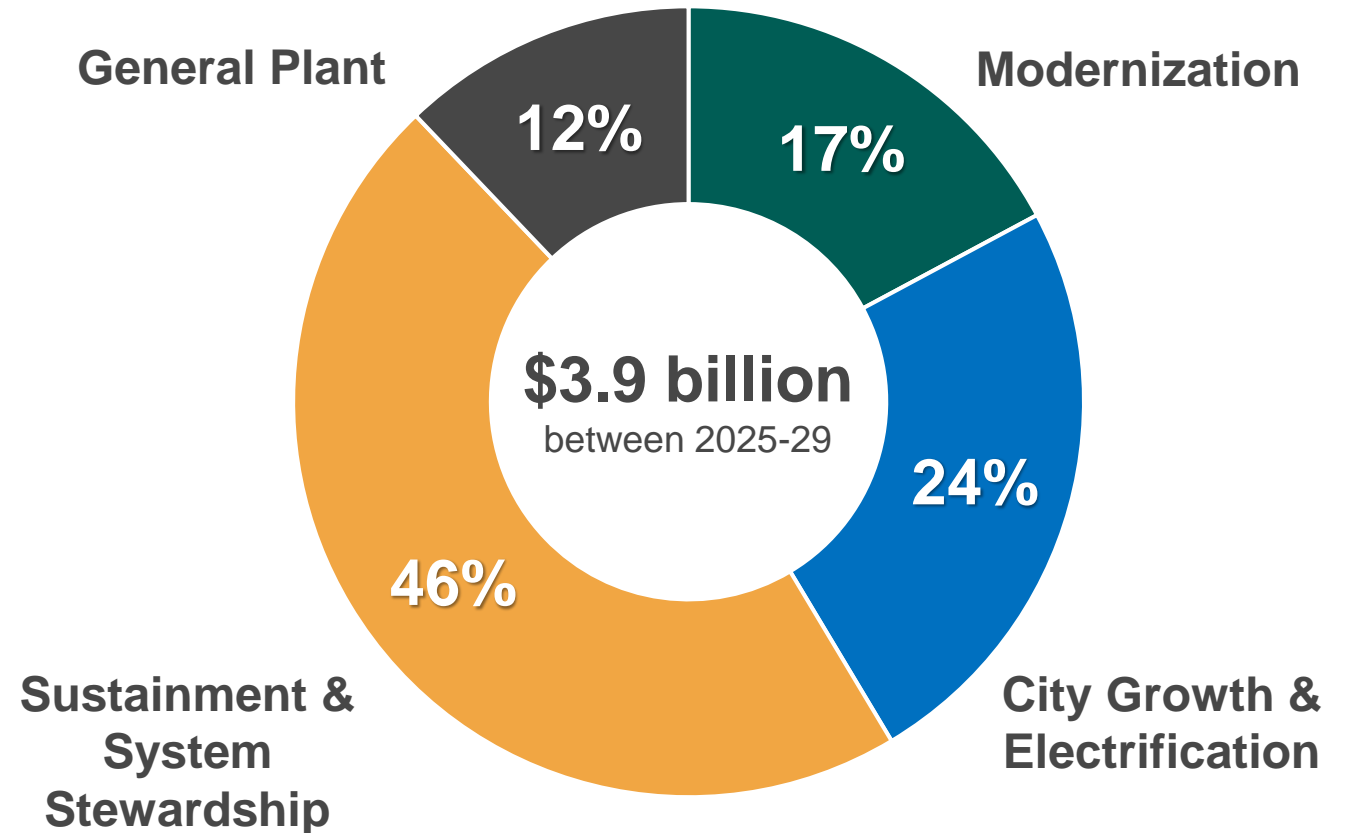
New Technology

Support for investments in new technology that will make the system better and reduce costs even if the benefits aren't immediate

System Capacity

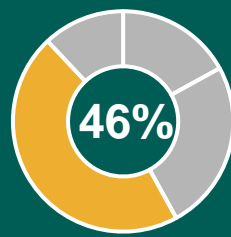
Support for investments in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability.

Investment Priorities

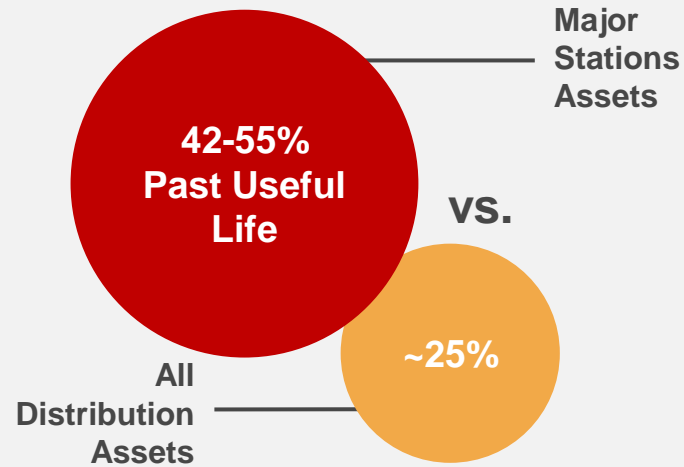


SUSTAINMENT

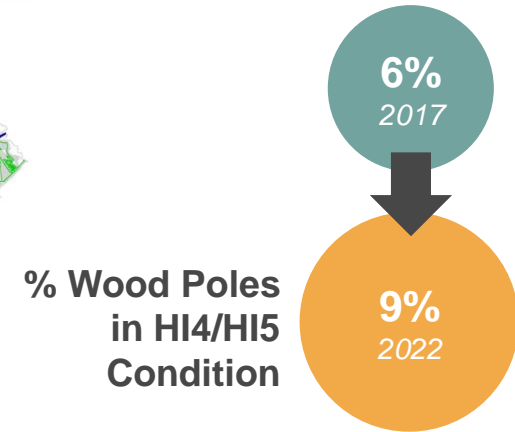
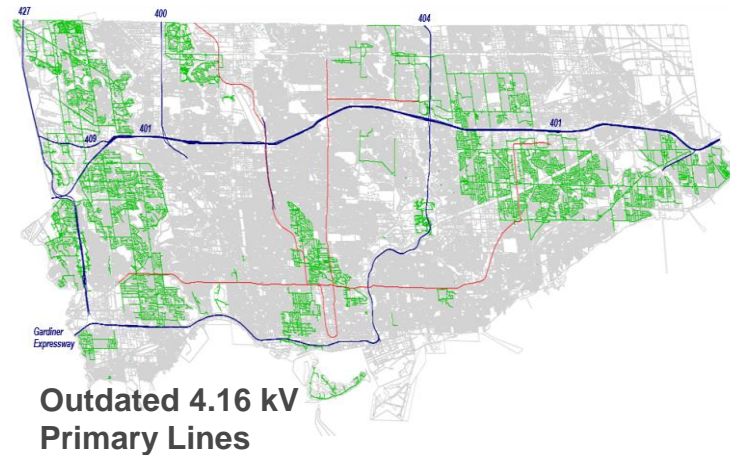
KEY ASSET TRENDS



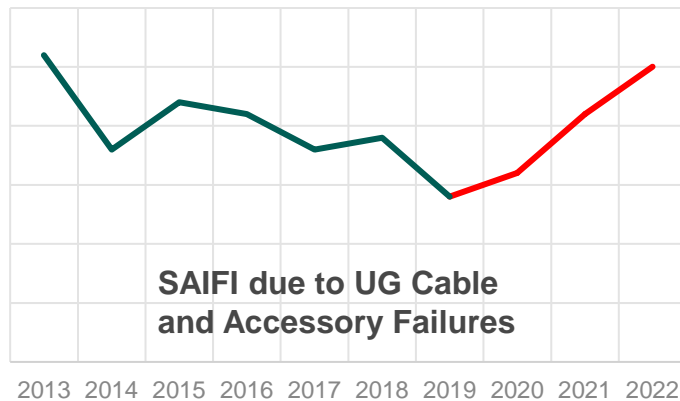
Stations



Overhead System



Underground System



Obsolete Cable Remaining

666 km of Direct-Buried XLPE Cable

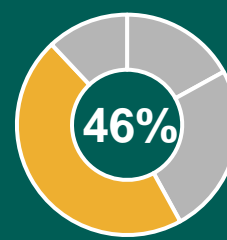
985 km of Paper Insulated Lead Covered (PILC) Cable

Network System



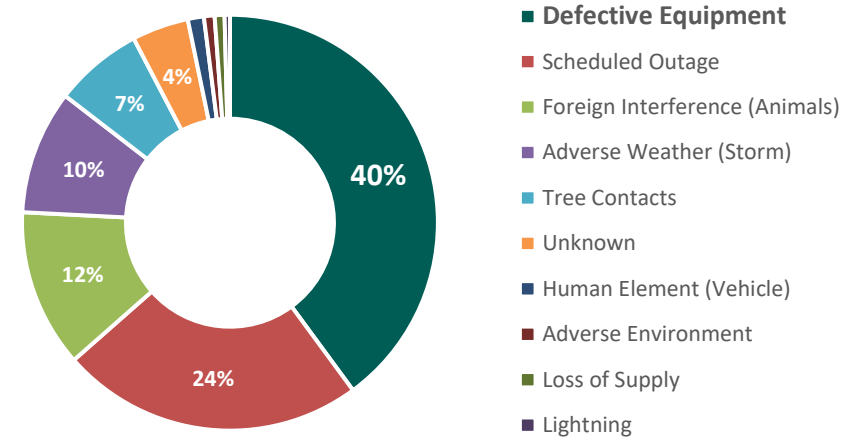
30% of 1,900 Network Units are legacy “non-submersible” type

SUSTAINMENT RENEWING INFRASTRUCTURE



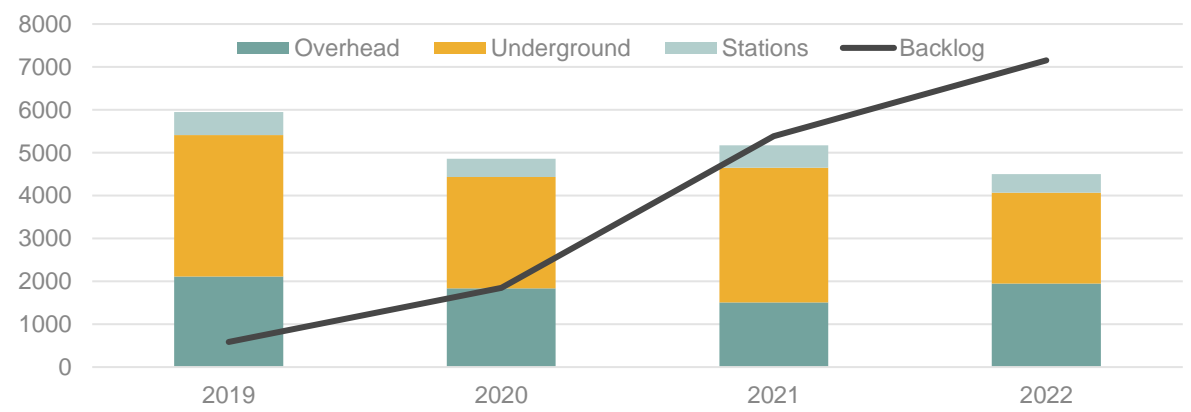
Program/Segment (Capital)	2020-24 (\$M)	2025-29 (\$M)
Area Conversions	\$209	\$236
Underground Renewal – Horseshoe	\$363	\$476
Underground Renewal – Downtown	\$81	\$165
Network System Renewal	\$116	\$123
Overhead Renewal	\$224	\$273
Stations Renewal	\$125	\$218
Reactive and Corrective Capital	\$306	\$328
Sustainment Capital	\$1,425	\$1,821

Customer Outage Duration by Cause 2018-2022



Program/Segment (Maintenance)	2020-24 (\$M)	2025-29 (\$M)
Preventative and Predictive Maintenance	\$82	\$112
Corrective Maintenance	\$90	\$109
Emergency Response	\$122	\$150
Distribution Maintenance & Emergency Response	\$294	\$370








