Toronto Hydro: 2020-2024
Distribution Rates Application
Overview
Today’s Agenda

1. Introduction and Overview
2. Distribution Capital & Maintenance
3. General Plant & Field Operations
4. Customer Services
5. Closing Summary
Toronto Hydro’s Customer Engagement

Residential Customers’ Priorities:

- Price
- Reliability
- Safety
- Customer Service
- Environment

Top Priorities

Our Proposed Plan:

- Incorporates Customer Priorities
- Approximately 2/3 of residential customers support our plan or one that does even more to improve services

We heard from over 11,400 residential and business customers
Toronto Hydro’s Plan

HISTORICAL PERIOD DELIVERY
Within 1% of Approved ISA

PERFORMANCE AS OF 2018
16 of 17 Above OEB Target/Average

FORECAST PERIOD RATE IMPACTS
Below Inflation (net)

INVESTMENT PERIOD-OVER-PERIOD
Stable

44 Measures Proposed for 2020-2024
Distribution Capital & Maintenance
Capital Investment Plan: The Distribution System Plan

Total Capital Expenditures*

% of Average Annual Expenditure by Category (2020-2024)

- 17%
- 26%
- 57%

Total OM&A Expenditures*

*All figures are inflation adjusted. Adjusted using annual OEB inflation prescribed value
Renewing the System
Our Operating Context

- Assets to Reach Useful Life by End of Forecast Period (2025) 67%
- Assets at End of Useful Life by 2018 24%
- Assets Not at End of Useful Life 9%

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Defective Equipment</td>
<td>36%</td>
</tr>
<tr>
<td>Loss of Supply From Hydro One</td>
<td>12%</td>
</tr>
<tr>
<td>Environment /Weather</td>
<td>12%</td>
</tr>
<tr>
<td>Other*</td>
<td>29%</td>
</tr>
<tr>
<td>Foreign Interference</td>
<td>9%</td>
</tr>
<tr>
<td>Scheduled Outage</td>
<td>2%</td>
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</tbody>
</table>

* (Tree Contact & Human Elements)

Number of Outages for the Average Customer (SAIFI)

- 2006: 2.1
- 2007: 1.9
- 2008: 1.7
- 2009: 1.5
- 2010: 1.3
- 2011: 1.1
- 2012: 0.9
- 2013: 0.7
- 2014: 0.5
- 2015: 0.3
- 2016: 0.1
- 2017: 0.0

*Excludes Loss of Supply from Hydro One and Major Event Days
Renewing the System
Stations Renewal

Stations Assets
Circuit Breakers & Power Transformers

Health Index (HI)

Asset Condition Assessment (ACA)
HI4: Material Deterioration
HI5: End of Serviceable Life
Renewing the System
Area Conversions — Box Construction

2017: 3,900 box-framed poles

2024: 300 box-framed poles

1919

2018
Renewing the System

Area Conversions — Rear Lot

2017: 7,100 customers
2024: 3,900 customers
Renewing the System
Underground System – Horseshoe & Downtown

2017: 1,130 km of PILC Cable
2024: 923 km of PILC Cable
Renewing the System

Overhead System

Wood Poles

Number of Poles

Health Index (HI)

ACA

HI4: Material Deterioration

HI5: End of Serviceable Life

PCBs

57%

Toronto Hydro
System Access & Service
The Growing City & System – Load Demand, Customer Connections, Stations Expansion

Customers

<table>
<thead>
<tr>
<th>Year</th>
<th>Customer Base</th>
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<tbody>
<tr>
<td>2018</td>
<td>700,000</td>
</tr>
<tr>
<td>2017</td>
<td>720,000</td>
</tr>
<tr>
<td>2016</td>
<td>740,000</td>
</tr>
<tr>
<td>2015</td>
<td>760,000</td>
</tr>
<tr>
<td>2014</td>
<td>780,000</td>
</tr>
<tr>
<td>2013</td>
<td>800,000</td>
</tr>
<tr>
<td>2012</td>
<td>820,000</td>
</tr>
<tr>
<td>2011</td>
<td>840,000</td>
</tr>
<tr>
<td>2010</td>
<td>860,000</td>
</tr>
</tbody>
</table>