Corrective Maintenance (Work Requests) Backlog



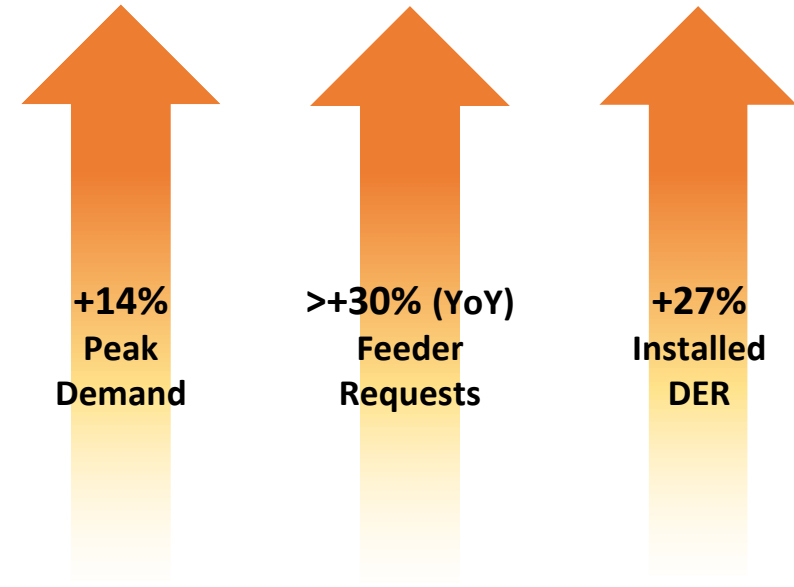
GROWTH & ELECTRIFICATION

PEAK DEMAND FORECAST & STATIONS EXPANSION

Demand Drivers

-  Residential Housing Stock
-  Industrial & Commercial Floorspace
-  Electric Vehicles
-  Electrified Transit
-  Hyperscale data centers
-  Municipal energy plans
-  Energy Efficiency

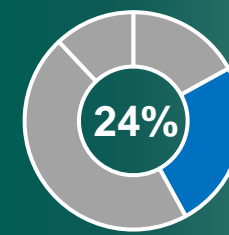
Toronto Hydro System Peak Forecast by Driver



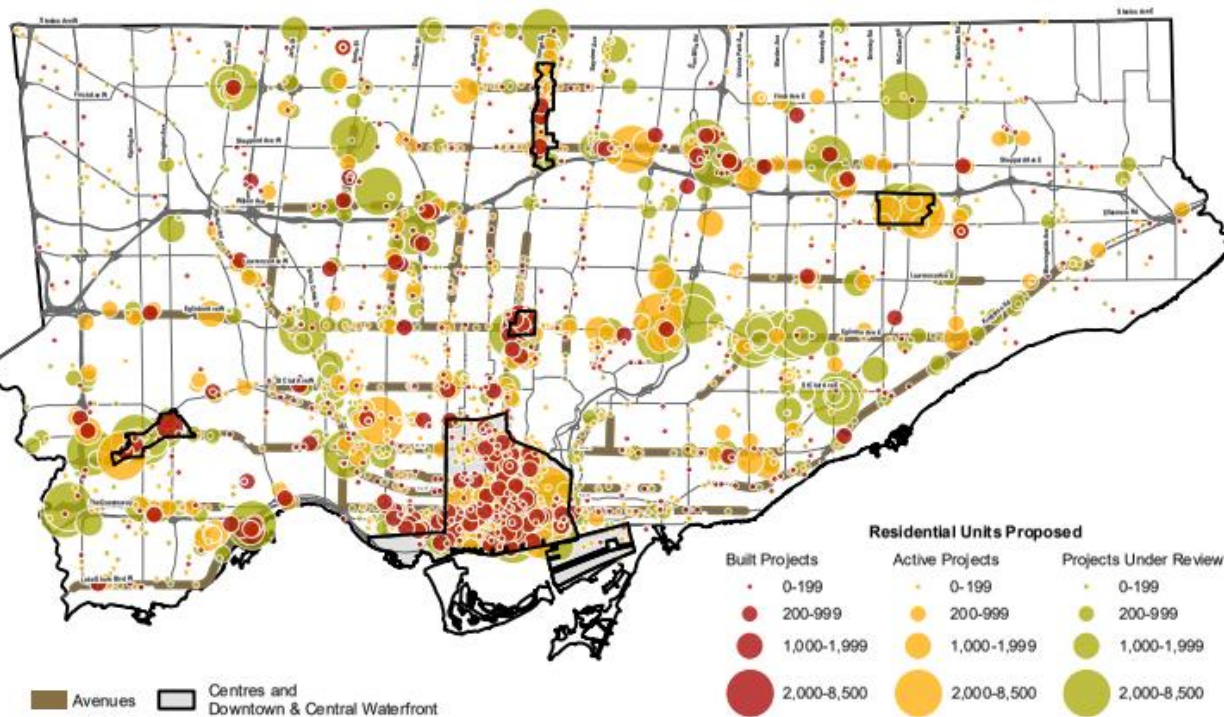
Municipal Energy Plans	Total Expected Load (MW)
Downsview Area Secondary Plan	300-500 MW
Golden Mile Secondary Development Plan	280 MW
Portlands Area Redevelopment	80 MW

GROWTH & ELECTRIFICATION

CUSTOMER CONNECTIONS & LOAD DEMAND



City of Toronto Growth Centres

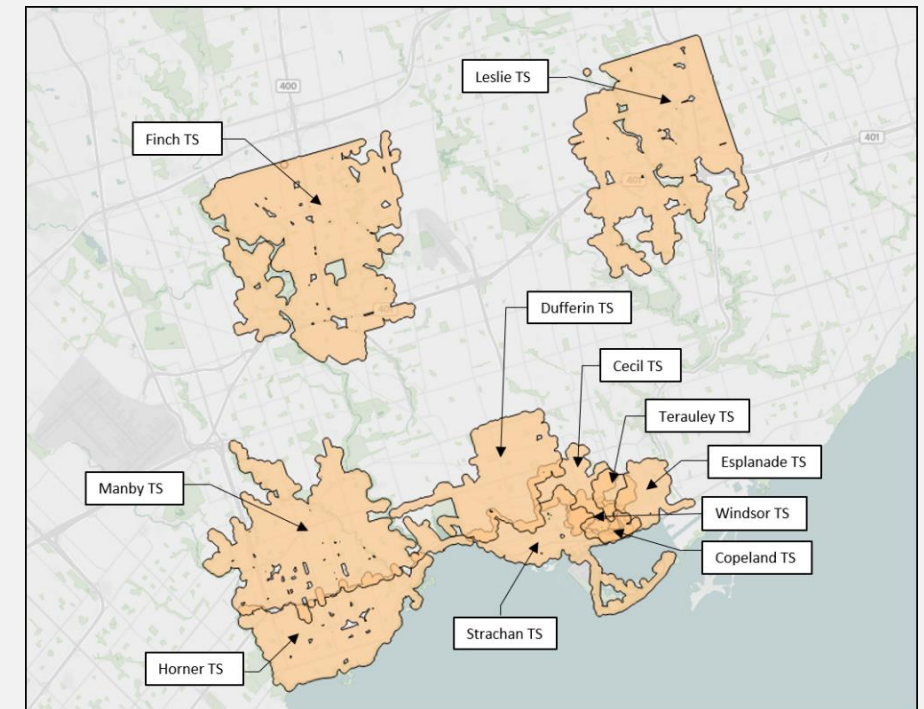


- Base load driven by growth in the city due to customer connections
- Focused areas of growth cause capacity strain on the localized level (e.g. transit corridors, emerging trends like EVs)
- The uncertainty of how load materializes introduces variability to the forecast

Load Demand

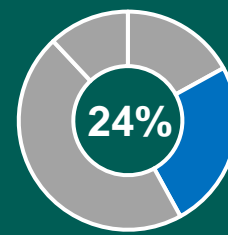
- Making optimal use of existing capacity
- Shifting loads to areas that require it
- Addressing the localized capacity strain due to Customer Connections

Stations Targeted for Relief during 2025-2029



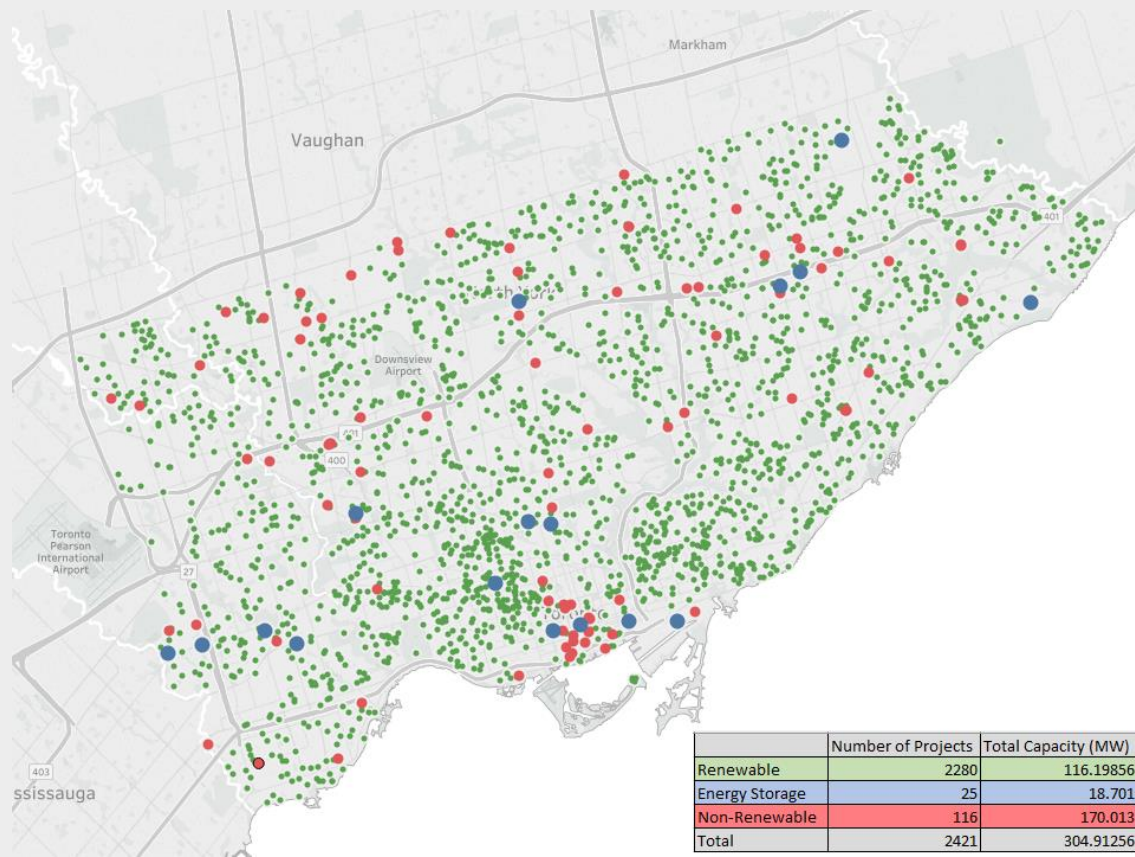
GROWTH & ELECTRIFICATION

DISTRIBUTED ENERGY RESOURCES

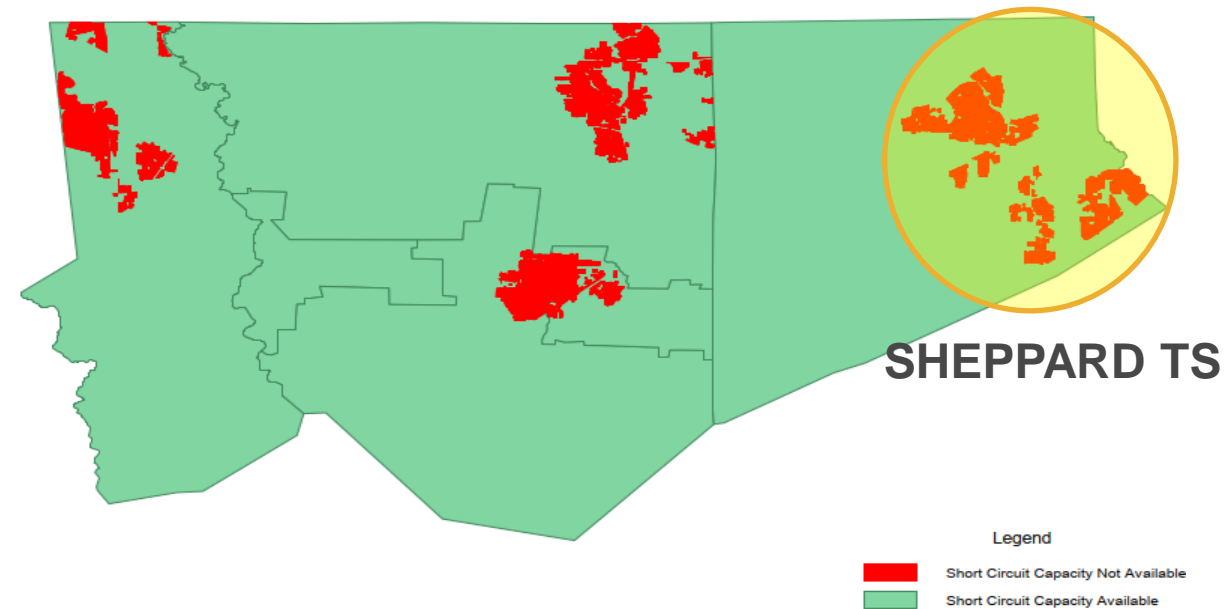


Toronto Hydro DG Connections

+2400 DERs throughout the city (2022)
305 MW cumulative capacity (2022)
500 MW est. cumulative capacity (2029)



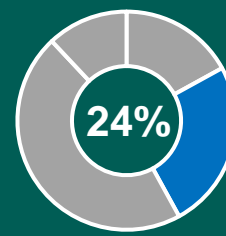
Distribution System Short Circuit Capacity Constraints



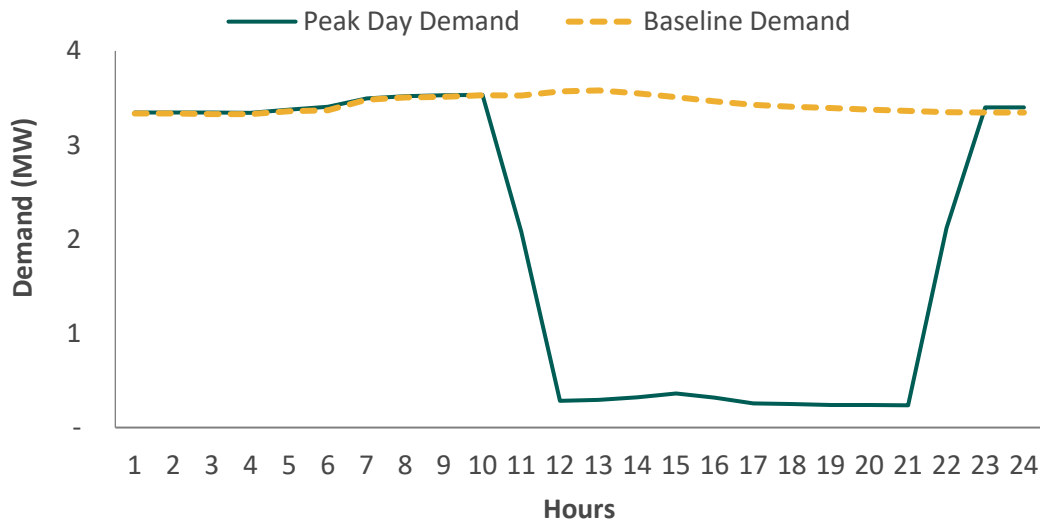
- To maintain safe and reliable operation of the distribution system, Toronto Hydro cannot connect DERs in situations where short circuit capacity limitations exist.

GROWTH & ELECTRIFICATION

NON-WIRES SOLUTIONS

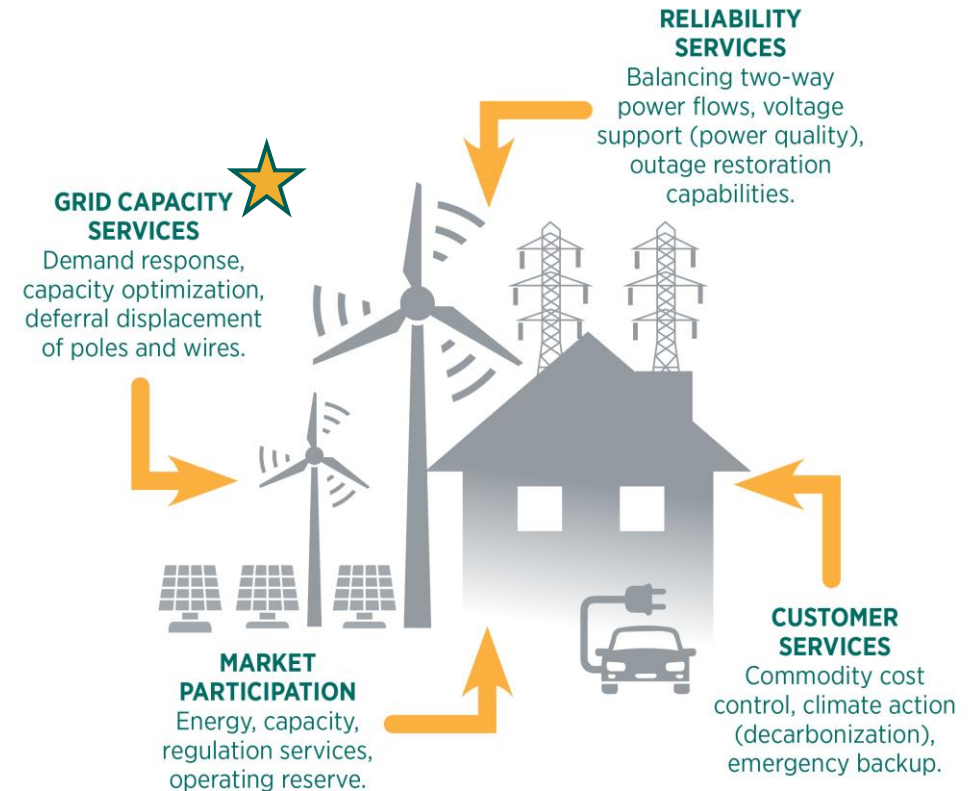


Renewable Enabling ESS



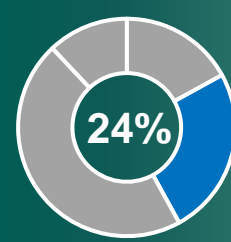
Local Demand Response

Complements conventional station expansion and load demand programs to address capacity constraints on the distribution system.



GROWTH & ELECTRIFICATION

BUILDING GRID & OPERATIONAL CAPACITY



Program	2020-24 (\$M)	2025-29 (\$M)
Customer Connections	\$369	\$477
Load Demand	\$135	\$217
Stations Expansion	\$142	\$122
Externally Initiated Plant Relocations & Expansions	\$60	\$76
Generation Protection, Monitoring, and Control	\$10	\$35
Non-Wires Alternatives	\$2	\$23
Growth Capital	\$718	\$949

System Access programs
System Service programs



- Customer Connections
- Load Demand
- Stations Expansion

Drivers of Uncertainty



Variable Demand

The demand for electricity is variable depending on how customer connection materialize and trends develop, such as the decarbonization of heat.



Customer Choice

Customer choice directly impacts the adoption rates of DER and EVs, and therefore the load growth experienced on the system.



Technological Advancement

Technology is advancing rapidly offering more opportunity to modernize the grid and deliver long-term benefits to customers.



Public Policy Evolution

Public policy environment is evolving as governments take action to advance decarbonization objectives.

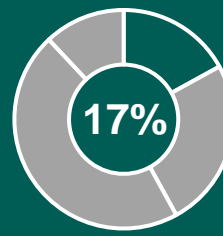


Regional Planning

Transmission and bulk system needs are evolving as decarbonizing objectives are incorporated into long-term scenario plans

MODERNIZATION

GRID MODERNIZATION IMPERATIVE



Accelerating Challenges

Grid Modernization Strategy

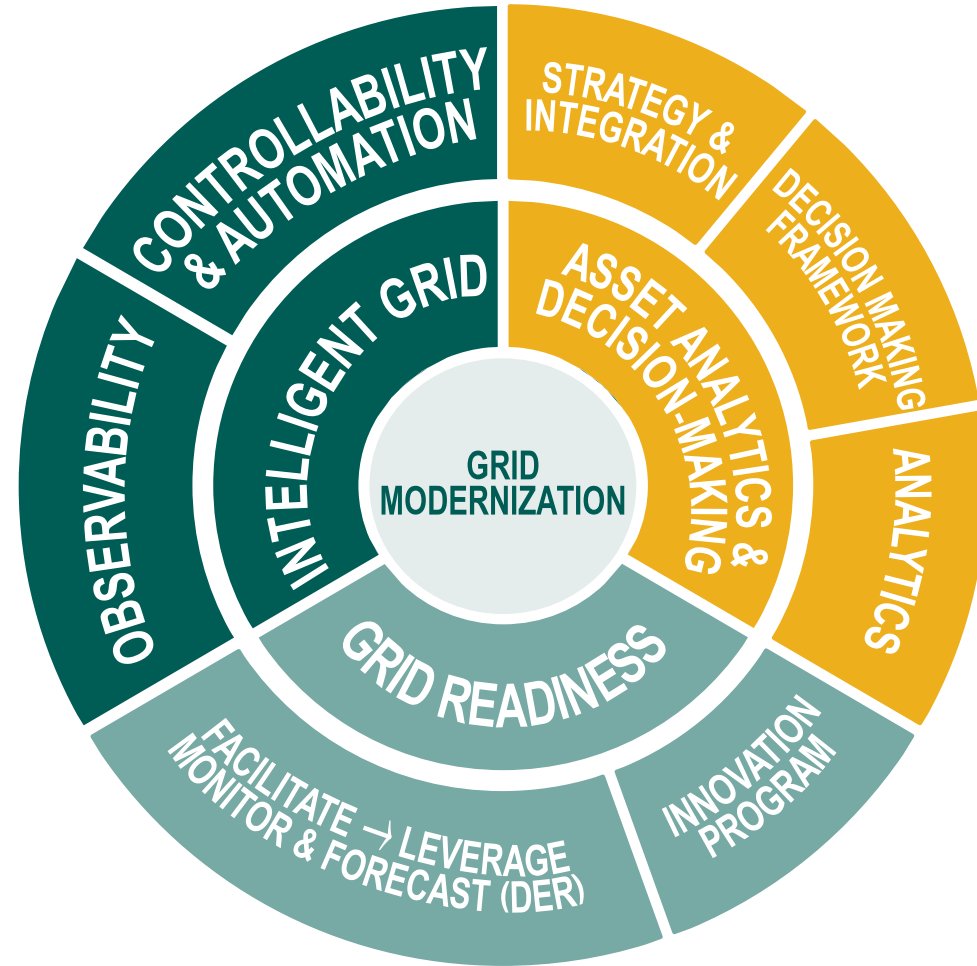
2030+

Climate Change

Electrification

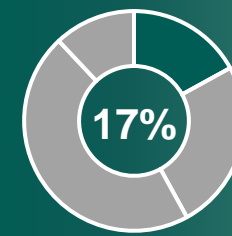
Distributed Energy

Cost Pressures



MODERNIZATION

BUILDING AN INTELLIGENT & RESILIENT GRID



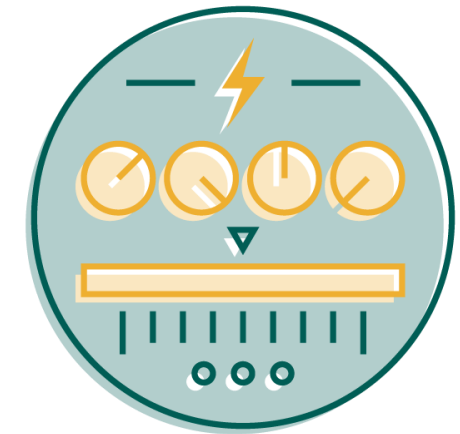
Investments in technology to get more use out of existing equipment, and build a smarter, more efficient and reliable grid.