Source: Toronto City Planning Division, Research and Information, September 2016
System Access & Service
The Growing City & System — Generation Connections

< 100 locations in 2007

1,700 locations in 2017
Capital Investment Plan: Summary

**Balanced Plan**

**Engineering based Asset Condition Assessment**

**Stay the course: Renewal & Growth**

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*All figures are inflation adjusted. Adjusted using annual OEB inflation prescribed value*

*Excludes Loss of Supply from Hydro One and Major Event Days*
General Plant: Information Technology

RUN
Upgrades of systems to maintain business capabilities

GROW
System enhancements to capture new business capabilities

TRANSFORM
Systems to drive new business capabilities

Customer Information System

Enterprise Resource Planning System
General Plant: Facilities & Fleet

Space Utilization Per Employee (2015-2019) (Sq. Ft.)

- Toronto Hydro Pre-OCCP: 430
- Toronto Hydro Post-OCCP: 240

OCCP is Operating Centres Consolidating Program

72 vehicle reduction 2014-2017
On average, 7% of the approximately 26,000 emergency events across all four categories experienced in 2018 were attributable to 5 Major Event Days in the same year.

Average Wait time for Planned Hold-Offs for Toronto Hydro and Contractors 2015 – 2018

Switching Orders Prepared And Checked Ahead of Execution 2015 - 2018
Field Operations: Challenges

Average Duration of Outages (SAIDI)

Average duration of interruptions caused by defective equipment per customer in a given year.
Productivity

- CAPITAL INVESTMENTS DELIVERED AT MARKET RATES: +82%
- 10 OF 11 UNIT COST CATEGORIES UMS BENCHMARKING STUDY: 2ND QUARTILE
- TORONTO HYDRO ESTIMATED SAVINGS 1999-2015: ~$150M, $2B
Field Operations: Successes

2015-2019

- Advance work methods and scheduling
- Safety and attendance performance
- Strategic mix of internal and external resources
- Timely resource recruitment from trades and technical groups
- Training and development
Customer Services

- **500,000** customer self-serve transactions
- **600,000** calls and emails
- **12 billion meter data points**
- **$4 billion** in payments
- **9 million bills**
- **40,000** planned investment notifications
- **500,000** customer care operations
Customer Services: Customer Operations Communications

INVESTING IN YOUR NEIGHBOURHOOD

REMEMBER: IMPORTANT NOTICE

PROJECT: Hammersmith Phase 5
PROJECT INFORMATION #: X18249/X18390
WARD: 32 – Beaches-East York
ACTIVITY: Overhead Electrical Upgrade
EXPECTED PROJECT TIMELINE: June 2018 - December 2018

Toronto Hydro’s approved contractor Enteria will begin work in your neighbourhood within the next few weeks. Crews will be rebuilding the aging overhead electrical system in your community to help improve service reliability. The rebuild includes upgrading overhead electrical cables and replacing hydro poles on city-owned property near your lot.

WORK AREA:
The boundaries include Columbine Avenue (north), Ashbridges Bay Park Road (south), Hammersmith Avenue (east), and Coxwell Avenue (west).

NEED MORE INFORMATION?
If you have any questions about the upcoming work, please contact our Customer Operations Representative, and quote Project Information # X18390/X18249.

Thank you for your patience and cooperation as we work to improve service reliability in your neighbourhood.
Customer Services: Impact of Investments

Meters Read Manually

Billing Accuracy

First Contact Resolution
Customer Services: Key Projects

Renewal of customer self-service website

Upgrading our Customer Information System
Customer Services: Key Projects

Number of Customers on Electronic Billing

Paper savings equal to 90% of CN Tower Height
Customer Services: Summary

- Deliver public policy changes
- Key projects needed to sustain the foundation
- Improved customer experience
- Organization focused on efficiencies
Thank You