Program/Segment	2020-24 (\$M)	2025-29 (\$M)
System Enhancement	\$26	\$151
Network Condition Monitoring and Control	\$54	\$6
Metering	\$80	\$248
Overhead Resiliency (Relocations)	\$0	\$86
Stations Control and Monitoring	\$28	\$65
IT (Cyber Security & Software Enhancements)	\$88	\$95
Legacy Network Equipment Renewal	\$4	\$0
Modernization Capital	\$280	\$651

System Access programs
System Service programs

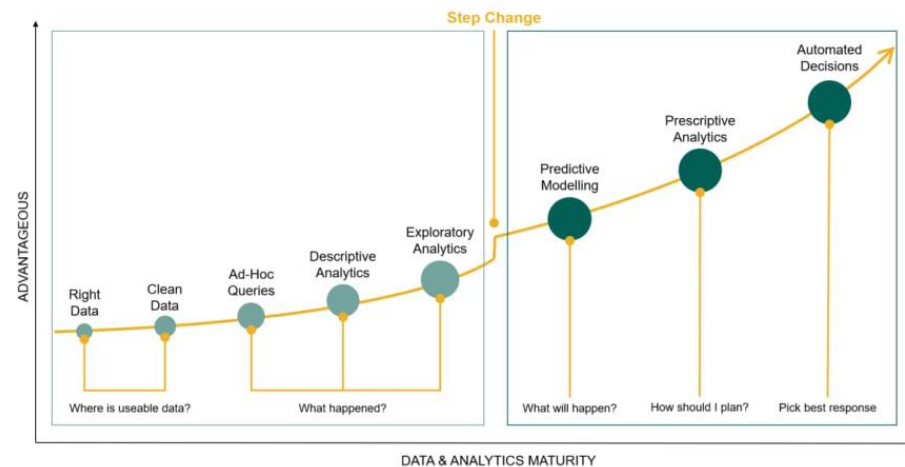
System Renewal programs
General Plant programs

Switches & Reclosers



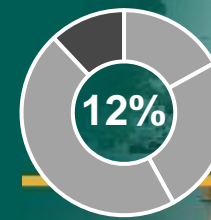
AMI 2.0

Analytics & Automation

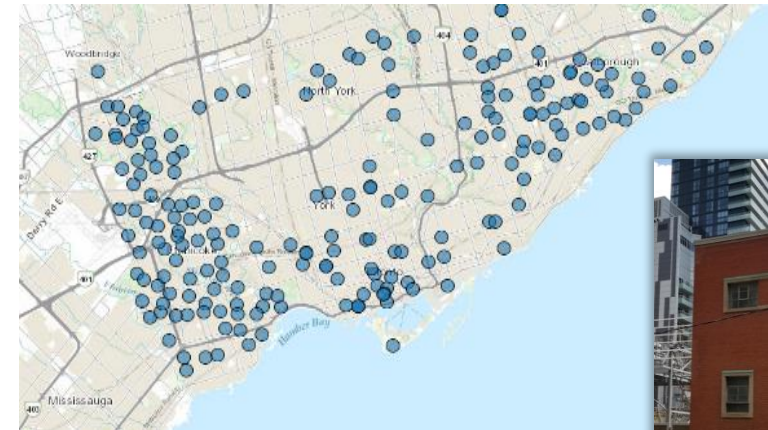


GENERAL PLANT

RUNNING THE BUSINESS & DECARBONIZATION



Program/Segment	2020-24 (\$M)	2025-29 (\$M)
Control Operations Reinforcement	\$40	-
Enterprise Data Centre	-	\$72
Facilities Management and Security	\$85	\$145
Fleet and Equipment Services	\$37	\$44
IT/OT (excl. Cyber Security & Software Enhancements)	\$169	\$206
General Plant Capital	\$331	\$467



Stations Buildings



Enterprise Data Centre & IT Hardware



Net Zero 2040



DISTRIBUTION GRID OPERATIONS



OPERATIONS

CUSTOMER OUTCOMES



Environment and Safety

4,100+



Emergency Events Completed

Reliability

9,000+



Power Off Events Restored

Modernization

4,000+



Field Devices integrated with the SCADA System

Grid Stewardship

32,000+



Switch Sheets and Hold Offs Completed

OPERATIONAL CHALLENGES

GRID COMPLEXITY



Density & Public Space
Congestion



Traffic & Road Restrictions



Customer Base



Energy Transition

4,800 people / sq. km
across service territory

16,608 people / sq. km
in downtown

238 cranes currently
operating in Toronto

45% increased drive time
from 500 Commissioners
work centre

INNOVATION & PRODUCTIVITY

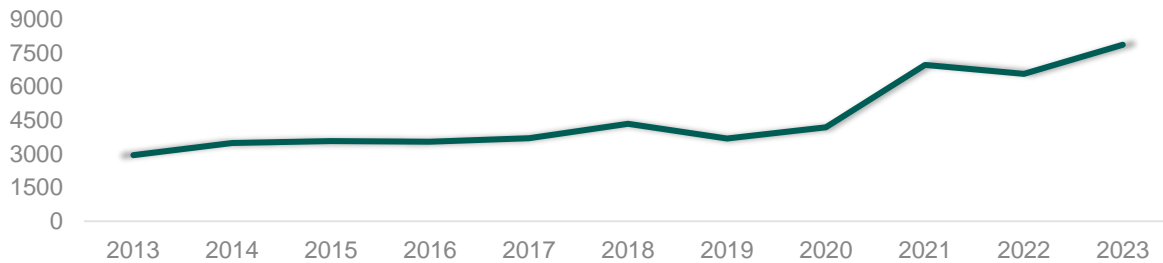
HISTORICAL PERFORMANCE



Control Centre Productivity

- 90,000+** calls handled by the control centre in 2021
- 94%+** of calls having a wait time of less than 10 minutes
- 3 Minute** average transaction time for hold-offs down from approximately 29 minutes in 2014

Prepared & Executed Switching Orders



Network Condition Monitoring and Control (NCMC)

10-15 percent of the peak load in downtown Toronto supplied by network system

379 vaults (approximately) commissioned with NCMC as of 2022

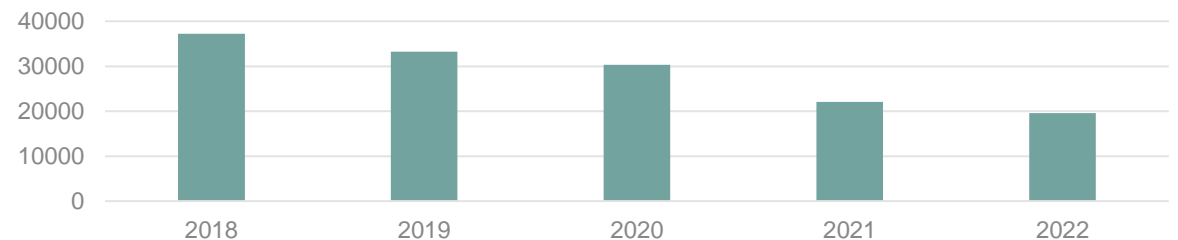
\$78,000 in operating costs saved in the last five months of 2022







Workforce Mobilization – Oracle Field Services Cloud


- 20,000** manual work order events/year eliminated
- Crew travel times reduced** between events
- Estimated Time of Restoration** implemented

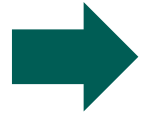
Number of Crew Calls to Trouble Dispatch



GRID MODERNIZATION OPERATIONS TECHNOLOGY

-  Outage Management System (OMS)
-  Distribution Management System (DMS)
-  Supervisory Control and Data Acquisition (SCADA)
-  Distributed Energy Resource Management (DERMS)

-  AMI 2.0
(Grid Edge Visibility, Last Gasp, Power Flow, Energy Management)



Advanced Distribution Management System (ADMS)

Workforce Mobilization Smart Routing

Electrification Energy Centre

Grid Modernization FLISR

Full-Scale implementation of FLISR across the Horseshoe could deliver improvements in the range of:

	+20%	+25%
	SAIDI	SAIFI

Power Restoration on Healthy Feeders

WITHOUT SCADA & FLISR AUTOMATION

WITH SCADA & FLISR AUTOMATION



Outage Report
5-10 min

Travel Time
15-30 min

Fault Investigation & Patrol Time
15-20 min

Manual Switching
15-20 min



1-5 Min
Power Restoration

45-75 Min
Power Restoration

OPERATIONS

WORKFORCE INVESTMENTS



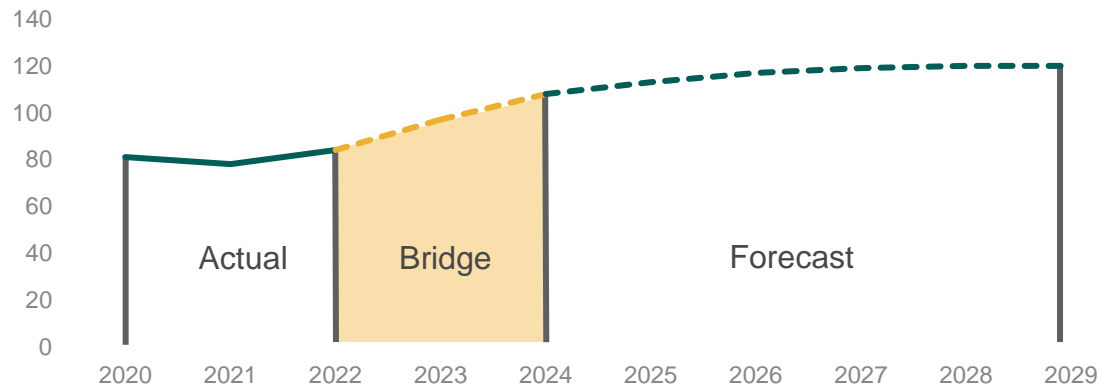
Workforce Challenges

Retirements (7% Reduction in avg. age)

Shortage of STEM Workers

4.5 – 6.5 years of training for trade employees

Control Centre Operations Overall Headcount



67%↑
DER Penetration
By 2029

Up to 30MW
Capacity
Procured

Headcount Drivers



Modelling for Grid Automation



Increased # of SCADA Assets



DER Penetration



Non-wires Alternatives & Capacity Procurement



Energy Management & Distribution Services

CUSTOMER SERVICES & EXPERIENCE



CUSTOMER SERVICES

OVERVIEW

Customers



790,000
Customer
Accounts



513
key account
customers

Meter to Cash



14 Billion
meter reads



9.5 Million
bills issued



\$3.6 Billion
In payments
processed

Customer Experience



70,000
emails



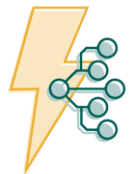
343,000 calls



3.6 Million
self-service
transactions



5,400
Connection
requests



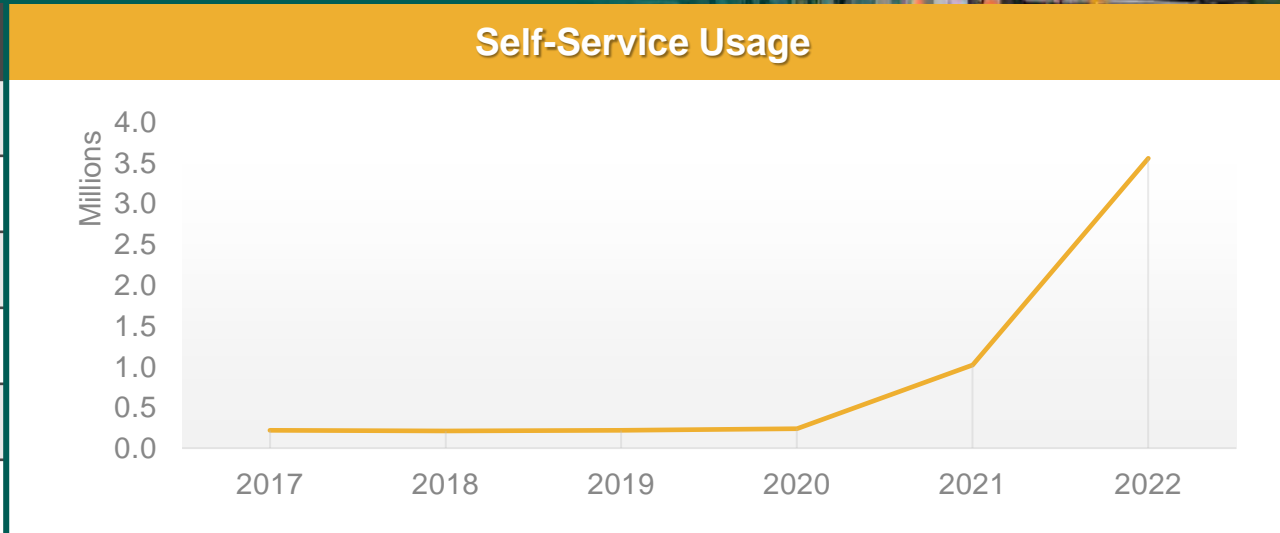
15-20
concurrent
technology
projects

2022 Data

CUSTOMER SERVICES PERFORMANCE AND PRODUCTIVITY

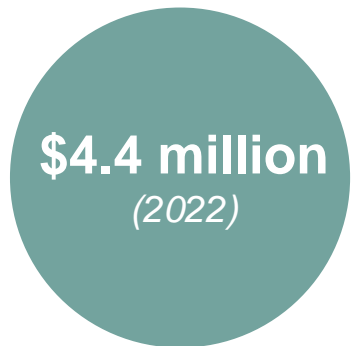


Measure	2013/14	2022	% Change
New Services Connected on Time	94.2%	99.9%	+5%
Billing Accuracy	96.6%	99.1%	+3%
First Contact Resolution	77%	91%	+19%
Customer Satisfaction	91%	94%	+3%
Rescheduling a Missed Appointment	98.4%	100%	+1.6%
Customers on eBills (total)	64,163	381,490	+495%

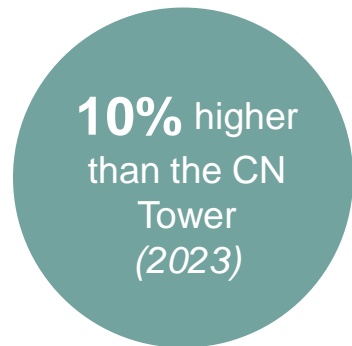


Savings from eBills

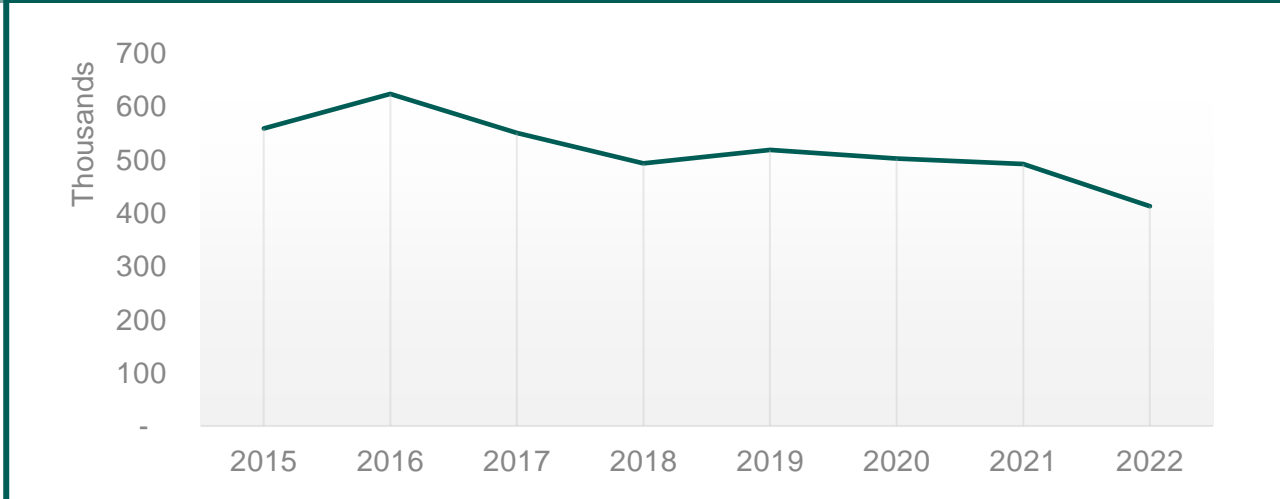
Operational Savings:



Paper Savings:



Call and Email Volume



CUSTOMER SERVICE

CUSTOMER NEEDS AND EXPECTATIONS

Engagements and on-going interactions provide an understanding of customers' service priorities and forms the primary basis for decision making



Ongoing Customer Priorities

- Reasonable rates; find efficiencies and reduce customer costs
- Accurate and timely bills and service
- Provide tools to understand and manage costs
- Support vulnerable customers



Emerging Customer Priorities

- Understanding and connecting distributed energy resources
- EV ownership (individual and commercial)
- Demands for data and analytics
- Technologies that provide future benefits

CUSTOMER SERVICES MODERNIZATION



Upskill Workforce

- Increasingly complex environment
- Greater depth of knowledge required
- Help customers navigate new energy choices
- Government programs and incentives



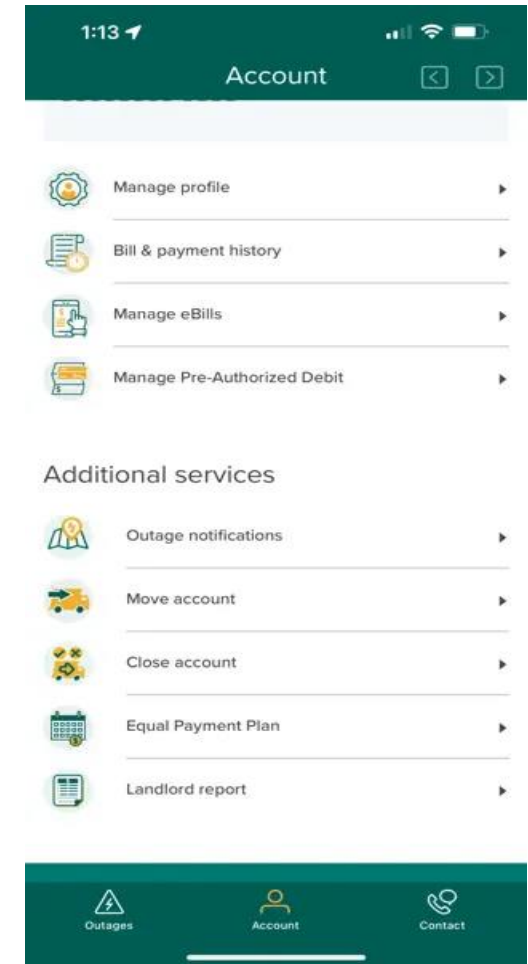
Build and Improve Self Service Functionality

- Proactive notifications
- Bi-directional energy and billing data
- New payment methods



Leverage New Technology

- Knowledge Management System
- Artificial intelligence – efficiency tools



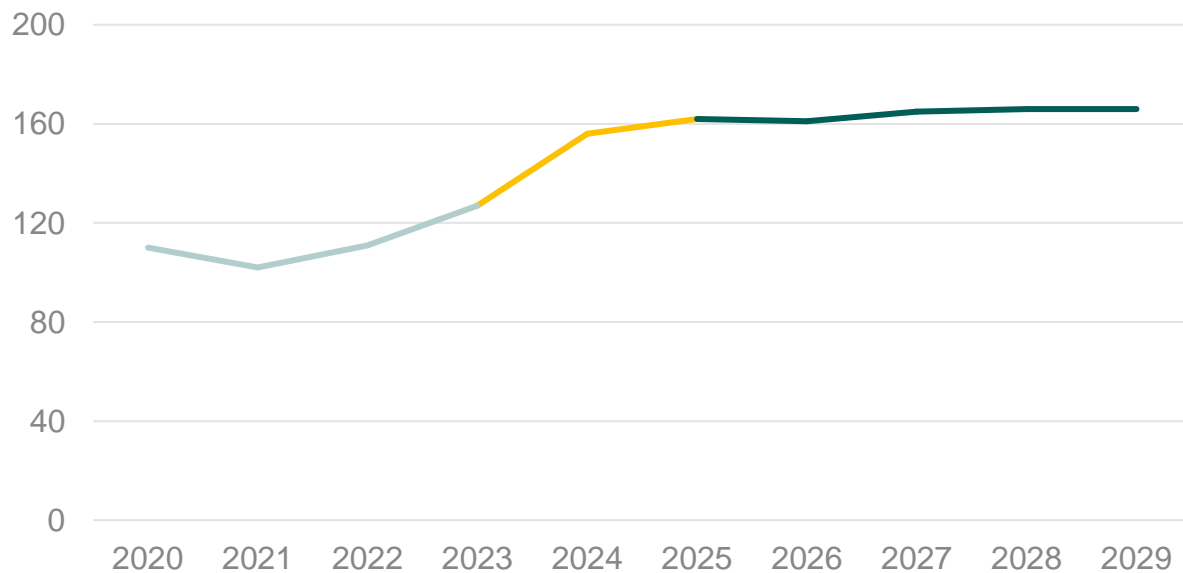
CUSTOMER SERVICES INVESTMENTS

Core utility customer operations







Capability and capacity building

Modernized capability and benefits

FTE - Customer Care, Connections and Key Accounts



Investments in Staffing and Skillsets

-  Data Analytics
-  Digital Channels
-  Knowledge Management
-  Artificial Intelligence
-  In-Sourcing
-  Capacity Building

OBRIGADO
VINAKA
MAMANA
GRAZIE
RAHMAT
HVALA
DANKON
TINGKI
MISAOTRA
KIA ORA
KIITOS
TACK
DEKUJI
ASANTE
ARIGATO
CHOKRANE
SPASIBO
JUSPAXAR
DANKE
MATUR NUWUN
CAM ON BAN
DANK JE
SALAMAT
MERCY

THANK YOU



APPENDIX



REGULATORY FRAMEWORK

KEY PRINCIPLES

Performance Based Regulation (PBR)

Deliver customer outcomes and advance public policy objectives.

Balance the interests of customers and utilities/shareholders.

Ensure stability and predictability to facilitate effective multi-year planning and decision-making.

Provide flexibility to execute multi-year plans in dynamic circumstances.

Protect customers and the utility from forecasting risk in times of uncertainty.

PERFORMANCE INCENTIVES

PROCESS OVERVIEW



*2025 Rebasing Application
(Phase 2)*

*2025-2029 Custom
Scorecard*

*Performance Incentive
Mechanism Deferral
Account (PIMDA)*

2030 Rebasing Application

2030-2034 Rate Cycle

2025

2025-2029

2030

2030-2034

Evidence Overview Presentation Table of References

Slide Number	Slide Title	Evidence Reference
1.	2024-2029 Custom Rate Application Overview	
2.	Agenda	
3.	Custom Incentive Rate Framework	
4.	Regulatory Evolution: Key Challenges	Exhibit 1B, Tab 1, Schedule 1, Section 2 Exhibit 1B, Tab 1, Schedule 2 Exhibit 1B, Tab 2, Schedule 1 Exhibit 1B, Tab 2, Schedule 1, Section 1 Exhibit 1B, Tab 2, Schedule 1, Section 2
5.	Funding Challenge: Investment Plan	Exhibit 4, Tab 1, Schedule 1 EB-2018-0165, Exhibit 2B, Section E4 EB-2014-0116, Exhibit 2, Tab 1 (OEB Appendix 2-BA)
6.	Funding Challenge: Operations & Workforce	Exhibit 4, Tab 1, Schedule 1 Exhibit 4, Tab 1, Schedule 1, Section 3, Figure 11 Exhibit 4, Tab 1, Schedule 1, Section 2 Exhibit 4, Tab 1, Schedule 1, Section 2.2, Figure 5, (FTE per 1M), Figure 6 (FTE Per GWh), Figure 7 (FTE per Circuit KM) 4-VECC-58 4-SEC-89 4-SEC-92 4-CCC-58 4-CCMBC-13 Electricity Human Resources Canada, “Electricity in Demand, Labour Market Insights 2023-2028”, 2023, available at: https://ehrc.ca/labour-market-intelligence/electricity-in-demand-labour-market-insights-2023-2028/ EB-2018-0165, Exhibit 4A, Tab 1, Schedule 1
7.	Funding Needs: Custom Incentive Rates	Exhibit 1B, Tab 1, Schedule 3, Section 2, Table 6 Exhibit 1B, Tab 2, Schedule 1 1B-STAFF-12

		JT4.31
8.	Funding Needs: Custom Rate Formula	Exhibit 1B, Tab 2, Schedule 1 Exhibit 1B, Tab 2, Schedule 1, Section 3
9.	Performance Risk: Incentive Mechanism	Exhibit 1B, Tab 3, Schedule 1 Exhibit 1B, Tab 3, Schedule 1, Section 2, Table 1 Exhibit 1B, Tab 3, Schedule 1, Section 3 Exhibit 1B, Tab 2, Schedule 1, Section 3.2.1 1B-STAFF-52
10.	Demand Uncertainty: Flexibility Mechanism	Exhibit 3, Tab 1, Schedule 1 Exhibit 9, Tab 1, Schedule 1 Exhibit 1B, Tab 2, Schedule 1, Section 3.2.3 1B-STAFF-42
11.	Rate Impacts: Customer Engagement	Exhibit 1B, Tab 1, Schedule 3 Exhibit 1B, Tab 5, Schedule 1, Section 2.3, Table 1
12.	Distribution System Plan	
13.	Capital Expenditures & Historical Performance	Exhibit 2B, Section A Exhibit 2B, Tab 3, Schedule 2, Section 1, Table 2 Exhibit 2B, Section E1 Exhibit 2B, Section E4 EB-2018-0165, Exhibit 2B, Section E4 EB-2014-0116, Exhibit 2, Tab 1 (OEB Appendix 2-BA)
14.	Planning for Uncertainty	Exhibit 2B, Section D4 Exhibit 2B, Section D4.2 Exhibit 2B, Section D4, Appendix A Exhibit 2B, Section D4, Appendix B 1B-PP-5
15.	2025-2029 Investment Plan: Strategic Focus	Exhibit 1B, Tab 1, Schedule 1, Section 3 Exhibit 1B, Tab 1, Schedule 2 Exhibit 2B, Section A4, Table 5 Exhibit 2B, Section E2 Exhibit 2B, Section E4, Appendix A (OEB Appendix 2-AB) Exhibit 2B, Section E4, Appendix B (OEB Appendix 2-AA)

16.	Sustainment: Key Asset Trends	Exhibit 2B, Section D2.2, Table 1 Exhibit 2B, Section D2.2.1 Exhibit 2B, Section D2.2.2 Exhibit 2B, Section D2.2.3 Exhibit 2B, Section D2.2.4 Exhibit 2B, Section E6.6 Exhibit 2B, Section E6.5 Exhibit 2B, Section E6.2 Exhibit 2B, Section E6.3 Exhibit 2B, Section E6.4
17.	Sustainment: Renewing Infrastructure	Exhibit 1B, Tab 1, Schedule 1, Section 4 Exhibit 1B, Tab 1, Schedule 1, Section 5 Exhibit 1B, Section C2.6 Exhibit 2B, Section A5.1, Table 6 Exhibit 2B, Section E1 Exhibit 2B, Section E4 Exhibit 2B, Section E6.1 Exhibit 2B, Section E6.6 Exhibit 2B, Section E6.5 Exhibit 2B, Section E6.2 Exhibit 2B, Section E6.3 Exhibit 2B, Section E6.4 Exhibit 2B, Section E6.7 Exhibit 4, Tab 2, Schedule 1 Exhibit 4, Tab 2, Schedule 2 Exhibit 4, Tab 2, Schedule 3 Exhibit 4, Tab 2, Schedule 4 Exhibit 4, Tab 2, Schedule 5 Exhibit 4, Tab 2, Schedule 6
18.	Growth & Electrification: Peak Demand Forecast & Stations Expansion	Exhibit 2B, Section D4 Exhibit 2B, Section D4.1.1.5, Figure 2 Exhibit 2B, Section D4.3, Figure 4

		Exhibit 2B, Section E1 Exhibit 2B, Section E3 Exhibit 2B, Section E4 Exhibit 2B, Section E7.4
19.	Growth & Electrification: Customer Connections & Load Demand	Exhibit 2B, Section E1 Exhibit 2B, Section E3 Exhibit 2B, Section E4 Exhibit 2B, Section E5.1 Exhibit 2B, Section E5.3 Exhibit 2B Section E5.3.3.2, Figure 3 Exhibit 2B, Section E5.3.3.4, Figure 5
20.	Growth & Electrification: Distributed Energy Resources	Exhibit 2B, Section E3 Exhibit 2B, Section E3.3, Figure 8 Exhibit 2B, Section E5.1 Exhibit 2B, Section E5.1.3.2, Figure 7 Exhibit 2B, Section E5.5
21.	Growth & Electrification: Non-Wires Solutions	Exhibit 2B, Section E7.2 Exhibit 2B, Section E7.2.1.1, Figure 1
22.	Growth & Electrification: Building Grid & Operational Capacity	Exhibit 1B, Tab 1, Schedule 1, Section 4 Exhibit 1B, Tab 2, Schedule 1, Section 3.2.3 Exhibit 2B, Section D4 Exhibit 2B, Section A5.2, Table 7 Exhibit 2B, Section E5.1 Exhibit 2B, Section E5.3 Exhibit 2B, Section E7.4 Exhibit 2B, Section E5.2 Exhibit 2B, Section E5.5 Exhibit 2B, E7.2 1B-PP-8
23.	Modernization: Grid Modernization Imperative	Exhibit 2B, Section D5 Exhibit 2B, Section D5.2, Figure 2 Exhibit 2B, Section E7.1

		1B-PP-8
24.	Modernization: Building an Intelligent & Resilient Grid	Exhibit 1B, Tab 1, Schedule 1, Section 4 Exhibit 2B, Section A5.3, Table 8 Exhibit 2B, Section D5 Exhibit 2B, Section D5.2.3.3, Figure 10 Exhibit 2B, Section E7.1 Exhibit 2B, Section E7.3 Exhibit 2B, Section E5.4 Exhibit 2B, E5.2 Exhibit 2B, E6.4 1B-PP-8
25.	General Plant: Running the Business & Decarbonization	Exhibit 2B, Section A5.4, Table 9 Exhibit 2B, Section E8.1 Exhibit 2B, Section E8.2 Exhibit 2B, Section E8.3 Exhibit 2B, Section E8.4
26.	Distribution Grid Operations	
27.	Operations: Customer Outcomes	Exhibit 4; Tab 2; Schedule 5 Exhibit 4, Tab 2, Schedule 7 4-AMPCO-92
28.	Operational Challenges: Grid Complexity	Exhibit 1B, Tab 1, Schedule 2 Exhibit 1B, Tab 3, Schedule 3 2B-STAFF-121
29.	Innovation & Productivity: Historical Performance	Exhibit 1B, Tab 3, Schedule 3, Section 1.5 Exhibit 2B, Section E7.3 Exhibit 4, Tab 2, Schedule 5 Exhibit 4, Tab 2, Schedule 7
30.	Grid Modernization: Operations Technology	Exhibit 2B, Section D5.2.1 Exhibit 2B, Section D5.2.2 Exhibit 2B, Section D5.3 Exhibit 2B, Section E7.1 2B-STAFF-162

31.	Operations; Workforce Investments	Exhibit 2B, Section E3 Exhibit 4, Tab 1, Schedule 1 Exhibit 4, Tab 2, Schedule 5 Exhibit 4, Tab 2, Schedule 7 Exhibit 4, Tab 4, Schedule 3
32.	Customer Service & Experience	
33.	Customer Services: Overview	2B-AMPCO-49 4-SEC-100(c) Exhibit 1C, Tab 1, Schedule 1 Exhibit 4, Tab 2, Schedule 14
34.	Customer Services: Performance and Productivity	Exhibit 1B, Tab 3, Schedule 1 Exhibit 1B, Tab 3, Schedule 2 Exhibit 4, Tab 2, Schedule 14 OEB Electricity Utility Scorecards, Toronto Hydro Electric-System Limited 2018 and 2022
35.	Customer Services: Customer Needs and Expectations	Exhibit 1B, Tab 5, Schedule 1 Exhibit 4, Tab 2, Schedule 14
36.	Customer Services: Modernization	Exhibit 4, Tab 1, Schedule 1, Section 5.1.6 Exhibit 4, Tab 2, Schedule 14
37.	Customer Services: Investments	Exhibit 4, Tab 1, Schedule 1 Exhibit 4, Tab 1, Schedule 4 Exhibit 4, Tab 2, Schedule 14
38.	Thank You	
39.	Appendix	
40.	Regulatory Framework Key Principles	Exhibit 1B, Tab 2, Schedule 1
41.	Performance Incentives Process Overview	Exhibit 1B, Tab 3, Schedule 1

EVIDENCE DAY LOOK BOOK

2024





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OPERATIONS

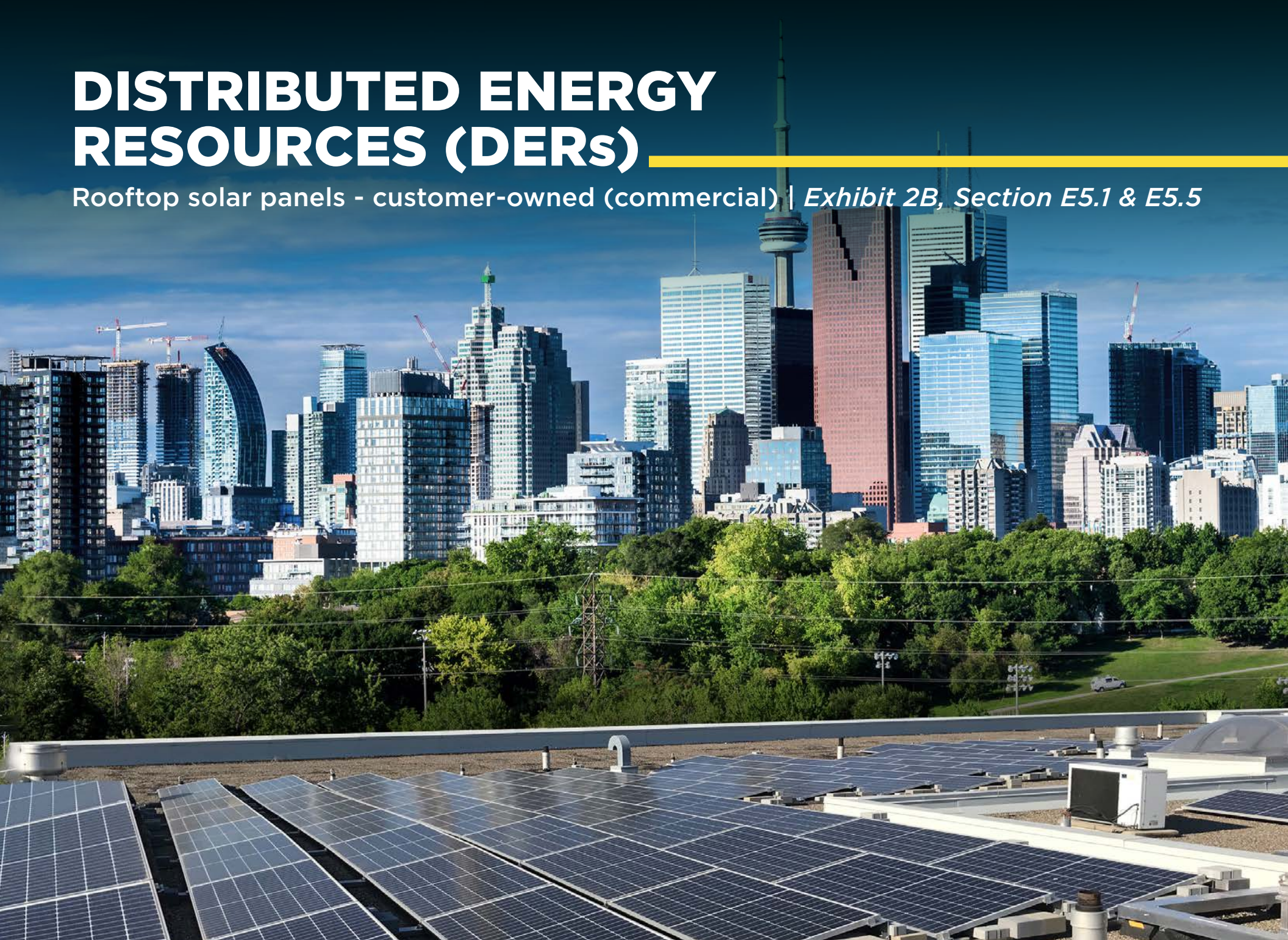
Grid operations	32
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A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are arranged in a way that they appear to converge towards the top center of the frame. The sky is a deep teal color. The overall mood is one of upward growth and urban development.

GROWTH

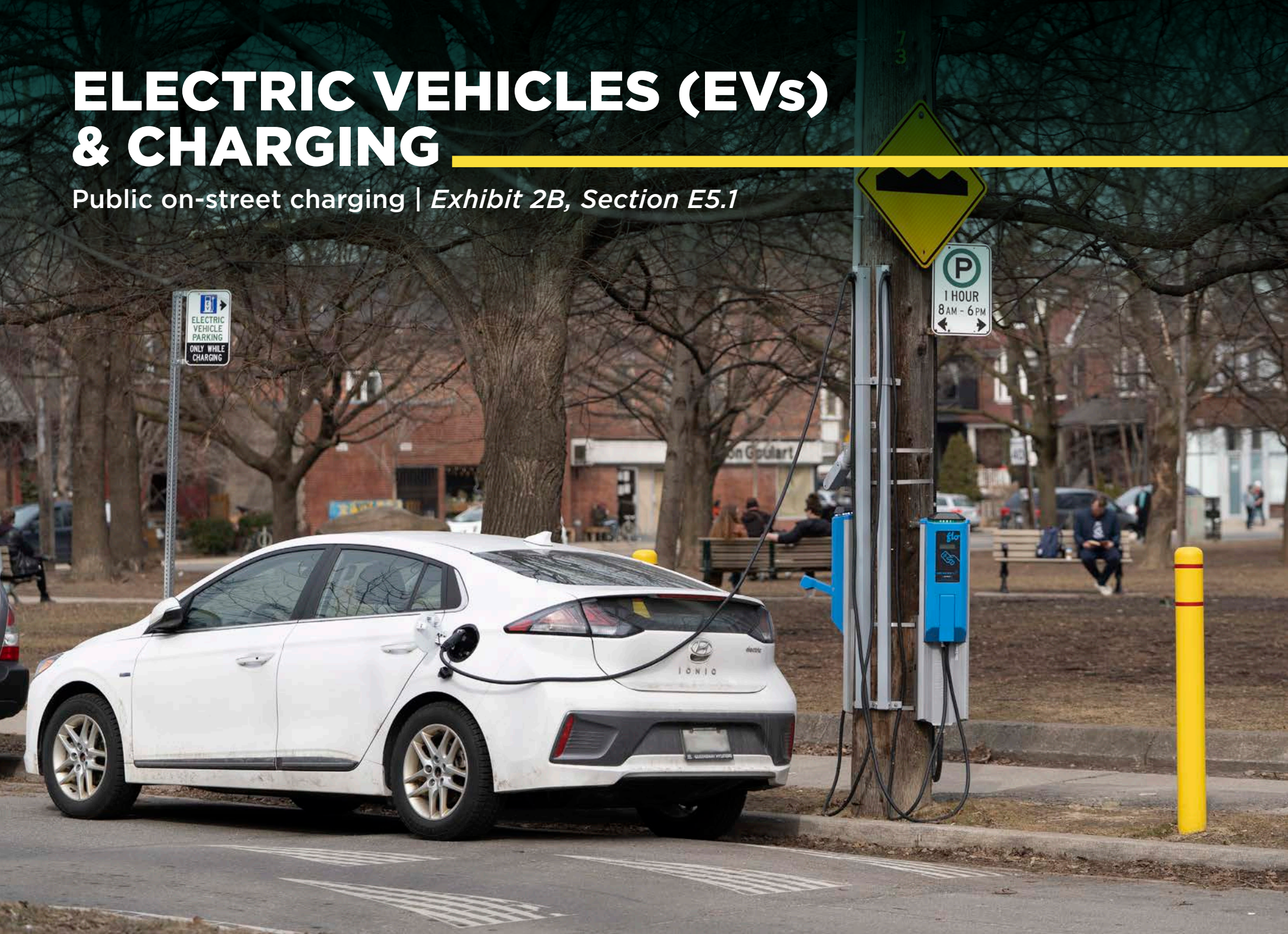
DISTRIBUTED ENERGY RESOURCES (DERs)

Rooftop solar panels - customer-owned (commercial) | *Exhibit 2B, Section E5.1 & E5.5*



ELECTRIC VEHICLES (EVs) & CHARGING

Public on-street charging | *Exhibit 2B, Section E5.1*



NON-WIRES SOLUTIONS

Bulwer battery energy storage system (“BESS”) | *Exhibit 2B, Section E7.2*



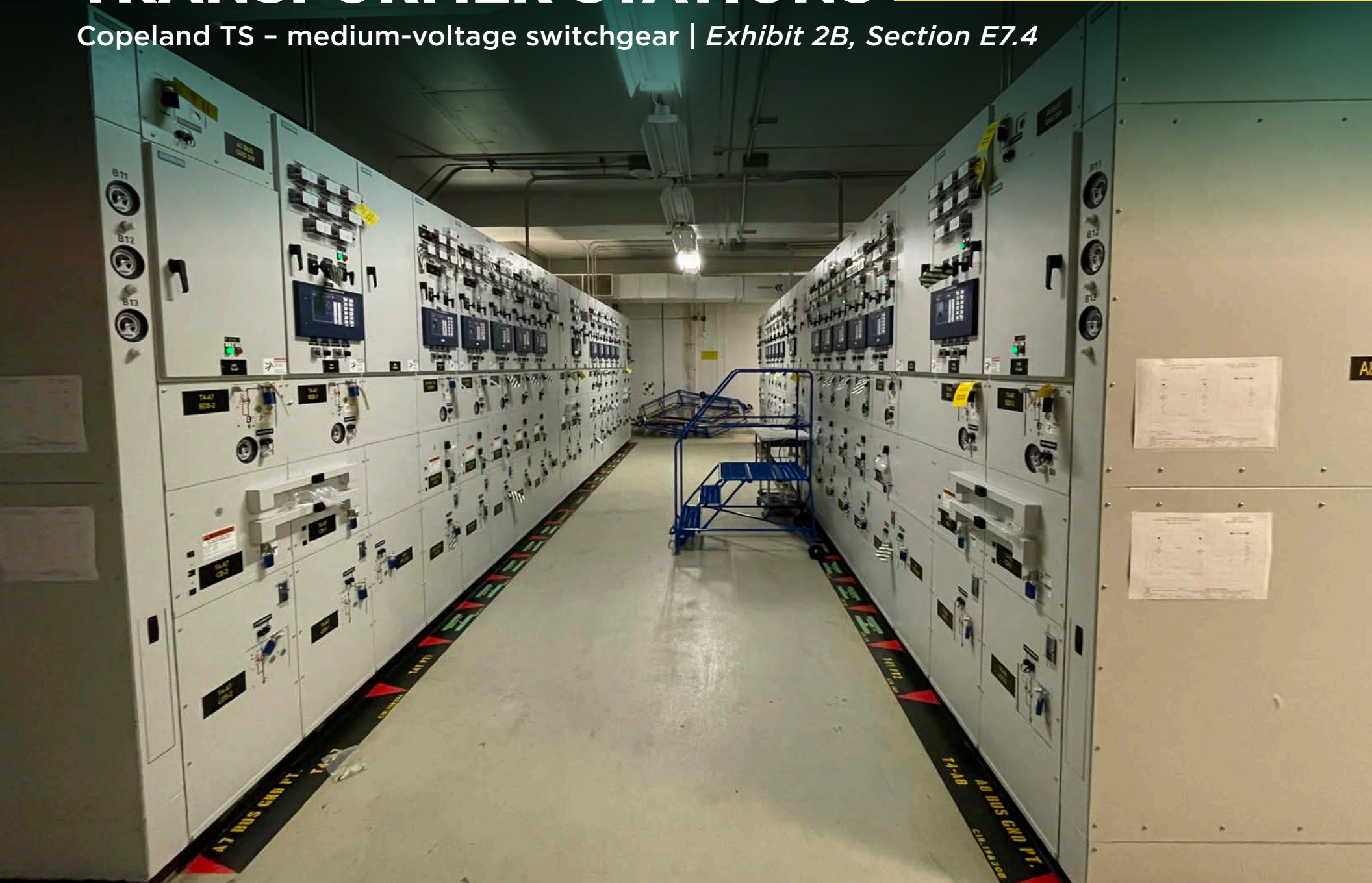
TRANSFORMER STATIONS

Windsor TS | Exhibit 2B, Section E7.4



TRANSFORMER STATIONS

Copeland TS - medium-voltage switchgear | *Exhibit 2B, Section E7.4*



RELOCATION WORK

Tunnelling to install UG duct bank for GO Expansion (Finch and Kennedy) |
Exhibit 2B, Section E5.2



RELOCATION WORK

Cable chamber rebuild for Ontario line (Don Mills and Eglinton) (L) / Switchgear for temporary power for Scarborough subway extension (McCowan and Sheppard) (R) | Exhibit 2B, Section E5.2





MODERNIZATION

GRID MODERNIZATION TECHNOLOGY

Network condition monitoring and control (L) / Substation electronic relays (R) |
Exhibit 2B, Section D5



GRID MODERNIZATION TECHNOLOGY

Reclosers | *Exhibit 2B, Section D5*



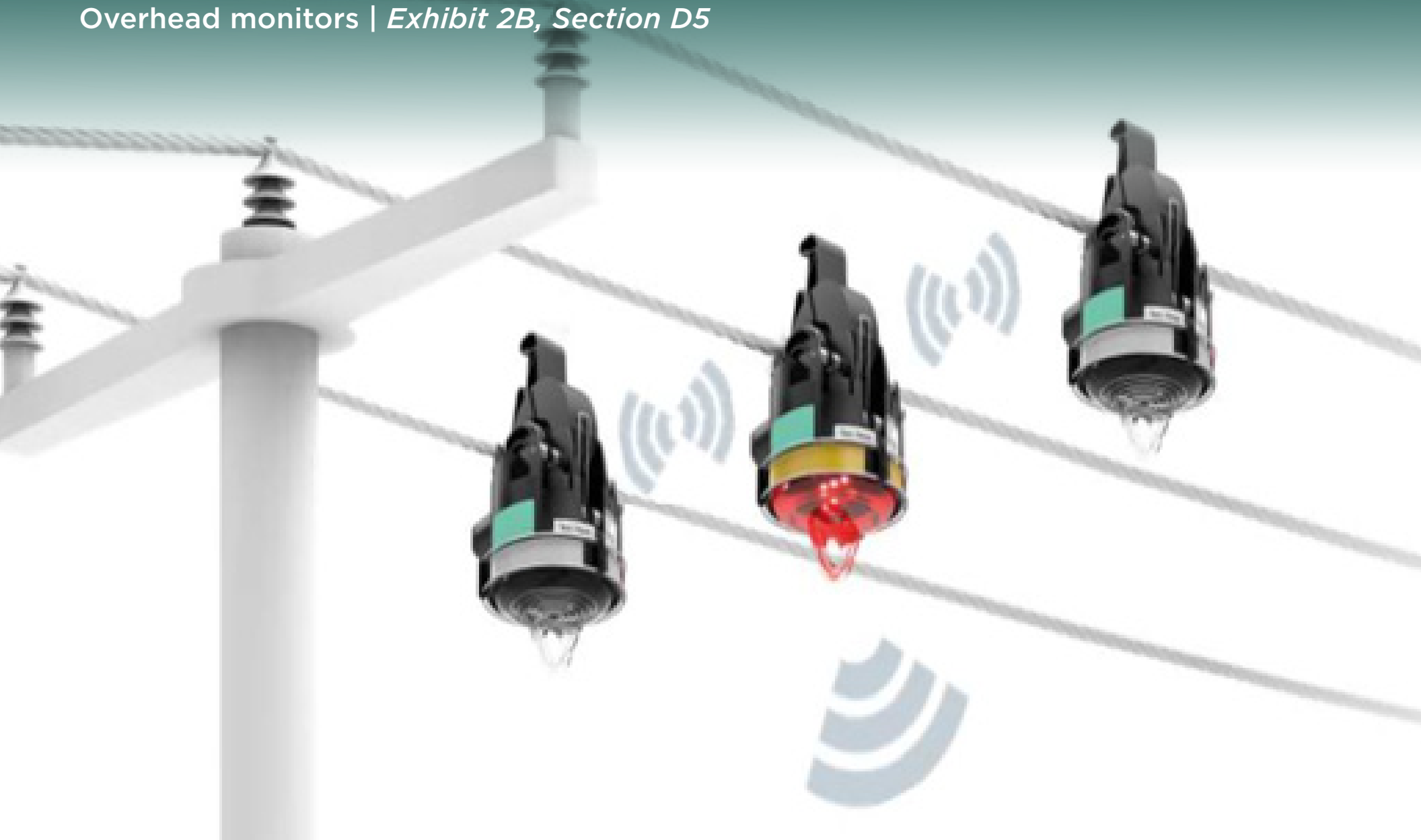
GRID MODERNIZATION TECHNOLOGY

SCADA switches | *Exhibit 2B, Section D5*



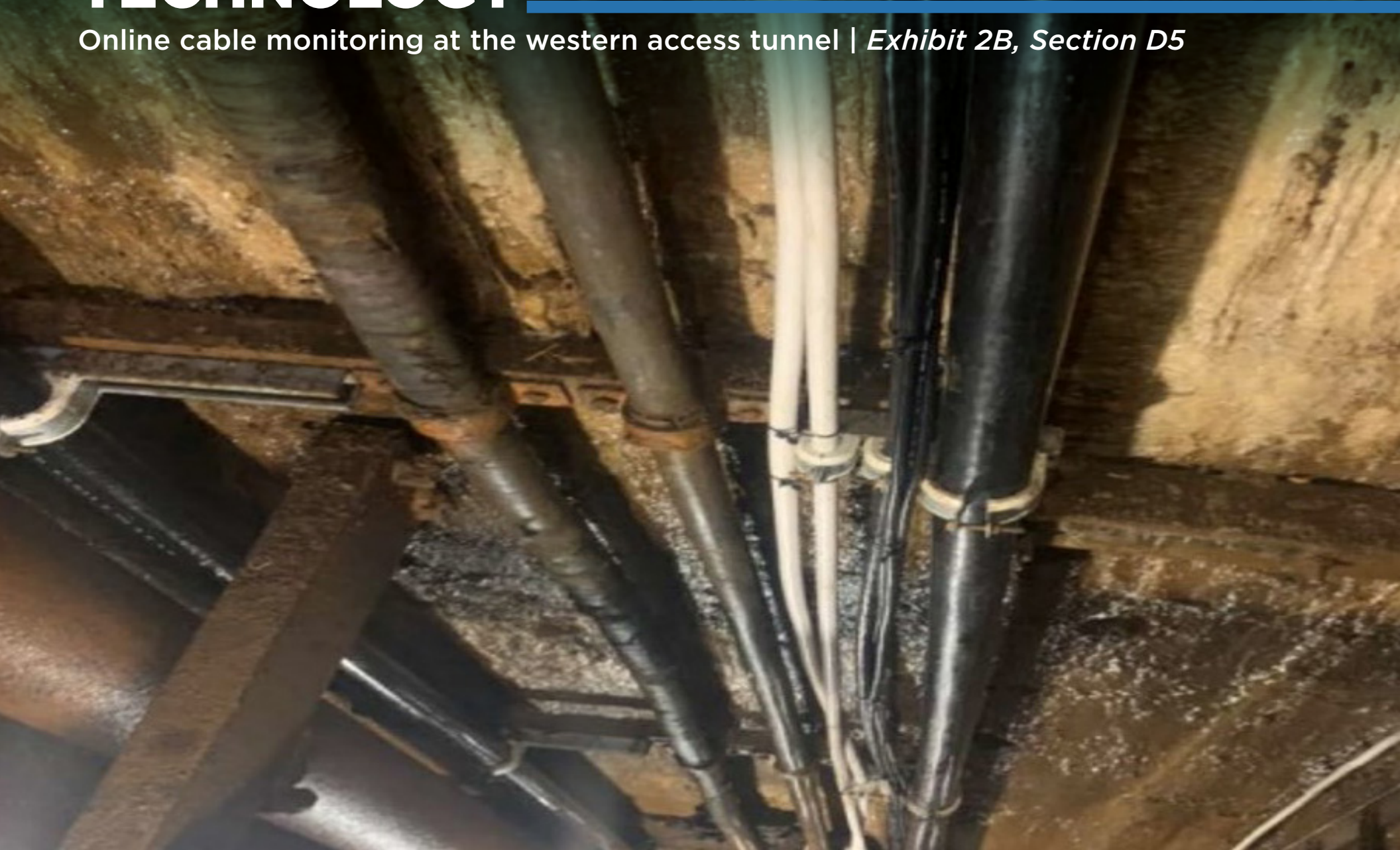
GRID MODERNIZATION TECHNOLOGY

Overhead monitors | *Exhibit 2B, Section D5*



GRID MODERNIZATION TECHNOLOGY

Online cable monitoring at the western access tunnel | *Exhibit 2B, Section D5*



GRID MODERNIZATION TECHNOLOGY

Dual radial automation (switchgear) | Exhibit 2B, Section D5



A worker wearing a yellow hard hat and an orange safety jacket with reflective stripes is focused on a task. The worker is positioned in front of a large, white, cylindrical container, possibly a water tank or a large bin. The background is slightly blurred, showing some greenery and structural elements. The overall scene is set outdoors, likely at a utility site. The image has a teal color overlay.

SUSTAINMENT

OVERHEAD SYSTEM (DOWNTOWN)

Box construction - now (L) / Box construction - then, 1950 (R) | *Exhibit 2B, Section E6.1*



OVERHEAD SYSTEM

Standard configuration (L) and rear lot (R) | *Exhibit 2B, E6.1, Section E6.5 and E6.7*



OVERHEAD SYSTEM

Overhead circuits below the Millwood overpass bridge along the Don River |
Exhibit 2B, Section E6.5



UNDERGROUND SYSTEM (HORSESHOE)

Direct buried cable (L) / Direct buried cable in PVC duct (R) | *Exhibit 2B, Section E6.2*



UNDERGROUND SYSTEM (DOWNTOWN)

Asbestos-insulated lead-covered (“AIRC”) cable (top) / Paper-insulated lead-covered (“PILC”) cable (bottom) | Exhibit 2B, Section E6.3



NETWORK SYSTEM (DOWNTOWN)

Ventilated network unit (L) and submersible network unit (R) | *Exhibit 2B, Section E6.4*



GENERAL PLANT



FLEET AND EQUIPMENT

Fleet vehicles | Exhibit 2B, Section E8.3



FLEET AND EQUIPMENT

Fleet vehicles | *Exhibit 2B, Section E8.3*



WORK CENTRES

Exhibit 2B, Section E8.2



Toronto Hydro
715 Milner Ave.
2017



Toronto Hydro
71 Rexdale Blvd.
2016



Toronto Hydro
14 Carlton St.
1931



Toronto Hydro
500 Commissioners St.
1996

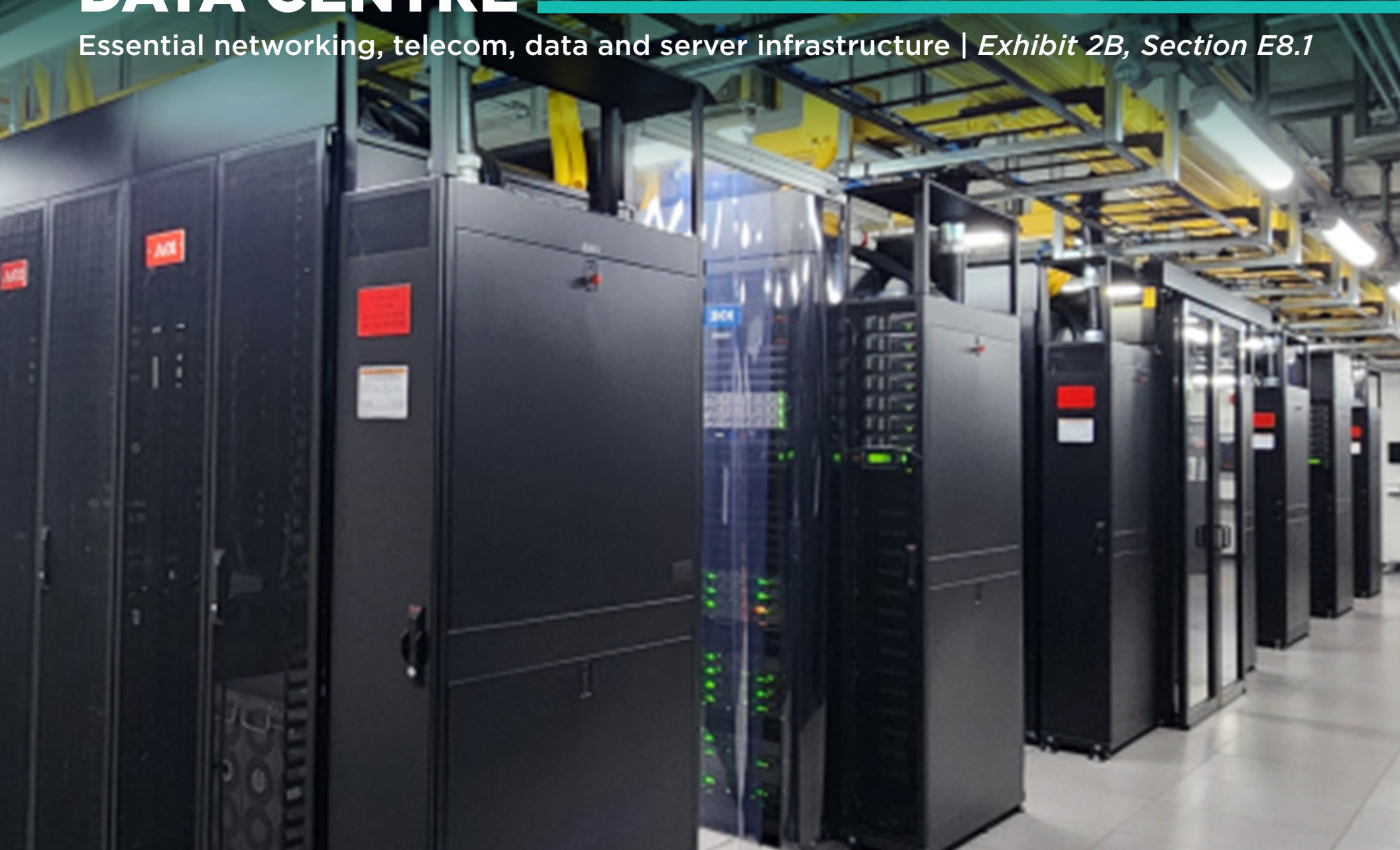
STATIONS

George and Duke MS | *Exhibit 2B, Section E6.6/E8.2*



ENTERPRISE DATA CENTRE

Essential networking, telecom, data and server infrastructure | *Exhibit 2B, Section E8.1*





OPERATIONS

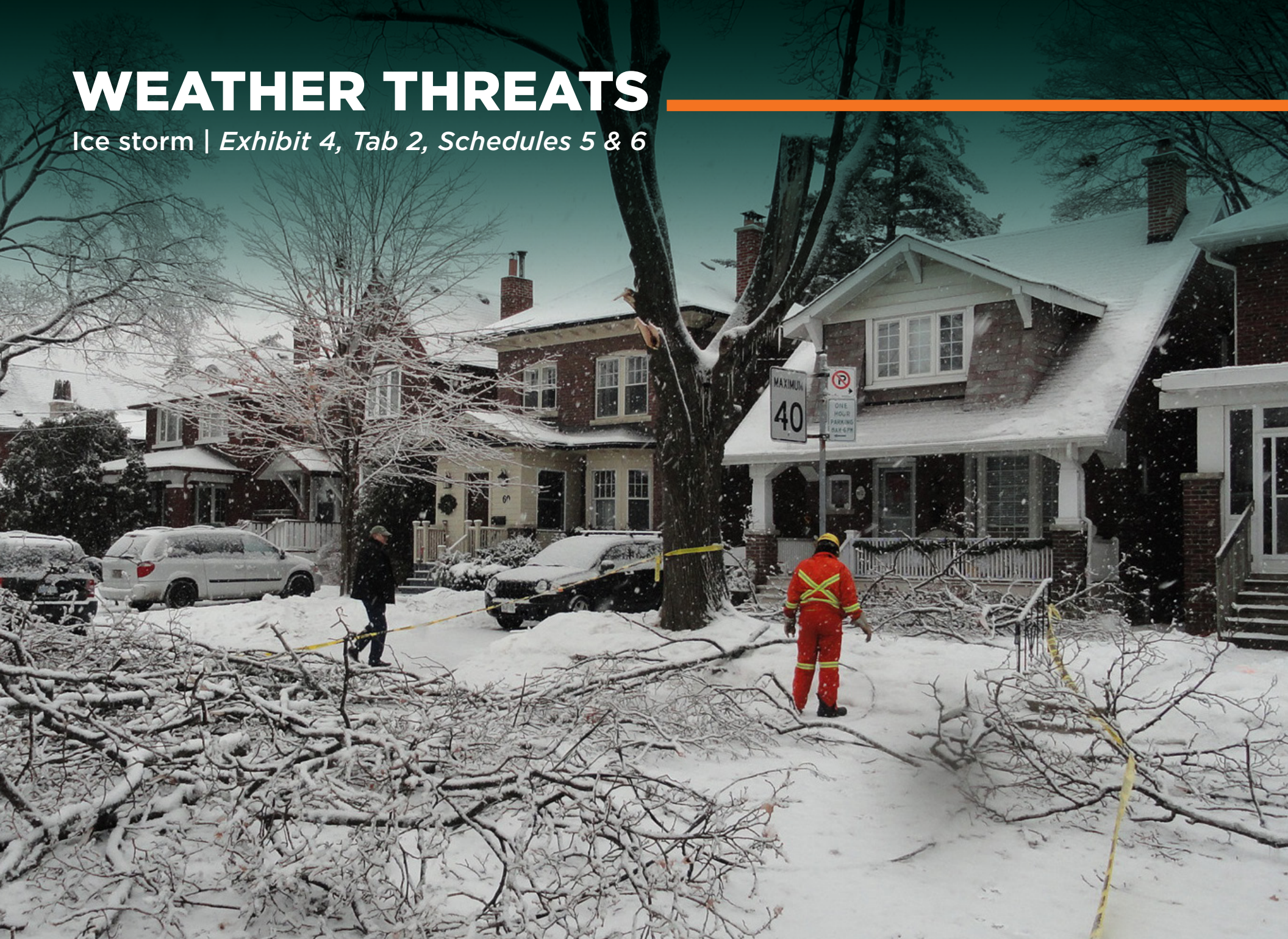
GRID OPERATIONS

Control centre operations | *Exhibit 4, Tab 2, Schedule 7*



WEATHER THREATS

Ice storm | *Exhibit 4, Tab 2, Schedules 5 & 6*



WEATHER THREATS

Wind storm | *Exhibit 4, Tab 2, Schedules 5 & 6*



FIELD CREWS

Exhibit 4, Tab 2, Schedule 1-4 & 10



FIELD CREWS

Exhibit 4, Tab 2, Schedule 1-4 & 10



TRADES SCHOOL

Talent management | *Exhibit 4, Tab 2, Schedule 15 and Tab 4, Schedule 3*



